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Military Leaders

America's World War II Leaders in Europe: Some Thoughts

MARTIN BLUMENSON

Our heroes in World War II are dear to us. We cherish them, applaud their exertions during the conflict, and feel lucky to have had such capable and sterling men leading our troops in battle. They brought us victory, performed their duties with conspicuous success, exhibited personal traits conforming to our expectations, became well and widely known, and took their places modestly in the pantheon of our military giants.

As a recent article makes plain, our World War II commanders, particularly those on the higher levels, had an abundance of "professional skills and abilities" learned along career paths preparing them well for their successful performance of duty." The assumption throughout reflects the widespread belief in how superb their qualifications for war leadership were. Their aptitudes, both natural and acquired, enabled them to respond effectively to the challenges of the war in their time.'

Apparently, they were our brightest and our best. The system uncovering them and inserting them into their proper places appeared to work well. Until recently, no one has questioned the abilities of our high-ranking officers except to quibble over a few details, all essentially minor lapses in judgment, errors in method, and the like. It is difficult, almost un-American, even to raise the issue of their overall excellence because they are so likable, so admirable in our collective memories. They have become bright stars unalterably fixed in our military firmament.

Furthermore, they were the only leaders we had in the struggle. We had no others. To whom can we compare them and their performance? To rate them against leaders of our allies or of our enemies makes little sense, for the historical and cultural differences are too great to permit reasonable matching. We are consequently stuck with the group who gained fame and our lasting gratitude. Upon reflection, it is not a bad group to be stuck with.

Yet the record of accomplishment and I speak only of the European side of the war-is essentially bland and plodding. The commanders were generally workmanlike rather than bold, prudent rather than daring, George S. Patton, Jr., being of course a notable exception. They showed a decided tendency to stay within the odds, the safe way of operating, and refrained from opting for the imaginative and the unexpected. Very few of their operations were brilliant. Those that stand out-among them the thrusts to Palermo and Messina in Sicily, the breakout across France, the rescue at Bastogne are exceptions to the rule, all too rare. The achievements can usually be traced to a single actor.

Our leaders, in addition, displayed serious flaws in conception and execution, as at Anzio, in the Hurtgen Forest, and during the reduction of the Bulge. The pattern emerged very early in the war at the battle of Kasserine Pass, the first hostile meeting between American and German ground troops. The confrontation was a disaster for us. The defeat was bad enough. What was worse was the shocking revelation of how ill-prepared our leaders were for combat and how poorly our system for producing war leaders had functioned.

To a large extent, personal deficiencies by commanders up and down the chain of command created the Kasserine setback. Far too many officers failed to realize that the time and space factors prevalent in World War I were now outmoded and irrelevant. They had no idea until too late of the accelerated reaction time and the extended battlefield space in effect in the 1940s. They were thus unable to adapt and adjust to the new requirements of leadership.

Who was responsible for putting this kind of officer into leadership positions? The military were not altogether at fault for the command deficiencies displayed during the actions around Kasserine Pass. Two factors in their defense come quickly to mind. First, the US Army started far too late to prepare seriously for World War II. As a result, the training program, the procurement of weapons, and virtually all else were hasty, largely improvised, almost chaotic, and painfully inadequate throughout the intensely short period of mobilization and organization immediately before and after Pearl Harbor, that is, before the battlefield commitment of units.³ The military had repeatedly informed the political authorities of the needs for growth and modernization and had just as repeatedly requested funds to initiate the twin process. The villain in the case, accountable for our unpreparedness, was American society. The American people counted on the false security offered by the Atlantic and Pacific oceans and preferred to dream of the low costs of isolationism. The Army suffered.⁴

Second, the comparatively easy sledding of the Army prior to Kasserine deferred the moment when it would finally have to winnow out the ineffective leaders. The combat around Kasserine Pass, like all the initial and early battles of

our wars, proved out the real leaders and shook out the duds. The actuality itself, it is often said, determines who is suited to lead in combat and who is not. Furthermore, it is strongly asserted, there is no sure way of telling beforehand, that is, in advance of the experience, who is temperamentally fitted to lead men and who is going to fall apart at the sound of the guns. If pushed too far, however, such claims begin to sound like a cop-out and an excuse. The primary function of the professional military body between wars is to produce wartime leaders. The process of correctly bringing up officers and grooming them at every stage of their careers is supposed not only to turn up and push ahead the qualified but also to weed out the incapable. The system works overtly by promoting certain officers and by refusing promotion to others.

The selection of an officer for advancement in the Army actually fulfills two requirements. He is thereby deemed ready and able to discharge increased authority and responsibility in his duties. He is also regarded as possessing the personal characteristics cherished and sought in the profession of arms. Those who do the judging are the high-ranking leaders in the profession. They renew and perpetuate the professional body as well as its standards. They do so by choosing certain members for professional leader-ship in the present and also for the future. The unspoken and possibly unconscious wish of those, the existing leadership, who are doing the selecting is quite naturally to find their eventual replacements among those who most thoroughly resemble themselves. It follows, then, that a professional group of any sort in any society reflects the strengths and weaknesses of those who are at the head of it at any given time. Those who shape the continuities of a profession do so in their own image.

A healthy professional group seeks and chooses those who meet the best and most relevant criteria. Officers being judged try to show in the course of their careers attention to duty, serious study, dedication, hard work, a good mind, and other virtues-all in order to guarantee advancement, increasing responsibility, and eventual success, the last measured by the attainment of high rank and a proficient performance. The brightest and the best are thus rewarded. But perhaps, like all conventional wisdom, this conclusion is altogether too neat.

We were fortunate to have George C. Marshall as the US Army Chief of Staff throughout World War II. His contributions to victory were legion, far too numerous to begin to mention here. His intellect, rectitude, and vision were beyond compare. One of his most significant activities was to institute a virtual one-man effort to find proper officers for our rapidly expanding war machine. Throughout his term of office as the top Army man in uniform, Marshall called upon those officers he had known during his years of service who had impressed him with their dedication and efficiency. He had, it seems, entered into his personal black notebook the names of those whom he had judged to be fit for eventual high command. These officers became Marshall's protégés, and they received choice assignments as well as concomitant advancement during the war.

Particularly lucky were those who had been with Marshall at the Infantry School at Fort Benning between 1927 and 1932, when he was Assistant Commandant. Outstanding students and faculty members were especially well-regarded and in his good graces. They had proved their potential for heavy responsibility, and Marshall looked after them during the war. They were generally excellent in discharging their duties, and they flourished and rose in rank and in authority.

Mark Clark missed Marshall at Fort Benning, but became acquainted with him at Fort Lewis, Washington. Clark was the 3d Division G-3 while Marshall commanded a brigade in the division. Their duties brought them together, and they worked closely with each other on training exercises and maneuvers. Marshall was impressed with Clark's abilities, and, as a consequence, Clark's standing in the profession rose like a rocket.

George S. Patton, Jr., a cavalryman, had no chance of meeting Marshall at the Infantry School, but he had already made the most of his contact with the future Chief of Staff during World War I. Both officers were closely associated with John J. Pershing. Both lectured at the Staff College established by Pershing at Langres in France. Patton too became a Marshall man, and he benefited from Marshall's interest and confidence in him.

The Marshall method of identifying and rewarding first rate officers was a system within a system. It worked well so far as it went. For every person entered in Marshall's notebook, there were probably a dozen, perhaps more, who were every bit as good as the ones he listed. The others were simply unfortunate because they had failed to come within Marshall's orbit and ken. If Marshall did not know them, he could not write their names into his book. How many excellent individuals were slighted simply because of their bad luck of never meeting or working with Marshall is, of course, a matter of conjecture.

Marshall also made mistakes. Some of his choices failed to measure up to the demands of combat. Lloyd Fredendall, Ernest Dawley, and John Millikin, all three corps commanders, were Marshall's selections. All were relieved of command, the first in North Africa after Kasserine Pass, the second in Italy after the Salerno invasion, the third after the Rhine River crossing at Remagen. It was rather late and rather shocking to discover officers nurtured in the system and advanced with every expectation of success to be found deficient at so high a level of command. There were other mistakes. For years Marshall confused James Van Fleet, an outstanding soldier, with someone who had a similar name and was a well-known drunk. Van Fleet's career progression suffered until the error somehow came to Marshall's attention.

The active-duty career of Marshall himself came very close to being terminated before his appointment as Chief of Staff. If he had been retired before gaining the post, as almost came to pass, what would have happened to the exceptional Marshall men whom he had personally and idiosyncratical-ly chosen for leadership roles? Most likely, some of our heroes of World War II would have had different names.

The Army as an institution traditionally carried the burden of selecting officers for advancement through the more systematic individual ratings of the periodic efficiency reports, usually submitted once a year, sometimes more often. The criteria by which superiors judged subordinates directly under them were revised from time to time during the interwar years, along with the format, to indicate more accurately and clearly the extent to which the subjects showed the desirable professional qualities. The reporting was not always entirely objective, but the cumulative papers in an officer's personal record file characterized with good accuracy his professional progress over the years.

Young officers wishing promotion had to be, first of all, ambitious. No other profession is more competitive, and no other so closely regulates the behavior of its members. Officers without ambition lack drive, and those who refuse to push rarely get ahead. It was ever so in the 1920s and 1930s, as it is today. Secondly, officers wanting advancement had to demonstrate their devotion to the service as well as their efficiency in meeting its demands. They had to be outstanding in their professional attainments and practices, and they needed to fulfill their duties with precision and élan. Finally, they had to have the knack of attracting the favorable notice of their superiors. To be excellent in duty was simply not enough. To be excellent and unremarked was worse than useless. The goal was to be outstanding and to be so noted by someone important, by someone who could enhance a junior's career strivings.

George S. Patton, Jr., then a young second lieutenant, in explaining to his skeptical father-in-law why he was participating so single-mindedly in horse races, horse shows, and polo matches, said, "What I am doing looks like play to you but in my business it is the best sort of advertising. It makes people talk and that is a sign they are noticing and the notice of others has been the start of many successful men." He was, of course, referring to efforts to draw attention to himself, to his bearing, dress, and soldierly aptitudes, and also to make his name well-known throughout the Army.

Throughout his long and distinguished career, Patton tried always to impress his superiors with his professional excellence. This took two forms. He endeavored to do in an outstanding manner more than was expected or required in his assigned duties and in those ancillary pursuits, like polo and other athletic engagements, that were closely allied to official Army service. He also practiced an outrageous flattery of those who could help him get ahead. In addition to his real soldierly achievements, he was a bootlicker par excellence. Perhaps he could get away with the flattery because his military professionalism was so obvious. Or were his superiors of that period so susceptible to blandishment?

Aside from the traditional efficiency reports already alluded to, two main methods of identifying and developing talent existed between the wars. One was the sponsorship exercised by mentors. A senior officer took several promising junior officers under his wing, looked after them, helped them get into service schools, and sought to land them choice assignments leading to future advancement. The second way was through attendance at the various Army schools. Successful officers usually proceeded through a progression of educational institutions. First came the Military Academy at West Point or college work with the ROTC, both leading to a commission. Then arrived the advance branch schooling at Fort Benning for Infantry, Fort Sill for Artillery, Fort Belvoir for the Engineers, and the like. Next came the course variously titled but eventually called the Command and General Staff College at Fort Leavenworth, which was regarded generally as the most important school assignment for all officers, the prerequisite, it was said, for promotion to high rank and major responsibility. Finally, the top of the educational pile was the Army War College.

How rich the substance of the learning was, how solid the instruction and pedagogy were, how stimulating the intellectual impact was, and how relevant the performance ratings at school were to future assignment-all these matters are still under rather intense discussion and disagreement among historians, soldiers, and educators. Most observers are in accord on one thing. The most noteworthy aspect of Leavenworth and its "school solution" type of teaching was the imposition of a homogenized view on the students. Graduates had a common method of approaching and solving military problems and, as a consequence, were comfortable and at home in any headquarters where they might be assigned.

The behavior in class of John Shirley Wood may be significant. Probably the most intelligent of all the armor disciples, Wood trained the 4th Armored Division to its high pitch of combat proficiency, then led it in combat with distinction in Normandy. Wood was older and thought to be smarter than most of his contemporaries. His nickname was "P" for professor, attributable to the many hours he spent helping classmates in their studies. Wood was reported to have expressed his disdain for the intellectual content of the Leavenworth course by ostentatiously reading a newspaper while his instructors lectured.

Thus the problem of the Army in World War II is largely the problem of the Army between the World Wars. Our Army during that period, apart from the frenzied preparations in 1940 and 1941 was a provincial, somewhat backward society in the process of dozing. The working day was short, nothing much of consequence was happening, and the procedures were cut and dried. Such complacency was bound to have adverse effects when war finally came. Today's somewhat exaggerated view of our World War II leaders' martial prowess is probably the product of national pride and the warm glow of nostalgia-after all, we *did* win the war.

Many observers and historians have noted how "impotent" and "ineffective" the Army was in the prewar days. Low pay and endless routine produced stagnation and futility. In these conditions, how well did the traditional means of identifying and developing talent function? If the context and framework of the Army provided little stimulus to learning, how did bright, ambitious, and dedicated officers prepare for what they all called "the next war"?

George Patton grew professionally through his reading, a "monumental self-study he charted for himself." He was hardly alone. Quite a few officers who strove for knowledge and development gained professional competence by more or less systematic reading. They also interacted with like-minded officers of their generation, all "intelligent, stimulating men...studying their profession" individually and in small groups, off duty and at the service schools. It is sometimes said that the most productive function of the military school system was to gather together the most ambitious and successful officers for specific periods of time, the school term, thereby enabling them to be mentally stimulated through mutual discussions and bull sessions. Men of native intelligence thus overcame the handicaps and restrictions of a moribund military organization. They read, discussed, and, in some cases, responded to the challenge of writing articles and studies, thereby becoming the top-notch professionals we needed in the Second World War. This is the legend. And it may well be true. By compelling the brightest members to look beyond the Army's formal academic offerings, the Army forced them to learn on their own, which may have enhanced initiative and resourcefulness. Self preparation was perhaps the key to later success.

How stifling was the prewar Army? Carson McCullers opened a novel, published in 1941 at the end of what were often called the Army's "lean years," with these lines: "An Army post in peacetime is a dull place. Things happen, but then they happen over and over again." After using the word monotony" and the term "rigid pattern" to describe military life, McCullers continued: "Perhaps the dullness of a post is caused most of all by insularity and by a surfeit of leisure and safety, for once a man enters the Army he is expected only to follow the heels ahead of him."

If the description is entirely accurate, it is chilling. Was the prewar Army environment really as deadly as all that? If so, how could anyone, especially the leaders in World War II, have stayed and endured the boredom? Some officers had entered the Army during the Spanish-American War and during World War I, and they simply remained, perhaps mainly out of inertia and regard for the steady pay. The Great Depression of the 1930s lends credibility to this notion. Others stayed because they enjoyed the satisfactions of horses and polo or of regular routine. Still others were in uniform because they were disenchanted with and renounced civilian life. ⁰

A few, perhaps many, ascribed their choice to continue in the service as motivated by the hope of commanding troops in war. They stayed despite the tide of civilian indifference to military preparedness. Noel F. Parrish, a cavalry trooper, later a flying officer, expressed the sentiment as follows:

Ground and air officers alike stubbornly carried out their duties among a people hoping and trying to believe that all officers were as useless as their saber chains. It was a weird, almost furtive existence, like that of fireman trying to guard a wooden city whose occupants pretended it was fireproof. In such an atmosphere of unreality, officers sometimes felt a little ghostly and bewildered, and turned to the affectation of imported uniforms and mannerisms, the imitation of the well-to-do and horse culture. These psychic manifestations of a sense of social uselessness appeared in a surprisingly small number of officers. Most plodded grimly along, stubbornly reminding themselves and each other that they were real, after all, and that the things they were doing were necessary. If

What they were doing was not only necessary but, above all, important, certainly in the light of another world war looming on the horizon. Herman Wouk made the same point in *The Caine Mutiny*. The regular officers, he said, who persevered during the bad times and kept the military alive made it possible for the services to rise from their ashes, regain their vitality, and perform in exemplary fashion and triumphantly in World War II. ¹² The feelings put into words by Parrish and Wouk are thrilling. Unfortunately, they were postwar observations rather than bona fide observations of the prewar years. They seem to be rationalizations or justifications instead of accurate depictions of the times.

Lucian K. Truscott, Jr., who was one of our best commanders in World War II, has authentically depicted how the other Army lived. His account reveals as well how happy and well-adjusted Truscott himself was in the regimen. What would have been stultifying to some was evidently close to perfect for him. He enjoyed his service. His prior experience was as a young public school teacher in rural and primitive areas; the life was hard and the pay was erratic. In contrast, the Army offered all sorts of unexpected pleasures, steady employment, periodic travel, endlessly fascinating tours of duty, the joys of riding horses and playing polo, and the opportunity to meet lots of people in the service. If most of his contemporaries were very much the same as he, several were out of the ordinary, such as a talented pianist and a gifted linguistics expert. In addition, before World War II every outfit seemed to have its resident eccentric, a harmless individual who added salt and pepper to what was other-wise a diet of rather bland existence.

Many officers during the interwar years had offers of good jobs in civilian life, paying much more than what they earned in the military. Some, of course, inevitably left the service, but the majority refused to succumb to such temptation. Many of the latter rose to prominence and became well known in World War II. Their reasons for declining civilian employment were never terribly explicit. They were much like that of William H. Simpson, later the Ninth Army commander in Europe: "I said to hell with it. I am going to stay in the Army." 14

Part of the failure to search for and elucidate the reasons for preferring Army life over civilian pursuits was in the nature of the officers themselves. Many were reticent, few articulate. Many wanted to appear less than thoughtful and expressive. Much of their motivation needed no expression. The military ethos was so ingrained and so strong among much of the officer corps that it required no definition. No one found it necessary to explain, for example, what the West Point motto-Duty, Honor, Country-meant. Everyone simply knew.

Whether they understood it on a conscious level or not, officers belonged to the aristocracy by virtue of their service. Harking back to medieval times, when only members of the nobility could be warriors, the American officer corps was patrician and socially privileged. Their commissions proclaimed and conferred upon them the status of gentlemen. As such, they were forbidden to carry an umbrella or a grocery package or to push a baby carriage. They were quite above such mundane matters as business and petty trade. They prided themselves on being oblivious to their salaries, anything but money-grubbing, so long, that is, as they could maintain a certain standard of living, along with a servant or two.

A mild snobbishness pervaded the establishment and molded the individual officers and their families into a close-knit association. The acculturation started as early as "Beast Barracks" for newly arrived cadets at West Point, the initial experience; and for those who entered the Army without benefit of West Point the conventions and social nuances of the system quickly if subtly made themselves felt, requiring rapid learning and adjustment.

In this society, the environment stressed conformity. Officers lived in a world where seniority prevailed and ruled. Conservatism was a guiding principle, and rigidity flourished. Intellectual life, if it existed at all, was somewhat sterile, the give-and-take of wide-ranging argument largely absent except in very special circumstances, such as at school. As a whole, the profession fled from the image of braininess-"P" Wood being a notable exception. Henry Halleck, a markedly brilliant Civil War officer, was called "Old Brains," but it was pejorative, and officers shunned

that sort of ticket. In the 1920s and 30s, officers were noted for their devotion to duty and sound judgment, however the latter was defined. Their intellectual capacities seemed hardly to matter at all.

This is perhaps the factor, the consistent downgrading of intellectual interest and activity, that in large part made the US Army unprepared conceptually for World War II. Even though the war resembled the earlier world war in many basic respects-that is, in the opposing line-ups, in the main instruments of warfare employed, and in the major battlefields fought over-we learned how to fight the second global war from others. We knew little from ourselves, from our own efforts, from our own teachings. Perhaps the strength of this tradition, the refusal to take intellect seriously, the failure to provide for the stretching of intellect, kept the Army from being ready, as well, for the Spanish-American War, World War I, Korea, and Vietnam.

Even more damning of the World War II generation of leaders was their inability to recognize the nature of future warfare. Although the struggle in the 1940s was mainly a conventional and linear war, the manifestations of the conflict to come in the 1950s and later were already present. Unconventional warfare and terrorism could be perceived in the various resistance movements and elsewhere on the far-flung fronts of the contest. Did our leaders notice them, take account of them, prepare to deal with them? They missed these phenomena completely.

The point is that academic excellence, attained and displayed at West Point and the service schools, has rarely been given much weight in later assignments and judgments about proficiency in the profession. Our heroes have usually been those who have been less than brilliant intellectually or who have preferred to play dumb. But if the Army was a good bit alienated from the mainstream of American concerns during the 1920s and 30s, the military, at least in their mild-mannered anti-intellectualism, were together with their civilian counterparts. My point is not to be construed as a yearning for all our military leaders to be intellectuals, however they are defined. Yet it bears stating that some of our practicing intellectuals, Maxwell Taylor and Jim Gavin, to name but two, were conspicuously successful field commanders. Thus, in improving upon the past, what seems to be needed is a rigorous intellectual climate and context within which our outstanding commanders and staff officers alike can find encouragement to go beyond the limits of conventional thought in order to stimulate the entire profession.

How good were our military leaders in World War II? They looked good, did the job, and gained victory for us. Were they exceptional or merely adequate? Could we have won with almost any other group in command? It may well be that our top leadership was analogous to the elite forces that implemented the blitzkrieg for Germany. The panzers, the motorized infantry, the self-propelled artillery, the close support aircraft in the vanguard of the attack were actually in very short supply. Behind them, the bulk of the components were horse-drawn.

Was our leadership similarly stratified? Beyond the few really outstanding and visible leaders who made it to the top despite the handicaps of a barely functioning or badly functioning profession, were most of the others at best mediocre? I won't presume to say. But how our small interwar Army produced the leadership that got us successfully through the war remains in large part a miracle and, like most miracles, a mystery.

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NOTES

- 1. Robert H. Berlin, "The United States Army World War II Corps Commanders: A Composite Biography," *Journal of Military History* (formerly *Military Affairs*), 53 (April 1989), 147-67.
- For three relatively recent departures from the customary blanket approbation of American arms and leadership in world war II, see
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 Russell F. Weigley, Eisenhower's Lieu-tenants: The Campaign of France and Germany, 1944-1945 (Bloomington: Indiana Univ.
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- See Charles E. Heller and William A. Stofft, eds., America's First Battles, 1776-1965 (Lawrence: Univ. Press of Kansas, 1986), pp. 186-265
- 4 For important qualifications to this view, however, see Thomas W. Collier, "The Army and the Great Depression," *Parameters*, 18 (September 1988), 102-08.
- 4. Martin Blumenson, *The Patton Papers*, 1885-1940 (Boston: Houghton Mifflin, 1972), p.23⁹.
- Charles E. Kirkpatrick, "Filling the Gaps: Re-evaluating Officer Professional Educational in the Inter-War Army, 1920-1940," a paper presented at the American Military Institute Annual Conference, Virginia Military Institute, 14 April 1989.
- 6. Steve E. Dietrich, "The Professional Reading of General George S. Patton, Jr.," a paper presented at the American Military Institute Annual Convention, Virginia Military Institute, 14 April 1989.
- 7. Kirkpatrick.
- 8. Reflections in a Golden Eye (Cambridge, Mass.: Houghton Mifflin, 1941), p.1.
- 9. Edward M. Coffman and Peter F. Herrly, "The American Regular Army Officer Corps between the world wars: A Collective Biography," *Armed Forces and Society*, 3 (November 1977), 70. Quoted in Coffman and Herrly, p.71.
- 10. Herman Wouk, *The Caine Mutiny* (Garden City, N.Y.: Doubleday, 1951), pp.445-⁴⁸.
- 11. The Twilight of the US Cavalry: Life in the Old Army, 1917-1942 (Lawrence: Univ. Press of Kansas, 1989)
- 12. Quoted by Coffman and Herrly, pp. 69-70.
- 13. Berlin.

General George C. Marshall: A Study in Effective Staff Leadership LIEUTENANT COLONEL PAUL G. MUNCH

Few dispute George Marshall's role in winning World War II. He is universally recognized as one of its most important leaders. For Instance,

- Time magazine selected him as 1943's "Man of the Year." (His role in the Marshall Plan won him a second "Man of the Year" recognition in 1947.)
- Newsweek magazine polled seventy prominent Americans during 1943 to determine which American leaders "made the greatest contribution of leadership to the nation" during the first two years of war? They mentioned George Marshall most often. {1}
- In explaining his selection of Eisenhower over Marshall to command the cross-channel invasion, President Roosevelt said, "I didn't feel I could sleep at ease with you out of Washington." {2}
- He became the nations' first five star general in December 1944. {3}
- Shortly after the war, Truman praised Marshall by saying, "Millions of Americans gave their country outstanding service. General of the Army George C. Marshall gave it victory." {4}

But General Marshall was not a commander in the field. Unlike Generals Eisenhower, MacArthur, Bradley, and Patton, Marshall was the Army's Chief of Staff--a position normally relegated to historical obscurity. In fact, Roosevelt once asked, "Who remembers who the Chiefs of Staff were during the Civil War or World War I?" {5}

Despite his position as a staff officer, Marshall emerged as the war's most respected general. He and his staff directed military operations around the world. In addition, he was Roosevelt's most trusted military advisor, a strategist on global terms, and a champion of alliance warfare. He was one of the war's most effective leaders.

WHY STUDY MARSHALL?

As with most talented men, we can learn a great deal from George Marshall. His ability to successfully direct the Army Staff during the crucial three month period from December 1941 through March 1942 is particularly instructive. It provides some very good insights on how to lead and direct [a] large staff faced with multiple problems.

During this period, Marshall and his staff successfully tackled a wide range of critical problems that would affect the outcome of the war. These included:

- The continuing effort to rapidly expand the Army and to provide for its ever-increasing needs.
- The Japanese attack on Pearl Harbor and the resulting investigation into this military disaster.
- The continued Japanese invasion in the Pacific including attacks on the Philippines, Hong Kong, Thailand, Malaya, Burma, and the Dutch East Indies.
- Germany's declaration of war on the United States.
- The Arcadia Conference which set the British and American strategic direction for the War.
- The push for a more integrated command structure which resulted in the establishment of the Joint Chiefs of Staff.

This article will look at Marshall's preparation to become Chief of Staff, his ability to build an effective team, the character of the staff, and Marshall's interaction with these very talented men. With this background, I will then

investigate how Marshall handled two critical issued: The support to the beleaguered forces in the Philippines and the reorganization of the Army Staff. Lastly, it will offer some insights into why Marshall was so successful as a staff leader. Hopefully, we can apply these traits to our own careers.

MARSHALL'S PREPARATION

By the time George Marshall became the Army's Chief of Staff, he was already considered one of the Army's most thorough and competent officers. He cultivated his reputation through hard work and thoroughness. He also pursued a calculated policy of committing himself only when he knew he was right, and could prove it. {6}

But while he built much of his reputation on his own hard work and natural abilities, he was also fortunate to serve in a series of important staff positions. These assignments exposed him to the Army's most pressing problems. He took the time to study every aspect of these problems. Over the years, he became a recognized expert on issues ranging from small unit tactics to the Army's budget.

Marshall also had the fortune to work for some of the Army's brightest leaders. {7} Recognizing his talents, they mentored him and prepared him for more demanding assignments. In turn, he studied their approach to solving problems. From them, he learned about leadership at the highest levels of our government. He also gained a firm understanding of the Army's bureaucracy and its relationship to the American people and the rest of the government.

In short, George Marshall's experience gave him the ability to see the forest and the trees. Fifteen years after the war, Walt Rostow would write that Marshall was "well prepared to serve as Chief of Staff to a strong President; to build quickly a powerful and effective higher military staff, capable of directing a global war; and to work with allies in a setting of Congressional confidence. The men who rose to posts of high responsibility under Marshall reflected his experience and his conception. . . Marshall built a command post through which passed the best staff brains of an Army generation." {8}

MARSHALL BUILDS HIS TEAM.

As Rostow suggested, Marshall moved quickly to form an effective cadre of leaders. Shortly after becoming Chief of Staff, he told a columnist, "The present general officers of the line are for the most part too old to command troops in battle under the terrific pressures of modern war...I do not propose to send our young citizens-soldiers into action, if they must go into action, under commanders whose minds are no longer adaptable to the making of split-second decisions in the fast-moving war of today." {9}

"They'll have their chance to prove what they can do." Marshall continued, "But I doubt that many of them will come through satisfactorily. Those that don't will be eliminated." {10}

Marshall was as good as his word. Of all the senior generals on active duty when he became Chief of Staff, only Walter Krueger would command American troops in battle. The rest retired. {11}

But where would the new officers come from? Fortunately, Marshall observed many officers over his long career and kept a "black book" on their strengths and weaknesses. He also had an exceptional eye for talent and was usually correct in sizing up officer's potential. {12} As Chief of Staff, Marshall would test them.

"I'm going to put these men to the severest tests which I can devise in time of peace." He told the columnist, "I'm going to start shifting them into jobs of greater responsibility than those they hold now. . . Those who stand up under the punishment will be pushed ahead. Those who fail are out at the first sign of faltering." $\{13\}$

Many of these future leaders would pass through Marshall's staff. Among them would be: Dwight Eisenhower, Omar Bradley, J. Lawton Collins, Matthew Ridgeway, and Maxwell Taylor. {14} Each of these officers would become successful field commanders and succeed each other as the Army's Chief of Staff. Others that passed through Marshall's staff included: Generals Bedell Smith (later Ambassador to the Soviet Union and Director of the CIA), Handy, Gerow, and McNarney.

THE CHARACTER OF THE ARMY STAFF.

Marshall picked his staff with care. In many respects, the men Marshall selected were a reflection of his own experiences and values. He was known for his absolute integrity, selfless dedication, almost rigid self-discipline, and complete confidence in his own ideas and actions. Each of these attributes were instilled into his staff.

Demand for Honesty. Marshall's integrity is almost legendary. He told the truth even if it hurt his case, but he invariably won the confidence of others by his own complete integrity and candor.

In a similar manner, Marshall demanded absolute honesty from his subordinates. He did not want "yes-man." For instance, General Bradley was Marshall's secretary during 1940. Marshall told Bradley, "When you carry a paper in here, I want you to give me every reason you can think of why I should not approve it. If in spite of your objections, my decision is still to go ahead, then I'll know that I'm right." {15}

General Wedemeyer had a similar experience. After making a strong presentation that criticized Marshall's position, Wedemeyer told Marshall that he hoped he hadn't been disrespectful. Marshall replied, "Wedemeyer, don't you ever fail to give me your unequivocal expression of your views. You would do me a disservice if you did otherwise." {16}

On the other hand, Marshall could be brutal to those who were not completely candid with him. For instance, one young general came to Washington to explain and defend MacArthur's strategic proposals for the war in the Pacific. The general concluded by remarking, "I will stake my military reputation on the soundness of these plans." General Marshall leaned across the table and asked acidly, "Just what is your military reputation?" {17}

Selfless Dedication. Marshall consciously declined to promote himself. Such restraint would cost him the assignment he wanted most--the command of the cross-channel invasion. Most historians agreed that if he had pressed President Roosevelt for the command, he would have received that prized assignment. However, such actions would have been totally out of character for Marshall. As a consequence, Marshall remained as Chief of Staff and Eisenhower took the command. {18}

Marshall expected the same selfless dedication from others. He did not see the Army Staff as a stepping stone to more prestigious field assignment. On the contrary, he saw these staff assignments as essential to the war effort, but as a deadend to any military career.

He once told Eisenhower that promotions would go to the officers who did the fighting. "Take your case," Marshall added, "I know that your were recommended by one general for division command and by another for corps command. That's all very well. I'm glad they have that opinion of you, but you are going to stay right here and fill your position, and that's that!" Marshall continued, "While this may seem a sacrifice to you, that's the way it must be." {19}

While Marshall made a concerted effort to send his staff officers to field assignments, he kept them long enough to make significant contributions to the war effort. Their dedication, continuity, and detailed knowledge of the various problems were a key, if often overlooked, contribution to the war effort.

In a similar vein, Marshall particularly disliked officers seeking outside patronage. For instance, one staff officer recalled a phone call that Marshall received in his presence. He didn't know what was said on the other side, but an angry Marshall replied, "Senator, if you are interested in that officer's advancement, the best thing you can do is never mention his name to me again. Good-by." {20}

Self-Discipline. Marshall looked for officers with self discipline. After several bouts with neurasthenia (exhaustion due to overwork) during his early career, Marshall disciplined himself to exercise and relax. {21} He expected other to do the same. (Marshall was true to his beliefs. He exercised each morning, arrived at his office no later than 7:45 each day, and left no later than 5:30 each evening. He went home to relax. {22})

Marshall believed "a man who worked himself to tatters on minor details had no ability to handle the more vital issues of war." {23} He told staff officers, "Avoid trivia." {24}

Confidence, Optimism and Enthusiasm. Marshall's self confidence was well known. He also expected staff officers to be confident and enthusiastic about their assignments. He would not assign an officer to any responsible positions unless he was an enthusiastic supporter of the project. He wanted them to be confident of the project's successful outcome. {25}

MARSHALL'S RELATIONSHIP WITH HIS STAFF.

Marshall demanded exacting staff work. Staff officers quickly learned his standard: They had to be thoroughly prepared. Their recommendations had to be concise, unbiased, detailed and thorough. They also learned that he strongly disliked staff studies and reports. {26} He preferred action over reports.

Staff Efficiency. Briefings given to Marshall were models in efficiency and communication of ideas. Staff officers were instructed to walk into his office without saluting and take a seat in front of his desk. At his signal, they began their briefing. Marshall listened with absolute concentration and absorbed the most intricate details. If there was a flaw, he would find it and ask why it hadn't been uncovered before it got to his desk. At the end of the briefing, he would ask, "What is your recommendation?" {27}

After the briefing, Marshall made his decision. The sheer rapidity of Marshall's thinking left many officers with the initial impression that he was "playing things off the cuff." In fact, he was "thinking of every detail, but thinking at a fantastic speed, and with unmatched powers of analysis." {28} He then stated his decision clearly and with the greatest simplicity. He spoke rapidly, but plainly.

Long Term Outlook and Planning. Marshall also valued effective and pragmatic planning. Historian Richard Neustadt suggests that he had an uncanny ability to look at current problems with a sense of both the past and the future. {29} He understood history and could relate future consequences to current actions. In addition, he wanted to act on problems, not react to them. He repeatedly told his staff, "Gentlemen, don't fight the problem. Solve it." {30}

He also forced his staff to think about problems that might have seemed remote at the time. For instance, only several months after the disastrous American defeats in the Pacific and at Kasserine Pass, Marshall called Major General John Hilldring to his office. He told Hilldring to start organizing the military governments for the countries that were going to be liberated by the Allies. {31} Amid all the bad news, Marshall knew the Allies would be victorious. He wanted to be prepared when that victory came.

Delegation and Staff Initiative. Once he accepted a plan, Marshall expected his staff to act decisively within their authority. He also insisted that his subordinates do their assigned jobs with a minimum of supervision and make decisions without waiting to be told. He didn't want to waste his time with decisions that could have been made at a lower level. {32}

Toward this end, he supported his staff by giving them wide latitude to accomplish their jobs. Furthermore, he backed their actions with the full authority of his position. General Eisenhower later wrote, "His ability to delegate authority not only expedited work but impelled every subordinate to perform beyond his suspected capacity." {33}

Teacher-Student Relationship Marshall acted as a teacher and role model to his staff. He used every opportunity to coach his subordinates. He often used historical examples, particularly the campaigns of Stonewall Jackson, to illustrate his arguments. {34} Eisenhower's biographer suggested Marshall's office "became kind of a schoolroom in which Eisenhower learned many lessons useful to him in the final development of his own command technique." {35}

Among the more important lessons Eisenhower learned was how to successfully meld political and military leadership at the highest levels. He saw that "Marshall never condescended, never presumed to issue 'orders' to civilians, and never impugned the motives of his opponents on specific issues. He made no grandiose public gestures calculated to inflame the prejudices or outrage the convictions of those who instinctively distrust the military. He counted on the truth—frankly stated, persuasively argued--to win its own points, and when he secured the agreement of a former opponent on an issue he never gloated over it. In his view, such a 'victory' was never personal; it meant simply that his former opponent, like himself, now recognized an objective reality." {36} Eisenhower learned these lesson and applied them exceptionally well as the Supreme Commander in Europe.

PERSONAL RELATIONSHIPS

"If George Marshall had a fault," Maxwell Taylor wrote, "it was that his strong personality had such an unnerving effect on officers around him." Taylor recalled, "I have seen many a general officer in his outer office betraying a most unmilitary agitation while awaiting his turn to pass through the door to his (Marshall's) office." {37}

Many remember Marshall's thoughtfulness and considerate actions, but few would remember him as a warm friend. Omar Bradley wrote, "Although I had known General Marshall for more than ten years, I was never entirely comfortable in his presence." {38}

General Wedemeyer, Marshall's chief planner for several years, wrote, "In all my contacts with Marshall, I found him as a rule coolly impersonal, with little humor. I know of many acts of kindness and thoughtfulness on his part, but he kept everyone at arm's length. It was typical of him that no one I know, with the exception of General Stilwell, ever called him by his Christian name or was on terms of even the beginnings of familiarity." {39} (As an interesting side note, President Roosevelt once called Marshall by his first name, George. He got a stand-off look from Marshall and never called him by his Christian name again.)

General Eisenhower summed up both sides of Marshall's personal relations with his subordinates. On one side, he noted "an atmosphere of friendly co-operation, remarkably free of even minor irritations, surrounded him. Yet he gained this cooperation without sacrificing one iota of his effective leadership; there was never any question among his subordinates as to who was the boss. He commanded respect, without insisting upon it, by his integrity, his profound knowledge of the job, and his obvious commitment to forces greater than himself." {40}

On the other hand, Eisenhower noted that just about everyone on Eisenhower's staff was in awe of Marshall. He related the story of Brigadier General Robert Crawford. Eisenhower suggested, Crawford was "a brilliant man with an unlimited future," but Marshall terrified him. Crawford got tongue-tied every time he was in Marshall's presence. As a consequence, Crawford's talents were never fully recognized. {41}

General Walter B. Smith agreed with Eisenhower. He believed some officers failed because they were incapable of expressing themselves lucidly and succinctly {42} During 1942, Smith suggested, "Those who speak slowly and haltingly and seem to fumble are soon passed by in the rush to get things done." {43}

Despite his intimidating reputation, there was another side to Marshall. He obviously cared about his subordinates. In addition, he was unfailingly courteous and thoughtful. Although he would occasionally get impatient and sometimes sharp with his subordinates, he was never rude. Marshall was the model of a gentleman in his dealings with all around him.

Moreover, many of his subordinate noted his uncommon thoughtfulness. General Lucian Truscott suggested that Marshall's generous and thoughtful actions "always distinguished him in his dealings with his subordinates. {44} In a similar vein, General Mark Clark's wife wrote that Marshall "was a great comfort to the wives and families of the officers he knew personally. Despite the terrible burden of responsibility and his work as Chief of Staff. . he always tried to find time to pass along word of the officers to their families. He made me and many other wives feel that our Army had a heart and soul and that our husbands were something more than mere numbers dropped into the slot for which their training fit them." {45}

In addition, Marshall often remained in the background while his subordinates received the credit for their hard work. For instance, it was Marshall who "prepared the ground for Eisenhower's tumultuous reception in New York, the ovations of Spaatz and Bradley in Philadelphia, of Hodges in Atlanta and Devers in Louisville." {46} Marshall never accepted such honors for himself. (In fact, he seemed genuinely embarrassed by them.)

It's difficult to understand why Marshall was so outwardly cool to his subordinates. Some suggest that it was the mechanism he used to protect himself. He once told his wife, "I cannot afford the luxury of sentiment. Mine must be cold logic. Sentiment is for others. . . It is not easy for me to tell men where they have failed. . .My days seem to be filled with situations and problems where I must do the difficult, the hard thing." {47} In any event, his coolness did not hurt the overall operation of the staff. While some were obviously hurt, others flourished.

THE ARMY STAFF IN ACTION

Two staff actions initiated by Marshall show how he effectively used his staff to achieve results. The first is Marshall's response to the Japanese invasion of the Philippines. The second is the reorganization of the Army Staff. Both took place between December 1941 and March 1942.

Marshall's Reacts to the Invasion of the Philippines.

Five days after the Japanese attack on Pearl Harbor, Third Army's Chief of Staff, Brigadier General Dwight Eisenhower, received a call from the War Department. General Marshall wanted him to come to Washington right away. Eisenhower did not know why. He immediately took the train to Washington.

Eisenhower arrived at Union Station in Washington on Sunday morning, 14 December, and went straight to General Marshall's office. Marshall quickly outlined the situation in the Pacific. He discussed the ships lost at Pearl Harbor, the planes lost at Clark Field in the Philippines, the size and strength of Japanese attacks elsewhere. Next he discussed the troop strengths in the Philippines, the limited possibilities of reinforcement, and the intelligence estimates. He ended with the capabilities of the Dutch and British in Asia, and other details, {48}

Marshall paused. Then he leaned over the desk, fixed his eyes on Eisenhower, and demanded, "What should be our general line of action?" {49}

Eisenhower was startled. Other than Marshall's briefing, all he knew about the Pacific war was what he had read in the papers. After a second or two of hesitation, he replied, "Give me a few hours."

Marshall agreed. {50}

Marshall's actions were typical. He recruited the best officers to be on his staff. Eisenhower met this criteria--he already had an exceptional reputation as a staff officer. Marshall also wanted his staff officers to think clearly and act on their own. His question was Eisenhower's first test. {51}

Eisenhower returned later that day. He suggested that it was impossible to get reinforcements to save the Philippines, but the United States had to bolster MacArthur's forces. "The people of China, of the Philippines, of the Dutch East Indies will be watching us.", he said "They may excuse failure but they will not excuse abandonment." {52}

Eisenhower further recommended that the United States use Australia as a base of operations. Lastly, he recommended the United States set up a line of communications running from Hawaii through New Zealand to Australia. {53}

When he finished his brief, Eisenhower recalled that Marshall leaned forward with "an eye that seemed awfully cold--and declared, 'Eisenhower, the Department is filled with able men who analyze the problems well but feel compelled always to bring them to me for final solution. I must have assistants who will solve their own problems and tell me later what they have done.'" {54}

Over the next several months, Eisenhower devoted most of his energies and took wide ranging responsibilities to make his recommendations work. Marshall liked Eisenhower's ability to turn ideas into actions and he increased Eisenhower's responsibilities accordingly. On 9 March 1942, he was named to head the newly formed Chief of the Operations Division.

Marshall's actions were typical. He gave his trusted subordinates full reign to accomplish a mission and rarely interfered with their ability to do it. After his initial interview with Marshall, Eisenhower rarely met with Marshall again. Marshall trusted Eisenhower's judgement and backed his actions. In return, Marshall received selfless and dedicated service from his subordinates.

The Reorganization of the Army Staff

Even before becoming Chief of Staff, Marshall realized the Army's General Staff was incapable of preparing for war. He later said the staff had "lost track of its purpose or existence. It had become a huge, bureaucratic, red-taperidden operating agency. It slowed everything down." {55}

In addition, Marshall had over sixty officers with direct access to him. He also had thirty major and 350 minor commands under him. {56} Clearly, this span of control was too large. The need for reform was recognized for a long time, but the bureaucracy always moved to block any changes.

Marshall wanted to reorganize the War Department, but he realized his efforts would be blocked if he gave its opponents time to organize. To get the changes he needed, he had to rely on careful planning, minimum publicity, and complete ruthlessness in execution. Within a month of Pearl Harbor, Marshall chose General McNarney to lead the effort in reorganizing the staff. McNarney's chief qualifications were that he had recent experience on the Army Staff, understood the army and air forces, and had just returned from England. Most important, Marshall needed a "tough hatchet man with a rhinoceros hide." Lastly, McNarney had "the nerve to push through the reorganization in the face of the rugged infighting that was almost certain to follow." {57}

NcNarney started on January 25, 1942. Within a week, McNarney and several assistants completed the plan. It was sweeping.

- The General Headquarters and the War Plans Division were eliminated and replaced by the new Operations
 Division.
- The G-1, G-3, and G-4 with combined staffs of 304 officers were reduced to twelve officers each and restricted to planning functions.
- The powerful Chiefs of Arms were eliminated.
- Finally, the numerous agencies and commands were consolidated into three larger organizations: The Ground Forces under General McNair, the Army Air Forces under General Arnold, and the Services of Supply under General Somervell. [58]

Marshall approved the plan on February 5, 1942.

The plan hit the War Department like a bombshell, but Marshall's careful timing of the action had already won most of the battle. He had timed the changes to coincide with the transfer of two Chiefs of Arms and the Adjutant General. The remaining two Chiefs of Arms were destined for more important duties and were soon transferred. Thus, careful timing had eliminated one of the biggest obstacles to the plan.

Next, Marshall asked President Roosevelt to approve the plan under the President's recently granted war powers. When Roosevelt approved the plan on February 28, it allowed Marshall to bypass the Congressional patronage of some of Marshall's subordinates. Marshall and McNarney had successfully neutralized most of the expected outside interference. The first phase of the battle was over. Now, Marshall and McNarney had to prevent the staff from sabotaging the plan. Once again, they moved quickly. Marshall set up a committee to carry out the plan, but gave its members little room to tinker or object. The plan went into effect on March 9.

Within six weeks of receiving his orders, General McNarney had completed his mission. Marshall's biographer, Forrest Pogue, credits the lightening swift success of the reorganization to "the audacity of his (McNarney's) approach and the full authority of the Chief of Staff." {59} Once again, Marshall picked the right man for the job and gave him full authority to get it done. Marshall also showed a complete understanding of the Army and the workings of the government.

Lastly, it shows his ability to relate consequences to actions. Pogue believed that it was "the most sweeping reorganization of the War Department since Secretary of War Elihu Root had undertaken the job in 1903." {60} It provided a smaller, more efficient staff and cut paperwork to a minimum. In addition, it set up clear lines of authority. Lastly, it freed Marshall from the details of training and supply. Marshall delegated responsibility to others while he freed himself to concentrate on the war's strategy and major operations abroad. {61}

WHAT CAN WE LEARN FROM MARSHALL?

General Marshall's staff leadership offers some valuable lessons. He handled his staff with absolute efficiency and got more from them than they expected they could give.

What made Marshall such a successful staff leader? As important, what can we learn from his leadership and how can we apply it today?

At least five aspects of Marshall's staff leadership deserve special attention. In each case, adapting Marshall's techniques can help us make better decisions and become more efficient as a staff leader.

Using the Staff as a Counterpoint. Marshall was an exceptionally knowledgeable Chief of Staff. Throughout his career, he aggressively sought to learn every aspect and detail of his profession. Due to his own hard work, a diversity of demanding assignments, and effective mentorship by others, Marshall became an expert in many areas. As Chief of Staff, he thoroughly knew the Army's strengths and limitations from the squad up.

With such depth and breath of knowledge about the Army, some staff leaders might be tempted to ignore or discard the advice of their staffs. Other staff leaders might limit their staff to the execution of their preconceived ideas. Still others might view their staff as an impediment to their ideas. Marshall rejected these approaches.

Marshall relied heavily on his staff, but not in an information gathering role. Rather, he used them as a sounding board. They broadened his already extensive knowledge of the Army by giving Marshall new perspectives on problems that he had already considered. As the anecdotes about Bradley and Wedemeyer suggest, Marshall used his staff to confirm or modify his line of attack on a problem. (He also saved himself a great deal of time and trouble, but more on this later.)

As a consequence of such an approach, Marshall consistently produced well thought-out and sound recommendations. Roosevelt rarely rejected Marshall's recommendations.

Staff Leadership. Marshall insisted "that leadership in conference, even with subordinates, is as important as on the battlefield." {62} Indeed, Marshall had many of the leadership traits emphasized by today's management and leadership consultants. Four are worth strong consideration.

Vision. Marshall had a clear and unshakable vision of what the Army Staff should be. Within this vision, he transformed the Army Staff from a bickering bureaucratic agency to a lean organization capable of planning and directing worldwide military operations.

Standards. Marshall not only set high standards, he enforced them. He was ruthless in replacing those who did not measure up to the standards. As important, he applied his standards equally to everyone.

Communication and Motivation. He clearly articulated and communicated his visions, standards and ideas. When he spoke, he motivated.

Decisiveness. Marshall was decisive, but not impulsive. When action had to be taken, he took it. But, he invariably sized up the problem, developed a sound plan, and took quick, well-synchronized action. His reorganization of the Army Staff is an example of such decisive action over much opposition.

Marshall's sound leadership methods offered several benefits.

First, the Army Staff gained a sense of direction. Marshall's ability to formulate and communicate his vision allowed everyone to visualize the Department's long-range goals.

Each officer saw how their contributions, however small, helped the Department's overall effort.

Second, the staff became very efficient. Clear guidance and a firm sense of direction minimized the effort spent on redoing actions that had been mistakenly embarked upon with the wrong guidance. The time saved was used to solve other important problems.

Third, Marshall's high standards permeated everything the staff did. As a result, the staff consistently produced exceptionally good work.

Total Staff Involvement. In today's parlance, Marshall gave "mission orders." He made his subordinates fully responsible for actions.

Marshall's procedures were simple. First, he defined the task and his expectations to his subordinate. Next, he ordered the officer to develop a plan. After Marshall approved the plan, he directed the staff officer to execute the plan. Marshall monitored progress throughout the process, but he did not expect the staff officer to pester him for more details or guidance. He expected his staff to make timely decisions within the realm of their authority.

The broad responsibilities given to Eisenhower after Pearl Harbor were the rule on Marshall's staff, not the exception. Marshall's approach had several advantages.

First, it freed Marshall to concentrate on the most important decisions. He also gained more time to contemplate the future and the "big picture."

Second, it minimized actions "falling through the crack." There was continuity on staff actions. Few actions were dropped during staff handoffs simply because there were few staff handoffs.

Third, his "start to finish" approach allowed staff officers to move quickly up the learning curve and stay there. Staff officers became the experts in their particular areas of responsibility. Combined with Marshall's desire for staff officers to make decisions, this approach allowed the most knowledgeable person to make the decisions affecting the action. It also minimized "reinventing the wheel."

Fourth, staff officers felt responsible for their actions. They aggressively sought to bring their actions to successful conclusions. (Remember, Marshall only picked officers who were confident in the outcome of the actions they were undertaking.)

Fifth, this process was part of Marshall's mentoring and development process. By making his staff officers take responsibility, he prepared them for more responsible positions in the future. Thus, he fulfilled one of the fundamental responsibilities of any leader; he trained his subordinates for positions of greater responsibility and leadership.

Developing Talent. Marshall had an extraordinary ability to choose and develop talented officers. He identified them early in their careers, moved them into responsible assignments, and mentored them along the way. However, he avoided cronyism. He carefully "tested" each officer before moving him into more responsible positions. Officers were advanced on their contributions and potential, not their friendship.

Marshall normally developed his subordinates by giving them responsibility, not by lecturing them. In addition, Marshall acted as a role model for many of his subordinates. Certainly, Eisenhower's references to "Marshall's classroom" indicated the kind of relationship he had with Marshall as a mentor.

Marshall's ability to develop talent had several benefits.

First, Marshall insured that the best officers rose to the top. There was no cronyism on the Army Staff as there were in some of the field commands.

Second, talent fostered talent. The Army Staff had a great deal of talent. The very interaction of such talented men promoted an atmosphere of excitement and creativity among its members. Such creativity was reinforced and rewarded by Marshall.

Third, Marshall's impartial manner of promoting talent fostered trust throughout his staff. Members of his staff knew they would be rewarded on their performance, not their connections.

Fourth, Marshall invariably placed the right person in the right job. Marshall's continual observations and "testing" of his subordinates gave him an excellent picture of their strengths, weaknesses, and potentials.

Staff Efficiency. Marshall sought efficiency in everything that he did. He also insisted that his staff be efficient. His disdain for staff papers, insistence on no-frill briefing techniques, drive for bottom line recommendations, and his almost adherence to a tight daily schedule clearly point to his desire for disciplined efficiency.

On a broader scale, his radical reorganization (not just minor fixes) of the War Department demonstrated his impatience with bureaucratic delays to action. (He conclusively showed that "bigger" is not necessarily better when it comes to a bureaucracy. He also required that his staff could do "more with less.") Under his leadership, the War Department became a remarkably well-tuned machine capable of planning and executing the nation's military strategy. Such an aggressive approach to efficiency had several important advantages.

First, it emphasized action. The Army Staff faced an avalanche of problems before and during World War II. They could have easily been overwhelmed. But, it was not a time for important actions to languish. Marshall's approach quickly moved urgent actions through the bureaucracy in Washington.

Second, Marshall and his staff saved time and effort. In turn, this allowed Marshall more time for sensitive issues, planning, and reflection. In addition, it allowed him to relax--a precious commodity for a man in his position. (Remember, Marshall religiously left the office each day at 5:30 in the evening and went home to relax.)

SOME LAST THOUGHTS

This article provides an historical perspective on practical techniques for leading a large and very effective staff. It doesn't imply that Marshall's style is the only way of running a staff. Rather, it suggests the importance of Marshall's drive for action and integrity, for making clear and timely decisions, and for developing talent. These are essential to any organization.

Quality leadership by staff leaders is important. For instance, when Field Marshall Sir Bernard L. Montgomery was asked to list the attributes of a successful general, the first item on his list was "Have a good Chief of Staff." {63} Staff leaders leave their imprint not only on their staff, but on the entire organization. Their importance cannot be overrated. They can make the difference, but to do so they must conscientiously study their profession as General George C. Marshall studied all aspects of the Army throughout his career.

NOTES

- 1. "We Tested Our Leaders: These Are the Ten Rated Topmost by a Panel of Authorities," Newsweek, December 6, 1943, pp. 30-32. The top ten (with the number of citations) were: Marshall (66), Roosevelt (65), Hull (48), Willkie (47), Eisenhower (41), Baruch (38), Kaiser (35), MacArthur (28), Nelson [27), and King (23). (The tabulation of the poll is somewhat misleading since it accounted only for votes cast. Actually, President Roosevelt received 56 first place and five second place votes. Marshall received nine first place and 24 second place votes. If the votes had been weighted, President Roosevelt would have come in first place and Marshall in second place.)
- 2. Robert E. Sherwood, Roosevelt and Hopkins: An Intimate History (New York: Harper & Brothers, 1948), pp. 802-3.
- 3. The other five star generals, in order of rank, were: Generals MacArthur, Eisenhower, and Arnold. All were promoted during December 1944, but with different dates of rank. General Bradley was promoted on 18 September 1950.
- 4. Forrest C. Pogue, George C. Marshall: Statesman (New York: Viking, 1987), p. 1.
- 5. Generals Scott, Bliss, Biddle and (Peyton C.) March were the Army's Chiefs of Staff during World War I. There was no position as Chief of Staff during the Civil War; however, General Halleck became Lincoln's military advisor.
- 6. William Frye, Marshall: Citizen Soldier (New York: The Bobbs-Merrill Company, 1947), p. 259.
- 7. General Pershing was Marshall's most important mentor; however, he had many others. Among his other military mentors were Generals Hunter-Liggett, Bell, and Fox Connor. Connor is among the more interesting. Generals Patton and Eisenhower also claimed that Connor was their mentor. As President, Eisenhower would say, "Fox Connor was the ablest man I ever knew."
- 8. W. W. Rostow, The United States in the World Arena (New York: Harper & Row, 1960), p. 49. (Also see Sanger, pp. 267-8)
- 9. Eric Larrabee, Commander in Chief (New York: Simon & Schuster Inc., 1987), p. 101.
- 10. Ibid., p. 101.
- 11. Ibid., p. 101.

- 12. The advancement of many officers during World War II was directly related to a favorable relationship with Marshall during an earlier part of their careers. For instance, 160 officers who served with him at Fort Benning became general officers during the war (Puryear, p. 69.). On the other hand, there is at least one horror story about Marshall's black book. For years, Marshall confused General James Van Fleet with another officer who had the reputation of being a poor soldier and a drunk. Each time Van Fleet was recommended for promotion to Brigadier General, Marshall rejected it. Finally, someone pointed out Marshall's error and Van Fleet was promoted. He eventually became a four star general and a distinguished Army commander in Korea (Mosley, p. 414).
- 13. Larrabee, pp. 101-102.
- 14. Forrest C. Pogue, George C. Marshall: Organizer of Victory, 1943-1945 (New York: Viking Press, 1973), p. 62.
- 15. Omar N. Bradley, A Soldier's Story (Chicago: Rand NcNally, 1951), p. 20.
- 16. General Albert C. Wedemeyer, Wedemeyer Reports! (New York: Henry Holt & Company, 1958), p. 187. (Also see Sanger, pp. 290-1.)
- 17. Marshall Sanger, The Image of Modern Generalship in the United States 1940 1965 (Doctoral Thesis, Columbia University, 1967), p. 292.
- 18. Ibid., p. 321.
- Stephen E. Ambrose, Eisenhower: Soldier, General of the Army, President Elect, 1890-1952 (New York: Simon and Schuster, 1983), p. 143.
- 20. Marshall S. Carter, "Unforgettable George C. Marshall," A Reader's Digest Reprint (Pleasantville, N.Y., July 1972), p. 4.
- 21. Forrest C. Pogue, George C. Marshall: Education of a General (New York: Viking Press, 1963), p. 124-126.
- 22. Leonard Mosley, Marshall: Hero for Our Times (New York: Hearst Books, 1982.), p.272.
- 23. Dwight D Eisenhower, Crusade in Europe (Garden City, New York: Doubleday & Company, 1948), p. 51.
- 24. George F. Kennan, Memoirs, 1925-1950 (Boston: Little, Brown & Co., 1967), p. 326.
- 25. Eisenhower, p. 51.
- 26. Frye, p. 271.
- 27. Carter, p. 1.
- 28. Frye, p. 270.
- 29. Richard E. Neustadt and Ernest R. May, Thinking in Time: The Uses of History for Decision-Makers (New York: The Free Press, 1986), p. 249.
- 30. Neustadt, p. 85.
- 31. Ibid., pp. 247-248.
- 32. Mosley, p. 269.
- 33. Dwight D. Eisenhower, Crusade in Europe, p. 56. Eisenhower would further state, "True delegation implies the courage and readiness to back up a subordinate to the full; it is not to be confused with the slovenly practice of merely ignoring an unpleasant situation in the hope that someone else will handle it. The men who operate thus are not only incompetent but are always quick to blame and punish the poor subordinated who, while attempting to do both his own and his commander's jobs, has taken some action that produces an unfortunate result."
- 34. Kenneth S. Davis, Soldier of Democracy (Garden City, New York: Doubleday & Company, 1946), p. 294.
- 35. Ibid., p. 294.
- 36. Ibid., p. 294. (Also see Sanger, pp. 282-3.)
- 37. Maxwell D. Taylor, Swords and Plowshares (New York: W. W. Norton and Company, Inc., 1972), p. 40.
- 38. Bradley, p. 20.
- 39. Wedemeyer, p. 121-122. (Also see Sanger, p. 292.)
- 40. Davis, p. 294. (Also see Sanger, p. 282.)

- 41. Stephen E. Ambrose, p. 136.
- 42. Edgar F. Puryear, Nineteen Stars (Orange, Virginia: Green Publishers, 1971), p. 82.
- 43. Harry C. Butcher, My Three Years with Eisenhower (New York: Simon and Schuster, 1946), p. 277.
- 44. Lucian K. Truscott, Command Missions (New York: Dutton, 1954), p. 383.
- 45. Maurine Clark, Captain's Bride, General's Lady: The Memoirs of Mrs. Mark W. Clark (New York, Toronto, and London: McGraw-Hill Book Co., Inc., 1956) p. 107. (Also see Sanger, p. 289.)
- 46. Robert Payne, The Marshall Story (New York: Prentice-Hall, 1951), p. 241.
- 47. Katherine Tupper Marshall, Together: Annals of an Army Wife (New York and Atlanta: Tupper and Love, 1946), p. 110.
- 48. Ambrose, p. 133.
- 49. Ibid., p. 133.
- 50. Ibid., p. 133.
- 51. Ibid., p. 133.
- 52. Ibid., p. 134.
- 53. Ibid., p. 134.
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- 55. Forrest C. Pogue, George C. Marshall: Ordeal and Hope, 1939 1942 (New York: Viking Press, 1965), p. 289.
- 56. Ibid., p. 290.
- 57. Ibid.,p. 292.
- 58. Ibid., p. 296.
- 59. Ibid., p. 295.
- 60. Ibid., p. 295.
- 61. Ibid., p. 298.
- 62. Puryear, p. 44.
- 63. Major H. A. DeWeerd, Great Soldiers of World War II (New York: W. W. Norton & Company, 1944), p. 117. The list of nine were:
 - a. Have a good chief of staff;
 - b. Go for simplicity in everything;
 - c. Cut out all paper and train subordinates to work on verbal instructions and orders;
 - d. Keep a firm grip on basic fundamentals--the things that really matter;
 - e. Avoid being involved in details--leave them to your staff;
 - f. Study morale--it is a big thing in war. Without high morale you can achieve nothing;
 - g. When the issue hangs in the balance, express confidence in the plans and in the operations, even if inwardly you feel not too certain of the outcome;
 - h. Never worry;
 - Never bellyache.

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George C. Marshall, The Last Great American? LANCE MORROW

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NO SOLDIER SINCE WASHINGTON HAS HAD HIS ROMAN VIRTUES, AND SO SIGNIFICANTLY SHAPED A PEACE

In my mind, a diagram of American military history might begin with a parallelogram of Georges -- George Washington and George Marshall; George Armstrong Custer and George Patton. A geometry of paired opposites. In some ways, George Marshall is the best of them all.

Custer and Patton are the Hotspur sides -- martial peacocks, brave, vainglorious and, in Custer's case, fatally heedless. The cavalier Georges favored flamboyant touches: Custer with his personal flag and a regimental band, mounted on white horses, playing "Garryowen" across the Montana plains; Patton with ivory-handled pistols and his warrior-mystic's déjà vu -- he thought that he had fought with Alexander the Great in another life.

Well, as George Marshall said, ruefully, a democracy's leader, even in war, must keep the people entertained. Custer and Patton were performance artists who filled the stage with strut and plumage and flame. They conceived that the battle was essentially a dramatically amplified projection of themselves. Pairing Patton with Custer is unfair, perhaps. Custer's curtain call was an act of self-immolating folly; Patton, by contrast, was a brilliant tactician and a superb combat leader who redeemed his excesses when he brought the Third Army slashing across Europe toward Hitler's throat.

The other two sides of the parallelogram, the Stoic Georges, shaped larger American business. Washington and Marshall were soldiers of maturity and gravitas: father figures, not sons. In both generals duty evolved beyond ego and broke through to a sort of higher self-effacement, an identification by which they merged themselves with their country's purposes. The Greeks might have thought Patton and Custer embodied hubris; they would have assigned Washington and Marshall to the realm of *arete*, or virtue -- the self fulfilled in noble accomplishment for the state. Washington and Marshall were not only warriors but, after their wars, something more constructive than that.

As Emerson said, "Every hero becomes a bore at last." Washington and Marshall both may seem too good to be true. But when I put Washington and Marshall side by side, and look at them against the background of the national leadership now in office, it is easy to think that I am looking at the first American grown-up -- and the last.

As much as any man, Marshall saved world democracy at the moment of its greatest danger. He took up his duties as U.S. Army Chief of Staff on September 1, 1939, the day that Hitler marched into Poland. He began with an absurdly ill-equipped army of 174,000 men, ranking 17th in the world behind such nations as Bulgaria and Portugal, and turned it into a global fighting force of more than eight million, an army without which the Allies could not have defeated Nazi Germany and Japan. Ulysses Grant [a Union general during the U.S. Civil War] was the first master of industrial warfare. Marshall was the first genius of bureaucratic warfare, a Napoleon riding a desk. Not martial flamboyance but logistics saved the world in 1939-45, although the world still may not be mature enough to understand that.

Could anyone else have done the job as well as Marshall? No. Was Marshall indispensable? The question has no answer, except perhaps a quotation from the *Tao Te Ching*: "The Master doesn't talk, he acts, when his work is done, the people say, 'Amazing: We did it all by ourselves!' "

The recent anniversary of the Marshall Plan notwithstanding, as a soldier George Marshall is half-forgotten now, or four-fifths forgotten, as he knew he would be. That was part of his virtue. There was a moment around Thanksgiving of 1943 that might have changed everything and propelled Marshall into higher historical orbit. [U.S. President] Franklin Roosevelt [FDR] needed to settle upon the general who would lead the Allied invasion of France and the reconquest of Europe. Everyone assumed that Army Chief of Staff George Marshall would get the job he had magnificently earned.

On his way to meetings in Cairo and Tehran, Roosevelt discussed the question with Dwight Eisenhower, then the commander of Allied forces in North Africa and the Mediterranean. As they flew over Tunisia, the President thought out loud: "Ike, you and I know who was Chief of Staff during the last years of the Civil War but practically no one else knows, although the names of the field generals -- Grant, of course, and Lee and Jackson, Sherman, Sheridan and the others -- every schoolboy knows them. I hate to think that fifty years from now practically nobody will know who George Marshall was. That is one of the reasons why I want George to have the big command. He is entitled to establish his place in history as a great general.

Eisenhower listened in silence. He, of course, wanted to command the invasion but, like everyone else, assumed the job would go to Marshall. In Cairo in early December, FDR tried to get Marshall to state a preference. Marshall said only that he would do what the President wanted him to do.

Days later, FDR made his decision. He reasoned that no one else could deal with Congress as effectively as Marshall did -- no other soldier would have Marshall's immense moral authority and credibility. No one else knew the world military situation so well. As the Cairo Conference ended, Roosevelt told Marshall: "I feel I could not sleep at night with you out of the country."

It was done. Marshall accepted the decision without question or comment. Both Roosevelt and Marshall were correct in predicting that being kept at his desk in the War Department would deprive Marshall of the honor in history that he deserved.

History is not fair. Marshall was a greater man than Dwight Eisenhower, yet it was Ike who went to the White House for eight years. Marshall was a greater general, and a better man, than theatrical and self-promoting Douglas MacArthur. Yet MacArthur lives on more vividly in whatever remains of American historical memory. Despite the offer of seven-figure publishers' advances, Marshall refused to write his memoirs after the war; to do so, he suggested, would require him to tell the full story, and such truth-telling would sometimes wound old colleagues.

His concern for others was usually concealed behind an on-duty, crisply serious command manner that rarely permitted warmth or familiarity to show. The jovial Franklin Roosevelt on several occasions called him "George," but Marshall rejected it as not suitable from his Commander in Chief. He had a sense of humor, but one so rarely indulged and so sly and dry that others could miss the point. At a World War I armistice celebration, a French attaché and a British observer debated the postwar distribution of Germany's colonies. When the Frenchman generously proposed giving Syria to the United States, Marshall declined: "America is opposed to any colony that has a wet or a dry season, and an abnormal number of insects." He allowed, however, that Bermuda would be acceptable. The Englishman was not amused.

Colin Powell and Norman Schwarzkopf, heroes of a 42-day video war, made millions for their memoirs. Marshall belonged to a pre-television, almost Plutarchian, order. In some ways the burden that he bore was greater than that of Churchill or Roosevelt, because Marshall was the man who turned policy, mere ideas, into men and steel, into facts. He was held more mercilessly than the others to the standard of reality. After World War II, [British Prime Minister Winston] Churchill, who had worked closely with Marshall and often quarreled with him over Allied strategy, said of the Chief of Staff, "Succeeding generations must not be allowed to forget his achievements and his example."

Franklin Roosevelt's Presidential career fell into two acts -- the Great Depression and World War II. Marshall played his two acts in the opposite order, from war to peace -- first as the organizer of global battle, then as a preeminent statesman of the postwar period. During the 1919s, when America was basically isolationist and largely pacifist, Marshall, along with some others, had the historical imagination to anticipate war on a scale that would have seemed to most Americans an apocalyptic fantasy. It took great daring and steadiness to prepare for such an apocalypse. Again, after the war, he led America out of isolation with the Marshall Plan.

Marshall's two great acts intersected one day in 1947, fifty years ago this June. Harvard University president James B. Conant presented to George Catlett Marshall a doctor of laws degree, *honoris causa*. The honor, Conant told the audience of 8,000 in Harvard Yard, went to "an American to whom Freedom owes an enduring debt of gratitude, a soldier and statesman whose ability and character brook only one comparison in the history of this nation." Conant understood the symmetry: the comparison was of course to George Washington.

By June 1947, the relief attending victory two years earlier had been lost in new anxieties. Churchill, deposed as prime minister and leading the loyal opposition, rumbled: "What is Europe now? It is a rubble heap, a charnel house, a breeding ground of pestilence and hate." The wartime alliance with the Soviet Union had all but disintegrated; the threat of Communist regimes in Europe and the Mediterranean was real. And now, in 1947, Marshall had a new assignment, Secretary of State. Marshall mistrusted eloquence; he said that he was bad with words, and in any case thought an officer should express himself through his deeds. Looking out at Harvard Yard, he adjusted his reading glasses, and began: "I need not tell you that the world situation is very serious...."

With that, Marshall set forth the outline of the European Recovery Program or, as everyone soon began calling it, the Marshall Plan. As the Cold War began, he set in motion the program that would save Western Europe from economic and political chaos, and from the totalitarianism that was overtaking mainland China and the Eastern Bloc countries. With Marshall pushing it in Congress and elsewhere, the plan was finally adopted despite notable opposition. "I worked on that," he later said, "as if I was running for the Senate or the Presidency."

He not only testified before Congress, he traveled the country patiently explaining. It was no giveaway program, he told businessmen; countries that wanted financial support had to come up with feasible plans for economic recovery. The aid had a fixed time limit and a fixed cost ceiling; it would be administered by an American businessman, not a bureaucrat, and there was plenty of accountability. Without a thriving Europe, who would we buy from and sell to? Without parliamentary democracy on the Continent, what chance was there for continued peace? Twice in 50 years, he reminded isolationists, America had gone to war to keep Europe free of "single-power domination," clear proof of how much Europe mattered to America.

Beyond that, in a vision of a future we understand better now than we did then, he noted that modern communications, vastly expanded during World War II, had made the difference between rich and poor nations more glaringly visible than in the past, a recipe for future trouble unless something could be done about the disparity. In the four years between 1948 and 1952 the Marshall Plan channeled some \$13 billion in reconstruction aid and technical assistance to 16 European countries. For that Marshall received the Nobel Peace Prize in 1953.

A SMALL-TOWN BOY

As soldier and statesman, Marshall served eight Presidents in a 50-year career. He was born on the last day of 1880, only 15 years after the Civil War, in Uniontown, Pennsylvania, in a primarily agricultural nation of 38 states. His career -- young lieutenant in the Philippines at the turn of the century, General Pershing's chief of staff in World War I, organizer of victory in World War II, Secretary of State as the Cold War hardened -- personified the American transformation from small-town insularity to global preeminence. The arc of his life was also the nation's trajectory. He molded his life and work to his duty and nation -- and those four things became indistinguishable.

Marshall's Pennsylvania origins had the savor of a manageable, self-sufficient and essentially innocent universe, congenial to boyhood, a sort of powerful Emersonian center from which Tom Sawyer might have gone forth into the greater world. The self-confidence instilled by such a childhood was one of those crucial (but usually obscure) sources of national energy as the United States moved out into the world for the American Century. It was the sort of boyhood that a representative American like Charles A. Lindbergh enjoyed and that Henry R. Luce, a missionary's son in China, dreamed of from afar, and forever missed. The soil of such childhoods nourished the myth of American bounty, generosity, blamelessness and immunity from evil in the world. [President] Theodore Roosevelt fired these assumptions at the world as if they were cannonballs; [President] Woodrow Wilson would turn them into a sort of missionary theology.

George Marshall was descended from John Marshall, the third Chief Justice, and from some of the oldest blood-proud families of Virginia -- Catletts, Picketts, Taliaferros. His father, a prosperous Uniontown businessman, used to brag about the genealogy. The son reacted with embarrassment and irritation. "I thought that the continued harping on the name of John Marshall was kind of a poor business," he commented later. "It was about time for somebody else to swim for the family."

In a speech he gave years later in Uniontown, just before World War II, Marshall explained that he decided on a military career only after 1899, when, at 18, he watched the triumphant return from the Philippines of Company C of the Tenth Pennsylvania Infantry Regiment: "No man of Company C could make a purchase in this community. The

town was his....It was a grand American small town demonstration of pride [that] reflected the introduction of America into the affairs of the world beyond the seas."

That bright moment -- America's foreign adventure celebrated to the sound of John Philip Sousa -- would arrive, several generations later, at the darker end of the trajectory when the soldiers arriving back, singly, from Vietnam received no welcome home except a glare, a complicated silence, or the taunt: "Baby killer!" (I have sometimes wondered what George Marshall would have done if, born 30 years later, his Commander in Chief had asked him to be the [General William] Westmoreland or the [Secretary of State Robert] McNamara of the American war in Vietnam. Marshall was, after all, a soldier impeccable in his loyalty and punctilious about obeying orders.)

Young Marshall wanted to go to West Point, but both Pennsylvania senators were Republicans and Marshall's father was a Democrat who supported William Jennings Bryan. Marshall decided upon the Virginia Military Institute (VMI) in Lexington, Virginia, which generations of Marshalls had attended.

His older brother, Stuart, VMI class of '94, was against the choice. The brothers did not get along. Marshall recalled: "I overheard Stuart talking to my mother; he was trying to persuade her not to let me go, because he thought I would disgrace the family name. Well, that made more impression on me than all instructors, parental pressure, or anything else. I decided right then that I was going to wipe his face, or wipe his eye."

Marshall had his revenge. He not only distinguished himself at VMI, emerging in his final year as unanimous choice for first captain, the highest ranking cadet officer, he also courted and, after graduation in the class of 1901, married a Lexington woman, Lily Coles, six years his senior, whom Stuart had courted when he was a cadet.

OFF TO MINDORO

The Spanish-American War was over; Spain had relinquished Cuba, ceded Puerto Rico and Guam to the United States, and sold the Philippines to us for \$20 million. But now the bloody Philippine Insurrection prompted the United States to expand its permanent army to 100,000. Marshall, a tall, lean, plain-handsome 20-year-old with sharp blue eyes and an air of crisp reserve, won a commission as a second lieutenant in the U.S. Army. Early in 1902, he said goodbye to his bride and set off for Mindoro Island in the Philippines, to begin a military career. It ended 49 years and seven months later at the retirement of Secretary of Defense George Marshall with the permanent rank of five-star general.

One of Marshall's attractive qualities as a leader was his refusal to condescend or bully; perhaps his relations with his older brother taught him that. A briskly intelligent reserve was an ingredient in his authority: no nonsense, but no overbearing power displays, either. He had a huge temper, which he eventually learned to control. He understood perfectly the way that, within the context of Army hierarchies, discipline could function through a democratic subtext of respect given and required. Once when he came upon one of his officers berating an enlisted man (who no doubt deserved it), Marshall called the officer aside and said, "You must remember that the man is an American citizen just the same as you are."

In the Philippines he soon established an ironclad but low-key style of command. When he was leading his sevenman patrol single file across a jungle stream one day, one of the men yelled "Crocodiles!" The patrol stampeded for the bank, trampling Marshall as they went. "It wasn't a time for cussing around," he recalled, years later. Instead, he picked himself up, waded forward, ordered the men to fall in, then, at the head of the column, marched them back across the stream and then back again into the water and so across in proper military fashion. Then he held a rifle inspection.

In November 1903, Marshall was ordered back to the United States. Now began his long seasoning years -- hard work in the obscurity of a peacetime army given over mostly to the waiting games of police duty, mapmaking and necessarily theoretical military exercises. An army at peace is an animal in hibernation; the seniority system congeals promotions. Garrison duty ritualizes spit and polish, and tedium.

Marshall was posted for a time at Fort Reno, in Oklahoma, on the north fork of the Canadian River. The Army's old rationale for Plains duty had by now expired; whites had all but completed their settlement, and the suppression of the Indians. From Fort Reno, Marshall set forth by wagon and mule train to map 2,000 square miles [5,200 square kilometers] of the southwestern-Texas desert, some of the harshest landscape in America.

Because of the seniority system, Marshall would not be made a first lieutenant until late winter of 1907 but, in 1906, was admitted to the Army's Infantry and Cavalry School at Fort Leavenworth, Kansas. Such schools were to become battlegrounds between the Army's older conservatives and its younger reformers, who saw that, because of new weapons, the internal-combustion engine and Marconi's wireless, the nature of war had fundamentally changed. Agility, mobility, communications and firepower were about to alter its metaphysics.

It was Marshall's eventual mastery of the new realities -- the need for rapid thinking and improvising, for a sure snapshooter's instinct in the field, supported by formidably organized pipelines of logistics and manpower -- that made him at last the controlling wizard of World War II. Marshall biographer Ed Cray assesses the historic cost of the transition in military thinking and the resistance of the military Old Guard to new ideas earlier in the century: "The successive bloodbaths blindly ordered by superannuated British and French generals at the beginning of World War I would validate the reformers, but the cost would be a generation of Europe's young men."

Ranked first in his class at Leavenworth, Marshall was promoted to first lieutenant and went on to Leavenworth's Army Staff College. In the years that followed, up until 1917 when he shipped out for the war in France, he established a pattern of distinguished performance at frustratingly low rank. At the age of 34, in 1915, and still a first lieutenant, he told the commandant of VMI that the "absolute stagnation in promotion in the infantry has caused me to make tentative plans for resigning as soon as business conditions improve somewhat." He soon thought better of it.

Marshall distinguished himself notably as a staff officer who, in a series of large-scale military maneuvers -- on the Texas-Mexico border, in Connecticut, in the Philippines -- proved a brilliant improvisationalist capable of moving whole armies with remarkable deftness. After the Batangas maneuvers in the Philippines in January 1914, an Army legend has it, the commanding general called his staff together to cite Marshall as "the greatest military genius since Stonewall Jackson [a Confederate general in the U.S. Civil War]." At Fort Douglas, Utah, in 1916, the commander, Lieutenant Colonel Johnson Hagood, paid Marshall an astonishing compliment on his efficiency report: "This officer is well qualified to command a division, with the rank of major general, in time of war, and I would like very much to serve under his command."

Woodrow Wilson, reelected in 1916 on a promise of keeping America out of war (as Franklin Roosevelt promised to do in 1940, as Lyndon Johnson promised in 1964), ended by getting us into the war in April 1917 and sending two million Americans to France under General John J. Pershing, who was fresh from chasing Pancho Villa in Mexico.

TOO VALUABLE FOR COMBAT

By 1917, no intelligent solider had illusions about the trench warfare that had been destroying Europe for three years. In one day, July 1, 1916, at the Battle of the Somme, England squandered 60,000 men, 2,000 more than America lost in 12 years in Indochina.

As the First Division's operations officer, a job usually assigned to a lieutenant colonel, Marshall began training and organizing the inexperienced American troops at Gondrecourt in Lorraine. He saw combat briefly as an observer along General Henri-Philippe Pétain's Verdun front. (Marshall got caught under fire, then entangled in barbed wire, and left part of his pants on the barbs as he scrambled back to the trenches.) Made acting chief of staff of the First Division, he had a memorable encounter with Pershing. The general had exploded at Marshall's commander, General William L. Sibert. Marshall, in turn, lost his temper on behalf of Sibert and blistered Pershing with a furious monologue about the condition of the troops, and inadequate supplies and transport. Marshall's fellow officers figured Marshall had committed professional suicide right before their eyes. In fact, Pershing decided that he had at last found an officer who would tell him the truth.

Marshall hoped for a troop command. Douglas MacArthur, almost the same age, was already a full colonel and chief of staff of the 42nd Division. Marshall, however, was considered too valuable as a staff officer. He was transferred to Pershing's headquarters at Chaumont. General Ludendorff's offensive in the spring of 1918, Germany's last hope of victory, had run out of gas. Marshall was ordered to plan the American part in an Allied counterattack.

Marshall's later story in World War II -- too valuable for combat, condemned against his wishes to function as a sort of military desk wizard -- was prefigured in the St. Mihiel and Meuse-Argonne campaigns. Rising rapidly and now

holding the temporary rank of colonel, he organized the transfer of some 600,000 American troops, and 900,000 tons of supplies and ammunition, from the St. Mihiel sector to the Meuse-Argonne battlefield, all moved by night, in secret, and without detection by the Germans. It was one of the largest and most complicated logistical undertakings of the war.

The Meuse-Argonne operation in the fall of 1918 was a kind of localized rehearsal for the global task that Marshall accomplished in World War II. It called into play his remarkable gift of dispassionate concentration upon the task at hand. His second wife, Katherine Tupper Marshall -- a widow whom Marshall married in 1930, three years after his first wife's death -- observed his behavior during the first bleak months of 1942, when the Allies were being thrown back on almost all fronts around the world. She said, "It was as though he lived outside of himself and George Marshall was someone he was constantly appraising, advising, and training to meet a situation."

Neither the Meuse-Argonne campaign nor the logistics of America's global war succeeded simply because Marshall had character. He possessed an extraordinary intellect, an astounding memory and what might be called kinetic military imagination -- a genius for seeing the dynamic interaction of facts in rapid motion through time.

Marshall's focused analytical intelligence would be on display when he testified as Army Chief of Staff before Congressional committees or gave occasional press conferences. During World War II, he would sometimes invite 40 or 50 correspondents into his office, listen to a long series of questions from them, and then, without notes, deliver a half-hour monologue in which he answered each question in turn (facing the correspondent directly as he answered that man's question) and at the same time wove all the answers into a coherent overall picture.

After World War II, America, of course, demobilized, turning away in horror and relief from foreign nightmares to an isolationism that relied upon the vast Atlantic and Pacific moats. Marshall returned to America as personal aide to Pershing. With his commander he sat in on long conversations with President Warren G. Harding. Marshall stood above partisan politics but learned how to deal with politics and national leaders -- an apprenticeship that paid off later. His years as aide to the Army Chief of Staff gave Marshall an education in the political realities of soldiering in a democracy.

THE "BENNING REVOLUTION"

But Marshall, although sufficiently horrified by the carnage of the war, again faced a soldier's frustration with peacetime. The nation heedlessly downsized its army to virtually symbolic proportions, and he was stuck with the permanent rank of major. After five years with Pershing, and a promotion to lieutenant colonel, he became assistant commandant of the Infantry School at Fort Benning, Georgia. It was there that he began training young officers in the lessons of firepower and maneuverability that formed the basis for the new Army. Tactics could no longer be static. Marshall trained officers with a view to what Cray describes as "that first aggressive thrust by an enemy increasingly motorized, with aircraft rather than cavalry to scout ahead." In one lecture Marshall said, "Picture the opening campaign of a war. It is a cloud of uncertainties, haste, rapid movements, congestion on the roads, strange terrain, lack of ammunition and supplies at the right place at the right moment, failures of communications, terrific tests of endurance, and misunderstandings in direct proportion to the inexperience of the officers and the aggressive action of the enemy. Add to this...fast flying planes, fast moving tanks, armored cars...." He was describing exactly the blitzkrieg used by Germany against France in 1940.

It was in his five years at Benning, during what became known in the Army as the "Benning Revolution," that Marshall began accumulating the roster of names -- kept in his own first-class memory or else in the fabled "black book" that officers thought he maintained -- from which he later put together American military leadership in World War II. Lieutenant Colonel Joseph Stillwell and Major Omar Bradley were among Marshall's instructors at Benning. It was at Benning, too, that Marshall developed the reputation -- later a sometimes rueful Army legend -- for ruthlessness in judging officers and sacking even the most experienced men in favor of junior officers who, in his judgment, were up to leading a modern army.

The 1930s were difficult for Marshall. He was in his 50s now, still a colonel. The Army's atherosclerotic system had reasserted itself. He confessed to Pershing, "I'm fast getting too old to have any future of importance in the Army." Finally, in October of 1936, Marshall made brigadier. Less than two years later, he went to Washington to become the Army's Deputy Chief of Staff under General Malin Craig.

By now, history was boiling along like one of the dark-cloud montages tumbling in time-lapse photography across a movie screen. From Tokyo to Berlin, from Moscow to Chungking, to London and Washington and New York, the world situation deteriorated. Stalin, Hitler, Mussolini, Roosevelt, Chiang, Mao and the Japanese all were making their preliminary moves. The Italian invasion of Ethiopia dramatized the weakness of the League of Nations and was a prelude to larger tragedy. In the Soviet Union, Stalin had launched the show trials that would result in the imprisonment or execution of millions of the U.S.S.R.'s party functionaries, bureaucrats, military officers, physicians and scholars -- a social and cultural apocalypse.

And in March 1936, Hitler moved unopposed into the demilitarized Rhineland. Germany sealed alliances with Italy and with Japan, and helped establish Francisco Franco in power in Spain. In March 1939, Hitler occupied the remains of Czechoslovakia. In September, it was Poland's turn. When Brigadier General Marshall reported for duty at the War Department in Washington, Chief of Staff Craig, an old friend from World War I, greeted him by saying, "Thank God, George, you have come to hold up my trembling hands."

Today, World War II and its aftermath seem a jurassic age, a remote time when giants roamed the earth perpetrating primitive deeds (Fascism, global conquest, genocide and the nuclear awakening that was the war's last act). The cast of characters (Hitler, Stalin, Churchill, Roosevelt, Mussolini, Mao) has an earthshaking, mythic quality. Out of the origin myth, Hitler became the baseline for the discussion of evil, as Munich became the cautionary model of appearsement.

George Marshall becomes in my mind the paradigm of a certain kind of American virtue, now all but extinct. Marshall lingers in the nation's memory, I think, with a wistful poignance -- a kind of reproach.

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Whence Patton's Military Genius? ROGER NYE

Parameters, Winter 1991-92

Of the many questions about the image of General George S. Patton, Jr., one appears salient: how did he achieve his famed prowess as a military commander when he served on the battlefield barely 13 months in his whole lifetime?' In World War I the 32-year-old Lieutenant Colonel Patton was only in his fifth day of combat when in foolhardy bravery he attacked virtually alone, armed only with a pistol—what turned out to be a nest of some 25 German machine guns. He was carted off to the hospital and later awarded the Distinguished Service Cross.

In November 1942 his combat time in command of the Western Task Force was less than a week when Casablanca fell. His command of II Corps in March 1943 in Tunisia was less than 30 days. His Seventh Army command in Sicily was used up in 38 days. His Third Army leadership from Normandy on 16 July 1944 to war's end in Bavaria on 9 May 1945 brought his combat total to 391 days-barely 13 months.

The reputations of Alexander the Great and Napoleon were based on at least a decade of campaigning, and Grant and Lee had at least four years. But Patton sat out much of World War II in deep frustration-months in Casablanca, Palermo, and England, spent in planning and organizing while his superiors decided what to do with him. But what he did in his 13 months of combat was so impressive that even his detractors had to admire it. His best-known biographer, Martin Blumenson, decided he showed all the traits of a military genius. I agree. But that does not get to the question of this article: How did Patton acquire that genius?

Initially, we should appreciate that the wartime Patton was an extension of the peacetime Patton. The long periods of frustrating waiting during World War II were also times for reading, for reflection, for prethinking the next phase of operations, and for writing a vast compendium of letters, diaries. speeches, and studies. It is this body of literature that reveals the mind of Patton the wartime leader, and shows how much he drew on the lifetime of professional study he took with him to the battlefield in 1942. The habits of diary-keeping and letter-writing to his wife Beatrice were accelerated as he took on his war-fighting stance. He supplemented this record with random memoranda to himself: Notes on Arabs, Notes on Combat, Notes on the Sicilian Operation, Notes on France.

The linkages to his prewar thinking were shown in his many letters of instruction to his commanders, particularly that of 6 March 1944 when he first advised his new Third Army subordinates how to command. Sententious advice peppered the letter: lead in person; visit the front daily; observe, don't meddle; praise is more valuable than blame; make personal reconnaissance; issuing orders is ten percent, execution is 90 percent; plans should be made by people who execute them; tell the troops what they are going to do and what they have done; visit the wounded personally; if you do not enforce discipline, you are potential murderers; *do not take counsel of your fears*. In the next month, four additional letters of instruction conveyed more and more of these familiar phrases.

The Patton method of warfare espoused in these letters could be capsuled in one word: *attack*. Here archetypical nuggets from his 5 June 1943 letter of instruction to subordinates before the Sicilian operation: "use the means at hand to inflict the maximum amount of wounds, death, and destruction on the enemy in the minimum time; casualties vary directly with the time you are exposed to effective fire-rapidity of attack shortens the time of exposure; if you cannot see the enemy, shoot at the place he is most likely to be; when mortars and artillery are silent, they are junk-see that they fire; fire from the rear is three times as effective as fire from the front. Patton 's emphasis on rear attack was often phrased as, "Hold them by the nose and kick them in the rear."

To begin to explore the sources of Patton's military genius, we must start with the unusual boyhood that followed his birth in 1885 on an 1800-acre ranch in southern California's San Gabriel valley. Horses and guns, camping and fishing would always be a part of his life. Because various members of his family owned what is now Pasadena, Mount Wilson, and Catalina Island, he grew up accustomed to wealth and power. Because his lineage included a host of Virginians who had graduated from the Virginia Military Institute and died in the Civil War, he could believe in a military caste that was traced in his own bloodlines. His father, a VMI product, was also a lawyer and highly literate, often translating from the Greek.

It was Papa who first noticed Georgie's learning disabilities that caused his early failure to read usefully. Blumenson, in his 1985 book *Patton: The Man Behind the Legend*, 1885-1945, concluded that Patton suffered from "the dyslexic flaw" that made printed letters appear upside down or reversed. He also pointed out the psychological symptoms that accompany dyslexia, including feelings of inadequacy, problems of concentration, and the need to compensate for impairments in the learning process by accomplishments in other areas-sports and drama come to mind. Blumenson suggested that Patton acquired a strong determination to overcome his handicap, which he accomplished in his college years, except for a lifetime inability to spell words correctly.2 Recent research has suggested that some persons with a history of dyslexia come away from the' experience with certain positive advantages, such as an unusual way of perceiving problems and creating solutions, factors which could figure in Patton's inventive approaches to military operations and leadership.

Papa's solution was not to send Georgie to school, but to read to him, to coach him in reading, and to require him to memorize long passages of poetry. The fare was the *classic--The Iliad, The Odyssey*, the Bible, Thucydides, Julius Caesar's *The Gallic War*, and the muscular fiction of such writers as Sir Walter Scott and especially Rudyard Kipling. By the time he was 11, Patton had a mind stuffed with the valorous deeds of great war heroes and a detailed knowledge of great campaigns and battles. When he finally entered Mr. Clark's School for Boys, he could write his essays on Alexander and Epaminondas and Themistocles. And by the age of 16 he could announce to his father that he wanted only a military career and must therefore get an appointment to West Point. He would spend a year at VMI before his Academy appointment came through in 1903.

Only three years later, Cadet Patton wrote into a small lined notebook a "List of Books to Read." Among the 17 listed were "Oman-History of the Art of War in the Middle Ages; Napoleon-Maxims de la Guerre; Henderson Science of War; Hohenlohe-Letters on Infantry, Cavalry, and Artillery; Upton-Armies of Europe and Asia; and Jomini-Life of Napoleon." Twenty years later the record would show that he had, indeed, read most of the 17 books.

His notebooks also indicated that he was reading Oman in December 1906, although in the following year he wrote his father that there was no time to read or do anything but study and play football. In a composition entitled "The Necessity of a Good Library at West Point," he wrote: "We are sorry to say that there are comparatively few men in the Corps who realize the importance of military study which is, as Napoleon says, the only school of war."

Support for his reading came more from home than from the Academy. He acquired C. W. Robinson's *Wellington's Campaigns, Peninsula Waterloo, 1808-1 815* in 1907 when family members visited West Point. In September 1908 he wrote to his mother, "I am awfully glad Aunt Nannie got those books...they are very good books...and convinced me of the value of book knowledge of war. It is the whole show and there are surprisingly few men who seem to realize its importance." In the same year his father inscribed to Cadet Patton a volume of Major General Henry Lloyd's *The History of the Late War between the King of Prussia and the--Empress of Germany and Her Allies,* printed in London in the 18th century. This became the foundation for his lifetime study of Frederick the Great and for his collection of antique military treatises.

Other aspects of the Patton persona were beginning to appear in his cadet notebooks. A year before graduating he wrote:

Remember that you have placed all on war. Therefore you must never fail. Hence if you attack-and you must never do anything else-put in every man and win or mark the high tide of the charge with your body. The world has no use for a defeated soldier and nothing too good for a victor. ... If you die not a soldier and having had a chance to be one I pray; God damn you George Patton. ... Never Never Never stop being ambitious. You have but one life. Live it to the full of glory and be willing to pay.

In January 1909 he wrote to his parents: "I have got to-do you understand got to-be great-it is no foolish dream-it is me as I ever will be. I am different from other men my age. All they want to do is to live happily and die old. I would be willing to live in torture, die tomorrow if for one day I could be really great."

As graduation neared, Patton's letters to Beatrice Ayer, whom he would later marry, conveyed more and more of his plans for professional reading. In a letter of 25 March 1909: "It has been raining all day so there was no drill and having nothing to do I read for about four hours until I could hardly see." In April: "I have been reading a German translation on tactics tonight and it is a most saddening work, for to be a good soldier one has to know so much and they seem to know it all and I know so little. How can I ever learn enough to fight with them, yet I must" Finally, in May: "I hope that after I get out of here I shall find plenty to do, for so many officers get into that awful habit of [make work] and not doing anything...I am going to try...to read war for a certain number of hours each day and hope to have time to read other things too."

While on summer leave in 1915, Lieutenant Patton acquired a little known book which may have set him on the path of developing the flamboyant public personality for which he became famous in World War II. Gustave Le Bon's *The Crowd:* A *Study of the Popular Mind* was published in London in 1896, and Patton inscribed a ninth edition in July 1915. In the early pages of this book Patton read that individuals act abnormally when in crowds because they get a feeling of invincible power, they are subject to the contagion of a collective will over the individual will, and they lose their inhibitions before the suggestions of a few leaders with hypnotic messages. Lieutenant Patton wrote in the margin of page 35, "The will to victory thus affects soldiers. It must be inculcated. G."

At the end of the first chapter Patton scribbled, "The individual [leader] may dream greatly or otherwise, but he must infect the crowd with the idea [in order] to carry it out." On page 57 he put three sidelines opposite these words: "Given to exaggeration in its feelings, a crowd is only impressed by excessive sentiments. An orator wishing to move a crowd must make an abusive use of violent affirmations. To exaggerate, to affirm, to resort to repetitions, and never to attempt to prove anything by reasoning are methods of argument well known to speakers at public meetings." Echoes of this advice were to appear in the Patton oratory in years to come.

In the same work, three sidelines also appeared next to: "Crowds exhibit a docile respect for force, and are but slightly impressed by kindness, which for them is scarcely other than a form of weakness. Their sympathies have never been bestowed on easygoing masters, but on tyrants who vigorously oppressed them." While Patton could not be accused of being an easygoing master in his speeches as a senior officer, he drew respect for his forceful manner of demanding discipline and hard training. As for his spectacular uniforms whenever addressing large crowds, Patton wrote in the margin of page 84 of Le Bon: "Advantage of a peculiar dress."

On Courage and Fear, Deja Vu and Memory

Let us jump ahead now to 1918. Having been treated for his leg and buttock wounds, Patton left the hospital in France and wrote his father: "An officer is paid to attack, not direct after the battle starts. You know I have always feared I was a coward at heart but I am beginning to doubt it. Our education is at fault in picturing death as such a terrible thing. It is nothing and very easy to get. That does not mean I hunt for it but the fear of it does not-at least has not-deterred me from doing what appeared to be my duty."

After he returned home he wrote a poem entitled "Fear" which Beatrice labeled "one of my favorites."

FEAR

I am that dreadful, blighting thing, Like ratholes to the flood, Like rust that gnaws the faultless blade, Like microbes to the blood.

I know no mercy and no truth, The young I blight, the old I slay. Regret stalks darkly in my wake, And ignominy dogs my way.

Sometimes, in virtuous garb I rove, With facile talk of easier way; Seducing where I dare not rape Young manhood, from its honor's way.

Again, in awesome guise I rush, Stupendous, through the ranks of war, Turning to water, with my gaze, Hearts that, before, no foe could awe.

The maiden, who has strayed from right, To me must pay the mead of shame. The patriot who betrays his trust, To me must own his tarnished name.

I spare no class, nor cult nor creed, My course is endless through the year, I bow all heads and break all hearts, All owe me homage-1 am FEAR.

G. 26 Apr. '20

Patton's focus on the control of fear dictated his views about officer training. After the war, when he learned that Army Chief of Staff General Peyton C. March wanted to reduce the West Point course to three years in order to graduate more classes, Patton wrote his former commander John J. Pershing: "What West Point makes is a soul. We the graduates are efficient because we can't help it. We don't run away because we are a lot more afraid of our conscience than we are of the enemy. The soul cannot be built in one or two years. It would be better to have several West Points."

Patton typed on a note card:

Japan and Germany and to a large degree England only give commissions to gentlemen. Washington is reported to have said that only gentlemen should have commissions. The idea in all this is to give command to a class who have a tradition to live up to, that which is stronger than the fear of death. In our country for obvious reasons we cannot so discriminate. Hence we must evolve in one lifetime a tradition which shall be stronger than fear or fatigue. All officers should go through West Point or new West Points. We have many splendid officers who have not done so; this does not affect the issue. We want a higher average, not splendid individuals. Cadets at such

institutions should be lectured on the traditions of the service. They should be made to memorize and recite on the many citations for courage in our army. By constant reiteration they should be taught that the sole purpose of an officer is to serve his country; if such service requires death, it is but a great chance for immortality...[They should know of] the deathless deeds of the great who have passed to Valhalla, which is death but not oblivion.

Valhal1a? The word appears in the Patton correspondence when Cadet Patton wrote his father in June 1905 of his unhappiness at losing a hurdles race. Papa answered back:

The real victor is he who strives bravely and deserves to win. There is even a sort of glory that crowns defeat-when it comes from no fault of the contestant...you remember when we first read Kipling's poem "The Destroyers"-there was a line we could not understand-"The choosers of the slain." Well the other night I was reading one of Carlyle's essays-and he explained the meaning of the term-It seems that in the Norse mythology-that of our ancestors the Vikings-the warriors who died in battle were accounted the real heroes-above those who survived-and before every battle the Valkyrie-or Valkyrs chose those who were adjudged worthy of death-& entrance into Valhalla-and these Valkyrs were thus called the "choosers of the slain," as the slain were called and esteemed "The Chosen." So in all of life's battles you can find the real heroes among the apparently defeated.

The legend further described how the warriors continue to train in Valhalla to fight for the god Oden in the coming battle with the giants.

Sometime before World War I, Patton began to wed this idea of warrior immortality to the concept that occasionally the warrior would leave Valhalla to return to earth and fight in selected battles in mankind's history. In a 1917 poem, "Memories Roused by a Roman Theater," he portrayed himself sitting in a tank in the Roman ruins at Langres, France. He wrote, "More than once I have seen these walls...now again I am here for war/ Where as Roman and knight I have been/ Again I practice to fight the Hun/ And attack him by machine."

It is difficult to find Patton's belief in reincarnation in his prose writings or lectures, but one poem indicates the range and depth of this feeling. "Through a Glass Darkly" was composed in 1922 when he was at Fort Myer, Virginia; the title was taken from the Bible 's First Epistle of Paul to the Corinthians (13.11). In this poem Patton wrote that he may have initiated his many lives as a caveman hunting for meat, and he may have been a soldier who stabbed Christ on the cross. He fought alongside Alexander at Tyre, the Greeks, and the Roman legionnaires. He was once a pirate, a cavalryman with Napoleon, and finally a tanker in the Great War. He always suffered horrible deaths. God determined when he should return and fight again. All of this, then, is behind Patton 's near mystical conception of the warrior soul or warrior spirit that he referred to in so many of his speeches and writings. Few in his audience may have realized how much these simple terms were bound to concepts of eternity and reincarnation in his complex mind. But these ideas were undoubtedly the means by which he controlled his fear in battle.

THROUGH A GLASS, DARKLY

Through the travail of the ages, Midst the pomp and toil of war Have I fought and strove and perished Countless times upon this star.

In the forms of many peoples In all panoplies of time Have I seen the luring vision Of the victory Maid, sublime.

I have battled for fresh mammoth I have warred for pastures new, I have listened to the whispers3 When the race trek instinct grew.4

I have known the call to battle
In each changeless changing shape
From the high souled voice of conscience
To the beastly lust for rape.

I have sinned and I have suffered, Played the hero and the knave; Fought for belly, shame or country And for each have found a grave.

I cannot name my battles For the visions are not clear, Yet I see the twisted faces And I feel the rending spear.

Perhaps I stabbed our Savior In His sacred helpless side. Yet I've called His name in blessing When in after times I died.

In the dimness of the shadows Where we hairy heathens warred, I can taste in thought the life blood We used teeth before the sword.

While in later clearer vision
I can sense the coppery sweat
Feel the pikes grow wet and slippery
When our phalanx Cyrus met.

Hear the rattle on the harness Where the Persian darts bounced clear, See their chariots wheel in panic From the hoplites leveled spear.

See the goal grow monthly longer, Reaching for the walls of Tyre. Hear the crash of tons of granite, Smell the quenchless eastern fire.

Still more clearly as a Roman,

Can I see the legion close, As our third rank moved in forward And the short sword found our foes.

Once again I feel the anguish Of that blistering treeless plain When the Parthan showered death bolts, And our discipline was vain.

I remember all the suffering Of those arrows in my neck. Yet I stabbed a grinning savage As I died upon my back.

Once again I smell the heat sparks When my Flemish plate gave way And the lance ripped through my entrails As on Crecy's field I lay.

In the windless blinding stillness Of the glittering tropic sea I can see the bubbles rising Where we set the captives free.

Midst the spume of half a tempest
I have heard the bulwarks go
When the crashing, point-blank round shot
Sent destruction to our foe.

I have fought with gun and cutlass On the red and slippery deck With all Hell aflame within me And a rope around my neck.

And still later as a general Have I galloped with Murat When we laughed at death and numbers Trusting in the 'Emperor's star.

Till at last our star had faded, And we shouted to our doom Where the sunken road of Ohein Closed us in its quivering gloom.

So but now with tanks a clatter

Have I waddled on the foe Belching death at twenty paces, By the starshell's ghastly glow.

So as through a glass and darkly The age long strife I see Where I fought in many guises, Many names-but always me.

And I see not in my blindness What the objects were I wrought. But as God rules o'er our bickerings It was through His will I foughi,

So forever in the future, Shall I battle as of yore, Dying to be born a fighter But to die again once more.

G. S. P. May 27, 1922

In August 1990, Ruth Ellen Patton Totten, the second daughter of G.S.P., Jr., retold this story. She was a youngster when the family drove from Washington to visit one of the Civil War battlefields, taking along military attaché Friedrich von Boetticher in the full regalia of a German army officer. As usual the family was deployed to represent key figures in the battle ("mother always had to play the North"). Major Patton said he would play General Jubal Early and therefore would be located "right here" on the map. Von Boetticher protested that his book indicated that Early was located "over there." As .the argument went on, a very old man in muttonchop whiskers hobbled up and listened; they thought he was attracted by the German uniform. But in time he said very firmly, "The major is right. General Early was right here. I was at this battle as a boy." Patton looked at the German and said, "Yes. I was here too." Von Boetticher changed Early's location on his map and the play continued.

Ruth Ellen recalled other instances when her father told of his experiences with deja vu, often in after-dinner talk around the dining table in the 1920s and 30s. One was his "memory" of being carried on a shield by four, Vikings. Asked why there were no books on reincarnation or Buddhism in the Patton library that had been accumulated over decades, she replied that her father's "I was there" was born into him, not induced by listening or reading, although those activities might have provided some rationale for what was innate. When asked to recall her father's earliest experiences with deja vu, she told of the night when her father recalled "playing war" in California with his boyhood cousins, the Browns. He loaded them in a wagon, had them cover themselves with their barrelhead shields, and told them to fire arrows out between the shields when they reached the enemy. Then he pushed the wagon off the brow of the hill and it hurtled its way down and through a flock of turkeys at the bottom. The Patton's would eat turkey for days. Asked how he got the crazy idea, Georgie said that in Bohemia centuries ago, John-the-Blind had done just that and won a great victory. Where had he heard about this? "Oh," he told them, "I was there." As Major Patton elaborated the story, the wagon in Bohemia was the first instrument of modern armored warfare.

The sessions around the dining table often included recitations of poetry that Major Patton had required the children to memorize. Ruth Ellen gave an example, starting with the first stanza of Alfred, Lord Tennyson 's "*The Revenge: A*

Ballad of the Fleet":

At Flores in the Azores Sir Richard Grenville lay,
And a pinnace, like a fluttered bird, came flying from far away:
"Spanish ships of war at sea! we have sighted fifty-three!"
Then swore Lord Thomas Howard: "Fore God I am no coward;
But I cannot meet them here, for my ships are out of gear,
And half my men are sick. I must fly, but follow quick.
We are six ships of the line; can we fight with fifty-three?"

Her brother George joined her, and together they continued reciting many of the 14 stanzas, telling how Sir Richard attacked the 53 galleons with his *Revenge*: "God of battles, was ever a battle like this in the world before? For he said 'Fight on!' (Though his vessel was all but a wreck.) "The poem concluded: "And the little *Revenge* herself went down by the island crags/To be lost evermore in the main."

Ruth Ellen suggested that the Patton family's ability to remember that which had been learned in youth was more than just a matter of training. She found the funeral eulogy of a Patton killed in the Civil War which noted particularly the man's prodigious memory. She also set about to type four pages of her father's favorite poems and sayings as she remembered them generations later. One was Sir Edwin Arnold's "After Death," taken from his translation from the Arabic of the 1883 *Pearls of the Faith*. Ruth Ellen noted, "When our grandfather died GSP Jr. made my sister Bea and me memorize this poem." In it, the everlasting soul announces from afar that the temporary body has been abandoned but that the separation from those left behind will not be long. This may be one of the few indications of the effect of oriental religion on Patton's thinking and probably derived from his father's vast reading. Most remarkable was Ruth Ellen's losing only a few words and lines from her memory of the poem some 60 years later.

She also typed out a fragment of an ode that had been a Patton favorite. Again, the theme was the everlasting soul; it was the fifth stanza of William Wordsworth's "Ode: Intimations of Immortality," written between 1803 and 1806, and called by Ralph Waldo Emerson "the high water mark reached by intellect in this age." Ruth Ellen's memory of this was without flaw, except for reciting "his vision" rather than "the vision" in the 16th line.

Another Patton favorite was from *The Iliad*, Achilles' prayer at Troy, probably translated for him from the Greek by Papa. As Ruth Ellen remembered it: "O Father Zeus, save us from this fog and give us a clear sky so that we can use our eyes. Kill us in daylight if you must." She also recalled this snippet from *The Island Race* by Sir Henry Newbolt:

To set the cause above renown,
To love the game beyond the prize,
To honor, while you strike him down,
The foe that comes with fearless eyes;
To count the life of battle goqd
And dear the land that gave you birth,
And dearer yet, the brotherhood
That binds the brave to all the earth.

Patton later finished his career praying to his God for better weather in which to fight the enemy he honored.

Ruth Ellen also remembered her father's love for a prayer from Socrates: "All-knowing Zeus, give me what is best for me. Avert evil from me though it be the thing I prayed for; and give me the good, for which, from ignorance, I did not ask."

The life of the mind that Patton took into his career and eventually passed on to his children was spawned in the house of his childhood, Lake Vineyard, near San Gabriel in California. It meant that once his formal education was finished he would take up the day-to-day study of an ever-growing personal library, accompanied by a torrent of writing. Both activities closely wove together his beliefs about his everlasting soul and fated destiny with his fixed star of the battle hero and military gentleman. All were necessary to account for the military genius that he became.

Between the wars Patton broadened his reading of the Prussians, to include most of the Great War memoirs of German officers such as Hindenburg and Falkenhayn, as they became available in English. In 1930 he wrote into Lieutenant Ernst Jiinger's *Storm of Steel*, " A fine account of a fighting man with none of the usual moral bunk to detract from its stark manhood and grim virtues." In 1930 he also mined General von Seeckt's *Thoughts of a Soldier*, as he had *Ludendorff's Own Story*, on how the Germans organized their staffs. When Von Seeckt wrote that the commander "must leave the wearisome daily routine to the Chief of Staff in order to keep his own mind fresh and free for great decisions," Patton wrote "Bull" in the margin. But when Von Seeckt wrote that if the Chief of Staff disagrees with his commander on an important decision, he must resign his position, Patton underlined it in red. One of the marks of Patton's military genius in World War II was his staff's handling of intelligence, planning, operations, and logistics-these were officers trained and orchestrated by Patton.

Why was Patton so intent on reading anything in English by or about the Germans? His nephew Frederick Ayer, Jr., suggested two connections in his *Before the Colors Fade*, published in 1964. He wrote that as a boy he had received a photograph from Uncle George from Hawaii, with this note: "This is my war face which I have been practicing before a mirror all my life. I am going to use it again to scare hell out of the Germans." Ayer added that Uncle George felt strongly "that we had left things unbalanced by Versailles, that disarmament was dangerous, and that certainly there would be another war."

Ayer also reported a second connection between Patton and the German military philosophers of war. As a lieutenant colonel in charge of Federal Bureau of Investigation personnel in the European theater in World War II, he had visited his Uncle George in his Third Army headquarters in Nancy, France, in September 1944. He later reconstructed Patton 's talk to staff members in this manner:

I have studied the German all my life. I have read the memoirs of his generals and political leaders. I have even read his philosophers and listened to his music. I have studied in detail the accounts of every damned one of his battles. I know exactly how he will react under any given set of circumstances. He hasn 't the slightest idea what I'm going to do: Therefore, when the day comes, I'm going to whip hell out of him.

The Bellicose Warrior as Cultured Man of Learning

Warrior Patton was at his most bellicose when he extolled man 's participating in war as an edifying experience that brought out the best in man's nature-sacrifice, loyalty, a hope for immortality. In a speech to Seventh Army troops before the invasion of Sicily he said, "Battle is the most magnificent competition in which a human being can engage. ...It brings out all that is best; it removes all that is base." Much of this came from his reading of John Ruskin's *The Crown of Wild Olive*, a gift from Beatrice in 1909.

When he said that he had a love for war he knew he was reciting the words of past warriors, including Robert E. Lee, who had said, "It is well that war is so terrible-we would grow too fond of it." Patton sensed in World War I what other soldiers sensed-the awe of the spectacle of war, of being present at world-shaking events, and of the binding camaraderie that was the wartime experience of countless soldiers throughout the centuries. It became the most important activity of their lives. He knew it was also present in the soldiers of World War II, as later described by J. Glenn Gray in *The Warriors*.

Patton was thus a bellicose man who trained himself to meet the needs of the bellicose times in which he lived. Those who later interpreted him as a medieval knight, hopelessly out of date in the 20th century, should pause to reflect on his effectiveness in the century of total warfare. They should investigate the sources of his popularity among vast populations just as bellicose as he in the middle and late 20th century.

What the public did not see was his quiet commentary opposing the bombing of population centers. In his "Account of Capture of Palermo" he wrote,

"I called off the air bombardment and naval bombardment which we had arranged, because I felt enough people had been killed, and felt that with the drive of the 2d Armored Division we could take the place without inflicting unproductive losses on the enemy." In his diary he wrote of Messina, "The town is horribly destroyed-the worst I have seen. ... I do not believe that this indiscriminate bombing of towns is worth the ammunition, and it is unnecessarily cruel to civilians."

Patton could have read many of these same words in the several biographies of the Duke of Wellington in his library. On 8 August 1944 he wrote Beatrice that he had regrettably had to order the destruction of St. Malo in Brittany: "I hate to do it, but war is war. Usually I have not bombed cities."

In early April 1945, Patton accompanied Assistant Secretary of War John McCloy on a drive through Frankfurt, which was in ruins. He later wrote in his diary that he had such efforts should always be on purely military targets and on selected commodities which are scarce. In the case of Germany it would be oil.

He added on 9 April, "McCloy ...said he intended to make a public statement to the effect that I am not only a great military commander but probably the best instructor general in the army. He said that there had been efforts to make it appear that I could do nothing but attack in a heedless manner." Patton's zealous pursuit of continuous attack and destruction of enemy forces obscured his belief in the proper limits of military power-a belief that had its roots in the moral precepts of the prewar officer corps.

Patton died of injuries from an automobile accident on 21 December 1945 and was buried with his soldiers at Hamm, Luxembourg. A half century later civil society remains beset by violence, whether in the streets or in the arts. War rages constantly, despite the nuclear umbrella, among countless factions across the planet's surface.

Patton's expertise lay in his effective use of military force to stop fighting as quickly as possible, The Patton mind also placed limits on the amount of violence to be visited on the innocent bystander. One would be greatly challenged to name world leaders today possessing Patton's rich blend of cultural sensitivity and insight, Far from being an anachronism in the 20th century, Patton brought the trained, cultured mind to the scene of man's catastrophe called World War II-no role could have been more timely or appropriate.

Whence Patton's military genius? Perhaps the surprisingly unconventional source was best suggested in a brief story told in 1990 by General John R. Galvin, the Supreme Allied Commander Europe, A few years earlier, General Galvin had paused in a medieval church in Bad Wimpfen. Germany, one that had survived almost intact the World War II destruction, An old churchman came to him and remarked that, as a young priest, he had found General Patton standing in the same place in 1945. Then he added that Patton was doing a most unusual thing for a man of such a martial reputation. He had a notebook and pencil, and he was sketching the stained glass windows,

NOTES

1. The present article was adapted from Colonel Nye's book *The Patton Mind: The Professional Development of an Extraordinary Leader*, forthcoming. The work is based on some 400 annotated books from the personal holdings of General George S. Patton, Jr., most of which have been donated to West Point by his son Major General George S. Patton, USA Ret. Colonel Nye has also drawn extensively from Martin

Blumenson's *The Patton Papers*, the Patton collection in the Library of Congress, and Nye's own book *The Challenge of Command* (Avery, 1986). A version of the present article appeared in the Friends of the West Point Library newsletter in March 1991 under the title "Why Pa ton?"

- 2. In all quotations from Patton's writings in this article, spelling has been silently corrected and punctuation has been added on occasion for clarity,
- 3, In Patton's original, the verb was "listed,"
- 4. In the original, the spelling is "race treck," amended here to read "race trek," meaning presumably a racial migration. Conceivably, Patton could have intended "race track,"

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General Patton's Address to the Troops Charles M. Province

Part I

The Background Research

Anyone who has ever viewed the motion picture PATTON will never forget the opening. George Campbell Scott, portraying Patton, standing in front of an immensely huge American flag, delivers his version of Patton's "Speech to the Third Army" on June 5th, 1944, the eve of the Allied invasion of France, code-named "Overlord".

Scott's rendition of the speech was highly sanitized so as not to offend too many fainthearted Americans. Luckily, the soldiers of the American Army who fought World War II were not so fainthearted.

After one of my lectures on the subject of General Patton, I spoke with a retired Major-General who was a close friend of Patton and who had been stationed with him in the 1930's in the Cavalry. He explained to me that the movie was a very good portrayal of Patton in that it was the way he wanted his men and the public to see him, as a rugged, colorful commander. There was one exception, however, according to the Major General. In reality, Patton was a much more profane speaker than the movie dared to exhibit.

Patton had a unique ability regarding profanity. During a normal conversation, he could liberally sprinkle four letter words into what he was saying and the listeners would hardly take notice of it. He spoke so easily and used those words in such a way that it just seemed natural for him to talk that way.

He could, when necessary, open up with both barrels and let forth such blue-flamed phrases that they seemed almost eloquent in their delivery. When asked by his nephew about his profanity, Patton remarked, "When I want my men to remember something important, to really make it stick, I give it to them double dirty. It may not sound nice to some bunch of little old ladies at an afternoon tea party, but it helps my soldiers to remember. You can't run an army without profanity; and it has to be eloquent profanity. An army without profanity couldn't fight it's way out of a piss-soaked paper bag."

"As for the types of comments I make", he continued with a wry smile, "Sometimes I just, By God, get carried away with my own eloquence."

When I appeared on a local San Diego television show to discuss my Patton Collection a viewer living in a suburb of San Diego, was very interested for personal reasons. Her husband had been a lieutenant assigned to General Patton's Third Army Headquarters, code named "Lucky Forward" and he had known General Patton quite well.

He had recently died and had left to his wife a box that he had brought home with him from the European Theater of Operations.

The lady invited me to her home to inspect the box to see if there was anything in it that might be useful to me in my search for "collectibles".

Opening the box, I immediately thanked her. Inside was one of only a couple hundred copies printed of the Official United States Third Army After-Action Reports. It is a huge two volume history of the Third Army throughout their 281 days of combat in Europe. She said that she had no use for it and that I could have it. I left with my new treasure.

When I arrived at my office and removed the foot-thick, oversized books from the box, I had an even greater surprise. Under the Reports lay a small stack of original Third Army memos, orders, AND a carbon copy of the original speech that had been typed by some unknown clerk at Lucky Forward and had been widely distributed throughout Third Army.

A few years earlier, I had discovered an almost illegible xerox of a carbon copy of a similar speech. This one came from the Army War College and was donated to their Historical Library Section in 1957.

I decided to do some research on the speech to obtain the best one possible and to make an attempt to locate the identity of the "unknown soldier" who had clandestinely typed and distributed the famous document. I began by looking in my collection of old magazines, newspapers, books that have been written about Patton since his death, and dozens of other books which had references to Patton and his speech.

I discovered some interesting facts. The most interesting probably being that George C. Scott was not the first actor to perform the speech.

In 1951, the New American Mercury Magazine had printed a version of the speech which was almost exactly the same version printed by John O'Donnell in his "Capitol Stuff" column for the New York Daily News on May 31, 1945. According to the editors of the New American Mercury, their copy was obtained from Congressman Joseph Clark Baldwin who had returned from a visit to Patton's Headquarters in Czechoslovakia.

After publication, the magazine received such a large reader response asking for reprints of the speech that the editors decided to go one step further.

They hired a "famous" actor to make an "unexpurgated" recording of the Patton speech. This recording was to be made available to veterans of Third Army and anyone else who would like to have one. The term "famous" was the only reference made by the editors about the actor who recorded the speech. In a later column they explained, "We hired an excellent actor whose voice, on records, is almost indistinguishable from Patton's, and with RCA's best equipment we made two recordings; one just as Patton delivered it, with all the pungent language of a cavalryman, and in the other we toned down a few of the more offensive words. Our plan was to offer our readers, at cost, either recording."

Unfortunately, a few years ago, their was a fire in the editorial offices of the magazine which destroyed almost all of their old records. The name of the actor was lost in that accident.

Only one master recording of the speech was made. The magazine Editors, not wanting to offend either Mrs. Patton or her family, asked for her sanction of the project. The Editors explained the situation thusly, "While we had only the master recordings, we submitted them to our friend, Mrs. Patton, and asked her to approve our plan. It was not a commercial venture and no profits were involved. We just wanted to preserve what to us seems a worthwhile bit of memorabilia of the Second World War. Our attorneys advised us that legally we did not need Mrs. Patton's approval, but we wanted it."

"Mrs. Patton considered the matter graciously and thoroughly, and gave us a disappointing decision. She took the position that this speeches was made by the General only to the men who were going to fight and die with him; it was, therefore, not a speech for the public or for posterity."

"We think Mrs. Patton is wrong; we think that what is great and worth preserving about General Patton was expressed in that invasion speech. The fact that he employed four letter words was proper; four letter words are the language of war; without them wars would be quite impossible."

When Mrs. Patton's approval was not forthcoming, the entire project was then scrapped, and the master recordings were destroyed.

Patton always knew exactly what he wanted to say to his soldiers and he never needed notes. He always spoke to his troops extemporaneously. As a general rule of thumb, it is safe to say that Patton usually told his men some of his basic thoughts and concepts regarding his ideas of war and tactics. Instead of the empty, generalized rhetoric of no substance often used by Eisenhower, Patton spoke to his men in simple, down to earth language that they understood. He told them truthful lessons he had learned that would keep them alive.

As he traveled throughout battle areas, he always took the time to speak to individual soldiers, squads, platoons, companies, regiments, divisions or whatever size group could be collected. About the only difference in the context of these talks was that the smaller the unit, the more "tactical" the talk would be. Often he would just give his men some sound, common sense advice that they could follow in order to keep from being killed or maimed.

The speech which follows is a third person narrative. From innumerable sources; magazine articles, newspaper clippings, motion picture biographies and newsreels, and books, I have put together the most complete version possible that encompasses all of the material that is available to date.

Part II

The Speech

Somewhere in England

June 5th, 1944

The big camp buzzed with a tension. For hundreds of eager rookies, newly arrived from the states, it was a great day in their lives. This day marked their first taste of the "real thing". Now they were not merely puppets in brown uniforms. They were not going through the motions of soldiering with three thousand miles of ocean between them and English soil. They were actually in the heart of England itself. They were waiting for the arrival of that legendary figure, Lieutenant General George S. Patton, Jr. Old "Blood and Guts" himself, about whom many a colorful chapter would be written for the school boys of tomorrow. Patton of the brisk, purposeful stride. Patton of the harsh, compelling voice, the lurid vocabulary, the grim and indomitable spirit that carried him and his Army to glory in Africa and Sicily. They called him "America's Fightingest General". He was no desk commando. He was the man who was sent for when the going got rough and a fighter was needed. He was the most hated and feared American of all on the part of the German Army.

Patton was coming and the stage was being set. He would address a move which might have a far reaching effect on the global war that, at the moment, was a TOP-SECRET in the files in Washington, D.C.

The men saw the camp turn out "en masse" for the first time and in full uniform, too. Today their marching was not lackadaisical. It was serious and the men felt the difference. From the lieutenants in charge of the companies on down in rank they felt the difference.

In long columns they marched down the hill from the barracks. They counted cadence while marching. They turned off to the left, up the rise and so on down into the roped off field where the General was to speak. Gold braid and stripes were everywhere. Soon, company by company, the hillside was a solid mass of brown. It was a beautiful fresh English morning. The tall trees lined the road and swayed gently in the breeze. Across the field, a British farmer calmly tilled his soil. High upon a nearby hill a group of British soldiers huddled together, waiting for the coming of the General. Military Police were everywhere wearing their white leggings, belts, and helmets. They were brisk and grim. The twittering of the birds in the trees could be heard above the dull murmur of the crowd and soft, white clouds floated lazily overhead as the men settled themselves and lit cigarettes.

On the special platform near the speakers stand, Colonels and Majors were a dime a dozen. Behind the platform stood General Patton's "Guard of Honor"; all specially chosen men. At their right was a band playing rousing marches while the crowd waited and on the platform a nervous sergeant repeatedly tested the loudspeaker. The moment grew near and the necks began to crane to view the tiny winding road that led to Stourport-on-Severn. A captain stepped to the microphone. "When the General arrives," he said sonorously, "the band will play the Generals March and you will all stand at attention."

By now the rumor had gotten around that Lieutenant General Simpson, Commanding General of the Fourth Army, was to be with General Patton. The men stirred expectantly. Two of the big boys in one day!

At last, the long black car, shining resplendently in the bright sun, roared up the road, preceded by a jeep full of Military Police. A dead hush fell over the hillside. There he was! Impeccably dressed. With knee high, brown, gleaming boots, shiny helmet, and his Colt .45 Peacemaker swinging in its holster on his right side.

Patton strode down the incline and then straight to the stiff backed "Guard of Honor". He looked them up and down. He peered intently into their faces and surveyed their backs. He moved through the ranks of the statuesque band like an avenging wraith and, apparently satisfied, mounted the platform with Lieutenant General Simpson and Major General Cook, the Corps Commander, at his side.

Major General Cook then introduced Lieutenant General Simpson, whose Army was still in America, preparing for their part in the war.

"We are here", said General Simpson, "to listen to the words of a great man. A man who will lead you all into whatever you may face with heroism, ability, and foresight. A man who has proven himself amid shot and shell. My greatest hope is that some day soon, I will have my own Army fighting with his, side by side."

General Patton arose and strode swiftly to the microphone. The men snapped to their feet and stood silently. Patton surveyed the sea of brown with a grim look. "Be seated", he said. The words were not a request, but a command. The General's voice rose high and clear.

"Men, this stuff that some sources sling around about America wanting out of this war, not wanting to fight, is a crock of bullshit. Americans love to fight, traditionally. All real Americans love the sting and clash of battle. You are here today for three reasons. First, because you are here to defend your homes and your loved ones. Second, you are here for your own self respect, because you would not want to be anywhere else. Third, you are here because you are real men and all real men like to fight. When you, here, everyone of you, were kids, you all admired the champion marble player, the fastest runner, the toughest boxer, the big league ball players, and the All-American football players. Americans love a winner. Americans will not tolerate a loser. Americans despise cowards. Americans play to win all of the time. I wouldn't give a hoot in hell for a man who lost and laughed. That's why Americans have never lost nor will ever lose a war; for the very idea of losing is hateful to an American."

The General paused and looked over the crowd. "You are not all going to die," he said slowly. "Only two percent of you right here today would die in a major battle. Death must not be feared. Death, in time, comes to all men. Yes, every man is scared in his first battle. If he says he's not, he's a liar. Some men are cowards but they fight the same as the brave men or they get the hell slammed out of them watching men fight who are just as scared as they are. The real hero is the man who fights even though he is scared. Some men get over their fright in a minute under fire. For some, it takes an hour. For some, it takes days. But a real man will never let his fear of death overpower his honor, his sense of duty to his country, and his innate manhood. Battle is the most magnificent competition in which a human being can indulge. It brings out all that is best and it removes all that is base. Americans pride themselves on being He Men and they ARE He Men. Remember that the enemy is just as frightened as you are, and probably more so. They are not supermen."

"All through your Army careers, you men have bitched about what you call "chicken shit drilling". That, like everything else in this Army, has a definite purpose. That purpose is alertness. Alertness must be bred into every soldier. I don't give a fuck for a man who's not always on his toes. You men are veterans or you wouldn't be here. You are ready for what's to come. A man must be alert at all times if he expects to stay alive. If you're not alert, sometime, a German son-of-an-asshole-bitch is going to sneak up behind you and beat you to death with a sockful of shit!" The men roared in agreement.

Patton's grim expression did not change. "There are four hundred neatly marked graves somewhere in Sicily", he roared into the microphone, "All because one man went to sleep on the job". He paused and the men grew silent. "But they are German graves, because we caught the bastard asleep before they did". The General clutched the microphone tightly, his jaw out-thrust, and he continued, "An Army is a team. It lives, sleeps, eats, and fights as a team. This individual heroic stuff is pure horse shit. The bilious bastards who write that kind of stuff for the Saturday Evening Post don't know any more about real fighting under fire than they know about fucking!"

The men slapped their legs and rolled in glee. This was Patton as the men had imagined him to be, and in rare form, too. He hadn't let them down. He was all that he was cracked up to be, and more. He had IT!

"We have the finest food, the finest equipment, the best spirit, and the best men in the world", Patton bellowed. He lowered his head and shook it pensively. Suddenly he snapped erect, faced the men belligerently and thundered, "Why, by God, I actually pity those poor sons-of-bitches we're going up against. By God, I do". The men clapped and howled delightedly. There would be many a barracks tale about the "Old Man's" choice phrases. They would become part and parcel of Third Army's history and they would become the bible of their slang.

"My men don't surrender", Patton continued, "I don't want to hear of any soldier under my command being captured unless he has been hit. Even if you are hit, you can still fight back. That's not just bull shit either. The kind of man

that I want in my command is just like the lieutenant in Libya, who, with a Luger against his chest, jerked off his helmet, swept the gun aside with one hand, and busted the hell out of the Kraut with his helmet. Then he jumped on the gun and went out and killed another German before they knew what the hell was coming off. And, all of that time, this man had a bullet through a lung. There was a real man!"

Patton stopped and the crowd waited. He continued more quietly, "All of the real heroes are not storybook combat fighters, either. Every single man in this Army plays a vital role. Don't ever let up. Don't ever think that your job is unimportant. Every man has a job to do and he must do it. Every man is a vital link in the great chain. What if every truck driver suddenly decided that he didn't like the whine of those shells overhead, turned yellow, and jumped headlong into a ditch? The cowardly bastard could say, "Hell, they won't miss me, just one man in thousands". But, what if every man thought that way? Where in the hell would we be now? What would our country, our loved ones, our homes, even the world, be like? No, Goddamnit, Americans don't think like that. Every man does his job. Every man serves the whole. Every department, every unit, is important in the vast scheme of this war. The ordnance men are needed to supply the guns and machinery of war to keep us rolling. The Quartermaster is needed to bring up food and clothes because where we are going there isn't a hell of a lot to steal. Every last man on K.P. has a job to do, even the one who heats our water to keep us from getting the 'G.I. Shits'."

Patton paused, took a deep breath, and continued, "Each man must not think only of himself, but also of his buddy fighting beside him. We don't want yellow cowards in this Army. They should be killed off like rats. If not, they will go home after this war and breed more cowards. The brave men will breed more brave men. Kill off the Goddamned cowards and we will have a nation of brave men. One of the bravest men that I ever saw was a fellow on top of a telegraph pole in the midst of a furious fire fight in Tunisia. I stopped and asked what the hell he was doing up there at a time like that. He answered, "Fixing the wire, Sir". I asked, "Isn't that a little unhealthy right about now?" He answered, "Yes Sir, but the Goddamned wire has to be fixed". I asked, "Don't those planes strafing the road bother you?" And he answered, "No, Sir, but you sure as hell do!" Now, there was a real man. A real soldier. There was a man who devoted all he had to his duty, no matter how seemingly insignificant his duty might appear at the time, no matter how great the odds. And you should have seen those trucks on the rode to Tunisia. Those drivers were magnificent. All day and all night they rolled over those son-of-a-bitching roads, never stopping, never faltering from their course, with shells bursting all around them all of the time. We got through on good old American guts. Many of those men drove for over forty consecutive hours. These men weren't combat men, but they were soldiers with a job to do. They did it, and in one hell of a way they did it. They were part of a team. Without team effort, without them, the fight would have been lost. All of the links in the chain pulled together and the chain became unbreakable."

The General paused and stared challengingly over the silent ocean of men. One could have heard a pin drop anywhere on that vast hillside. The only sound was the stirring of the breeze in the leaves of the bordering trees and the busy chirping of the birds in the branches of the trees at the General's left.

"Don't forget," Patton barked, "you men don't know that I'm here. No mention of that fact is to be made in any letters. The world is not supposed to know what the hell happened to me. I'm not supposed to be commanding this Army. I'm not even supposed to be here in England. Let the first bastards to find out be the Goddamned Germans. Some day I want to see them raise up on their piss-soaked hind legs and howl, 'Jesus Christ, it's the Goddamned Third Army again and that son-of-a-fucking-bitch Patton'."

"We want to get the hell over there", Patton continued, "The quicker we clean up this Goddamned mess, the quicker we can take a little jaunt against the purple pissing Japs and clean out their nest, too. Before the Goddamned Marines get all of the credit."

The men roared approval and cheered delightedly. This statement had real significance behind it. Much more than met the eye and the men instinctively sensed the fact. They knew that they themselves were going to play a very great part in the making of world history. They were being told as much right now. Deep sincerity and seriousness lay behind the General's colorful words. The men knew and understood it. They loved the way he put it, too, as only he could.

Patton continued quietly, "Sure, we want to go home. We want this war over with. The quickest way to get it over with is to go get the bastards who started it. The quicker they are whipped, the quicker we can go home. The shortest

way home is through Berlin and Tokyo. And when we get to Berlin", he yelled, "I am personally going to shoot that paper hanging son-of-a-bitch Hitler. Just like I'd shoot a snake!"

"When a man is lying in a shell hole, if he just stays there all day, a German will get to him eventually. The hell with that idea. The hell with taking it. My men don't dig foxholes. I don't want them to. Foxholes only slow up an offensive. Keep moving. And don't give the enemy time to dig one either. We'll win this war, but we'll win it only by fighting and by showing the Germans that we've got more guts than they have; or ever will have. We're not going to just shoot the sons-of-bitches, we're going to rip out their living Goddamned guts and use them to grease the treads of our tanks. We're going to murder those lousy Hun cocksuckers by the bushel-fucking-basket. War is a bloody, killing business. You've got to spill their blood, or they will spill yours. Rip them up the belly. Shoot them in the guts. When shells are hitting all around you and you wipe the dirt off your face and realize that instead of dirt it's the blood and guts of what once was your best friend beside you, you'll know what to do!"

"I don't want to get any messages saying, "I am holding my position." We are not holding a Goddamned thing. Let the Germans do that. We are advancing constantly and we are not interested in holding onto anything, except the enemy's balls. We are going to twist his balls and kick the living shit out of him all of the time. Our basic plan of operation is to advance and to keep on advancing regardless of whether we have to go over, under, or through the enemy. We are going to go through him like crap through a goose; like shit through a tin horn!"

"From time to time there will be some complaints that we are pushing our people too hard. I don't give a good Goddamn about such complaints. I believe in the old and sound rule that an ounce of sweat will save a gallon of blood. The harder WE push, the more Germans we will kill. The more Germans we kill, the fewer of our men will be killed. Pushing means fewer casualties. I want you all to remember that."

The General paused. His eagle like eyes swept over the hillside. He said with pride, "There is one great thing that you men will all be able to say after this war is over and you are home once again. You may be thankful that twenty years from now when you are sitting by the fireplace with your grandson on your knee and he asks you what you did in the great World War II, you WON'T have to cough, shift him to the other knee and say, "Well, your Granddaddy shoveled shit in Louisiana." No, Sir, you can look him straight in the eye and say, "Son, your Granddaddy rode with the Great Third Army and a Son-of-a-Goddamned-Bitch named Georgie Patton!"

His Finest Hour

John Keegan

Sixty years ago this month, in May 1940, Western civilization was threatened with defeat. Liberty, the principle on which it rests, was menaced by a man who despised freedom. Adolf Hitler, the dictator of Nazi Germany, had conquered Western Europe. He challenged Britain, the last outpost of resistance, to submit. He believed Britain would, and with good reason. Its Army was beaten, its Navy and Air Force were under attack by the all-conquering German Luftwaffe. He believed no one would oppose his demands.

He was wrong. One man would and did. Winston Churchill, recently appointed prime minister, defied Hitler. He rejected surrender. He insisted that Britain could fight on. In a series of magnificent speeches, appealing to his people's courage and historic greatness, he carried Britain with him. The country rallied to his call, held steady under a concentrated air bombardment, manned the beaches Hitler planned to invade, and took strength in the struggle of "the Few," Britain's fighter pilots, in their eventually victorious battle against Hitler's air power. By the end of the year, by the narrowest of margins, Britain had survived. Hitler's war plan was flawed, never to recover, and the Western world lived to fight another day. Western civilization had found a new hero in crisis, whose example would lead it to eventual triumph.

Most of the 20th century's men of power were the antithesis of Churchill. They ruled by standards the opposite of those to which Churchill held. Churchill believed in liberty, the rule of law, and the rights of the individual. They rejected such standards. Lenin, Stalin, Hitler, Mao Zedong elevated power itself into a value in its own right. Truth, for Lenin, was a bourgeois concept, to be manipulated for revolutionary ends. Stalin despised truth, taking pleasure in forcing revolutionary idealists to deny their beliefs and confess to crimes of which they were not guilty. Hitler went further. He propagated the idea of the big lie that, if large enough, became undeniable. Mao encouraged a Cultural Revolution that vilified his civilization's historic culture and encouraged the ignorant to humiliate the learned and wise. In Bolshevik Russia, Nazi Germany, and Maoist China, civilization itself was threatened with death.

Two titans. Indeed, civilization might well have gone under in the years of the great dictators. That it did not was because of its defenders, men of principle who were also men of courage. Foremost among them were two titans of the Anglo-Saxon world, Franklin Delano Roosevelt and Winston Churchill. That they were Anglo-Saxons was no coincidence. Both derived their moral purpose from the Anglo-Saxon tradition of respect for the rule of law and freedom of the individual. Each could champion that tradition because the sea protected his country from the landbound enemies of liberty. Roosevelt's America was protected by the vast expanse of the Atlantic Ocean, Churchill's England by the English Channel. The channel is a puny bastion by comparison with the Atlantic. It was Churchill's will, buttressed by the power of the Royal Navy and Royal Air Force, that made the channel an insurmountable obstacle to Hitler's attack on liberty.

In terms of moral stature, there is little to choose between the two men. Roosevelt was a great American, consistently true to the principles on which the great republic was founded. Churchill was a great Englishman, committed with an equivalent passion to the Anglo-Saxon idea of liberty that had inspired America's founding fathers. There was this difference. The challenge of dictatorship came later to the United States than to Britain. It also came as an indirect threat. Hitler could never have invaded America. He might, following his military triumph in northwest Europe in the summer of 1940, all too easily have invaded Britain. A weaker man than Churchill might have capitulated to the threat. His refusal to contemplate surrender elevates him to a status unique among champions of freedom. Churchill was the Western world's last great hero.

Who was Churchill? The son of a prominent parliamentarian, Lord Randolph Churchill, and his beautiful American wife, Jennie Jerome, daughter of the proprietor of the *New York Times*, Winston was born into the purple of British society. His grandfather was Duke of Marlborough, a title conferred on his great ancestor, victor of the 18th-century War of the Spanish Succession-Queen Anne's War to Americans-and the place of his birth, in 1874, was Blenheim Palace, given to the first duke by a grateful nation as a trophy of generalship.

The young Winston wanted for nothing by way of privilege and connections. Unfortunately, he wanted for money. His father, a younger son, was profligate with the wealth he inherited. Jennie was extravagant with her American

income. After Lord Randolph's early death, Winston was left to make his way in the world. He yearned to follow his father into politics. Without money, however, a political career was closed to him.

He had, moreover, been a failure at school. Headstrong and wayward, careers with prospects-business, the law-were thus closed to him. He took the only option open to a penniless youth of his class. He joined the Army.

Not without difficulty. Even the comparatively simple Army exams defeated Winston at his first two attempts. He passed into the Royal Military College only on his third try, which would have been his last attempt. His grades qualified him only for the cavalry, which did not look for brains. In 1895, he joined the 4th Hussars. In 1896 he went with his regiment to India.

Soldiering may have been a career of last resort. Winston embraced it enthusiastically. He was deeply conscious of his descent from Queen Anne's great general. He also had a passionate and adventurous nature. While a junior lieutenant he used his leave to visit the fighting in Cuba between Spain and the rebels. In India he used his connections to go as a war correspondent to the Northwest Frontier; in 1898 he again went as a correspondent to the Sudan, which Britain was recapturing from the Mahdi, an inspirational Islamic leader; and in 1899 he went, again as a correspondent, to the Boer War in South Africa.

Along the way, Churchill discovered a talent. He could write. The gift did not come without effort. In his hot Indian barracks he had spent his afternoons reading the English classics-Gibbon, Macaulay-and imitating their style. It was an unusual occupation for a young cavalry officer, particularly one who enjoyed the practice of his profession. Churchill was bored by routine but loved action. He was physically fearless and had no hesitation in killing Queen Victoria's enemies. On the Northwest Frontier, he had clashed at close quarters with rival tribesmen. In the Sudan he had ridden in the British Army's last great cavalry charge. In South Africa he had fought in several battles and made a daring escape from Boer captivity.

But bravery in action did not, he early recognized, win cash returns. Vivid journalism did. By his 25th year he had made himself not only one of the most successful war correspondents of his age but also a bestselling author. His books on Indian tribal warfare, the recapture of the Sudan, and the Boer War sold in thousands, both in Britain and America, and he added to his literary income by well-paid lecturing. In 1900, with the money accumulated by writing, he was independent enough to stand for a parliamentary seat and win.

His literary success had not made him popular. Senior soldiers resented the way he had used family influence to escape from regimental duty. In the political world he was thought bumptious and self-promoting. Churchill did not care. He knew he was brave. Having proved that fact to his own satisfaction, he felt liberated to pursue his fundamental ambition, which was to achieve in politics the position he believed his father had been denied. Churchill adulated his father. The admiration was not returned. Lord Randolph regarded his son as a disappointment and often told him so. Despite the rebuffs suffered at his father's hands, Churchill took up Lord Randolph's pet cause-"Tory Democracy," which sought to align the Conservative Party of property owners with the interests of the working man. At the outset of his parliamentary career, Churchill spoke of "taking up the banner he had found lying on a stricken field," and, as an act of piety, he later wrote his father's biography. But the banner of Tory Democracy found so few followers that Churchill soon despaired of his father's party. In 1904 he left the Conservatives and joined the Liberals. "Crossing the floor" was a foolhardy act for a young parliamentarian. He thereby made himself the enemy of all of his former colleagues without any certainty of finding new friends on the other side.

The reformer. Such were his gifts of oratory, however, that Churchill escaped the floor crosser's common lot. In 1905 he was promoted to ministerial rank, only an under secretaryship but at the Colonial Office, whose work interested him. In that office he returned self-government to the Boers, whom he greatly admired. In 1908 he made a real leap, joining the cabinet as president of the Board of Trade. His responsibilities included social policy, and he was able to introduce a series of measures that benefited the working man, including unemployment pay and the creation of a job placement service By 1910, when he became home secretary (a cabinet-level position similar to minister of the interior), he made a reputation as a radical social reformer, doing in the Liberal Party what he had hoped to achieve as a Tory Democrat.

Had he been kept in the social ministries, he would have built on the reputation. In 1911, however, he was made first lord of the admiralty at the height of Britain's competition with Germany in a costly naval race. Churchill loved the Royal Navy and fought successfully to win it the funds it needed. When the crisis came in July 1914, the fleet

greatly outnumbered Germany's and was ready for war. Churchill sought every chance to bring it into action, actually leading a division of sailors turned soldiers in the defense of Antwerp during the German advance into Belgium. Soon afterward came the opportunity to use the Navy's battleships in the sort of decisive campaign he craved to direct. With the war in France stalemated, Churchill successfully argued that a diversionary effort should be made against Turkey, Germany's ally, by seizing the Dardanelles, the sea route from the Mediterranean to the Black Sea.

The campaign proved a failure from the start. The fleet was repulsed in March 1915, when it tried to bombard its way through the Dardanelles. When troops were landed the following month, they were quickly confined to shallow footholds on the Gallipoli Peninsula. By the year's end, casualties had risen to hundreds of thousands, and no progress had been made. In January 1916 Gallipoli was evacuated. By then Churchill was a discredited man. He had resigned political office and rejoined the Army in a junior rank, commanding a battalion in the trenches.

The reactionary. He was the only politician of his stature to serve in the trenches, and the gesture-which put him often in great danger-restored something of his reputation. In 1917 he became minister of munitions, in 1919 war minister. In the war's aftermath his responsibilities involved him in the Allied intervention against Russian Bolsheviks and in the negotiations of Irish independence. In none of his posts could he show himself at his best, however, and his political career in the 1920s took a downward path. In 1924 he fell out with the Liberal leadership over economic policy and returned to the Conservatives. As chancellor of the exchequer in 1925 he helped to precipitate the general strike of 1926 against the resulting financial stringency. He was henceforth regarded as a social reactionary by the working man he had championed when a young Liberal. He soon after acquired a reactionary name in imperial policy also. The freedom he had been eager to grant the Boers he thought inapplicable in India, and over that issue he left the Conservatives' upper ranks. By 1932 he was a lonely man. Hated by the Liberals and the new Labor Party, isolated in his own Conservative Party, he sat on the back benches of the House of Commons, frustrated and increasingly embittered.

He had consolations. His wife, the former Clementine Hozier, was one. She was a woman of strong character whom Churchill had married in 1908. Clemmie never lost faith in him. Their children also brought much pleasure. Writing, above all, filled the gap left by the collapse of his political career. Ever short of money, Churchill worked hard as a journalist to cover the costs of his ample way of life. He also found time out of office to complete his most substantial literary work, a life of his great ancestor, the first Duke of Marlborough.

Even as he brooded on the back benches, however, Churchill was identifying a new cause. He had thus far had four lives, as a soldier, as an author, as a social reformer, and as a minister at the center of events. He now embarked on a fifth, as a Cassandra of Britain's present danger. Russian Communism had outraged his libertarian beliefs in the early Bolshevik years. In Hitler, whose rise to power began in 1933, he recognized a new enemy of liberty and one whose policies directly menaced his own country. The foreign policy of the government from which he stood aloof was one of appeasement. Anxious to protect Britain's fragile economy in the aftermath of the Great Depression, it preferred to palliate Hitler's demands rather than spend money on the rearmament that would have allowed it to oppose them. Year after year, between 1933 and 1938, Churchill warned of Germany's growing military might. He found support among experts in government who surreptitiously supplied him with the facts to authenticate his warnings. Official government persisted in denying their truth.

War is declared. Then, in 1938, the facts could no longer be denied. Hitler browbeat Czechoslovakia into surrendering much of its territory. He peremptorily incorporated Austria into Greater Germany. Neville Chamberlain's administration accepted that rearmament must now take precedence over sound economic management. France, too, bit the bullet of preparation for war, if war should come. When Hitler's aggressive diplomacy was directed against Poland, Britain and France issued guarantees to protect its integrity. Hitler chose to disbelieve their worth. He deluded himself. Two days after the Wehrmacht invaded Polish territory on Sept. 1, 1939, Britain and France declared hostilities against Germany. The Second World War had begun.

The Second World War was to be the consummation of Churchill's lifelong preparation for heroic leadership. He had proved his abilities as a soldier, as an administrator, as a publicist, as a statesman, as a master of the written and spoken word, and as a philosopher of democracy. In the circumstances of climactic conflict between the principles of good and evil, all the difficulties of his eventful life were to be overlaid by a magnificent display of command in national crisis.

Hitler almost won the Second World War. By July 1940 he had conquered Poland, Belgium, the Netherlands, and France, beaten their armies, and expelled the British Army from the Continent. He stood poised to conquer Britain also. On his strategic agenda, once Britain was invaded, stood the conquest of the Balkans and then the Soviet Union. He looked forward to being the master of Europe, perhaps of the world.

So certain was Hitler of victory that, during September 1940, he delayed the invasion of Britain in the expectation of Churchill's suing for peace. His expectation was false. There had been a moment, in late May, when Churchill was tempted to negotiate. Once it became clear that the Royal Navy could rescue the Army from Dunkirk he put that temptation behind him. Britain would fight. Its Army might be in ruins, but its Navy was intact, and so was its Air Force. To invade Britain, Hitler must first destroy the Royal Air Force so that he could sink the Royal Navy. Only then could his invasion fleet cross the English Channel. Churchill convinced himself that his Air Force would defeat the Germans in a Battle of Britain. In midsummer 1940 he set out to convince the British people also.

As war leader, Churchill was to display vital qualities: courage, boldness, intellect, cunning, and charisma all founded on deep moral purpose. His courage, and the charisma his courage created, were shown first in the series of great speeches he made to Parliament and the people in the invasion summer of 1940. On May 19, just over a week after Chamberlain resigned, Churchill broadcast to the nation: "I speak to you for the first time as prime minister," he began. He went on to describe how the Allied front was collapsing before the German attack, calling the moment "a solemn hour for the life of our country, of our empire, of our Allies, and, above all, of the cause of freedom." Further details of the crisis followed. He concluded, "We have differed and quarreled in the past, but now one bond unites us all-to wage war until victory is won, and never to surrender ourselves to servitude and shame, whatever the cost and agony may be. . . . Conquer we must-conquer we shall."

On May 13 he had already told the House of Commons that he could offer only "blood, toil, tears, and sweat" but went on, "You ask: What is our aim? I can answer in one word: Victory. It is victory. Victory at all costs. Victory in spite of all terror, victory, however long and hard the road may be." On June 4 he made to the Commons the same declaration in words that were to become the most famous he ever uttered.

"We shall not flag or fail," he said. "We shall go on to the end. . . . We shall defend our island, whatever the cost may be. We shall fight on the landing-grounds; we shall fight in the fields and in the streets. . . . We shall never surrender." The effect was electrifying. A taut and anxious House put aside its fears and rose to cheer him to the rafters. His words, soon transmitted to the people, also electrified them. They caught a mood of popular disbelief that so great a nation should stand in such sudden danger and transformed it into one of dogged defiance. It was from this moment that began what philosopher Isaiah Berlin identified as the imposition of Churchill's "will and imagination on his countrymen" so that they "approached his ideals, and began to see themselves as he saw them."

There had always been a strong element of the populist in Churchill. From his father he had inherited the watchword "Trust the people," and it was because of his democratic ideals that he had, as a young statesman, thrown himself so enthusiastically into legislating for the welfare of the working man. In his later posts it was the welfare of his country as a whole that had come to concern him, and his fellow politicians' laxity of purpose in defending its interests that had dispirited him and alienated him from government. Now, in the supreme crisis of his country's life, he found the voice once more to speak to his people's hearts, to encourage and to inspire. In another great speech to the Commons on June 18, the day of the French capitulation to Hitler, he appealed directly to their sense of greatness. "If we can stand up to Hitler, all Europe may be free, and the life of the world may move forward into broad, sunlit uplands. But if we fail, then the whole world, including the United States, including all that we have known and cared for, will sink into the abyss of a new Dark Age. Let us therefore brace ourselves to our duties and so bear ourselves that if Britain and its Commonwealth last for a thousand years, many will say, 'This was their finest hour.'"

Britain's year of 1940 would have been the finest hour of any nation. The British, under the threat of invasion and starvation by the U-boats too, heavily bombed in their cities, without allies, without any prospect of salvation at all, wholly exemplified how a finest hour should be lived. They dug the dead and the living from the rubble, manned their beaches, tightened their belts, and watched spellbound the aerobatics overhead of Fighter Command's fighting-and eventually winning-the Battle of Britain. Above all, they lent their ears to Churchill's great oratory. Speech by speech, they were taught by him to shrug off danger, glory in "standing alone," and determine to wait out isolation until the turn of events brought hope of better days.

Churchill's courage, and the charisma he won by it, was matched by his extraordinary boldness in adversity. A lesser man would have husbanded every resource to defend his homeland under the threat of invasion. Under such threat, Churchill nevertheless sought means to strike back. Identifying Hitler's ally, the Italian dictator, Benito Mussolini, as a weak link in the Axis system, Churchill stripped the home islands of troops to reinforce Britain's Army in the Middle East, where, in December 1940, it inflicted a humiliating defeat on the garrison of Italy's overseas empire. The setback caused Hitler to send Field Marshal Erwin Rommel to Mussolini's aid and, when Churchill next detached troops to aid Greece as well, to complicate his plans for the invasion of Russia by launching an offensive into the Balkans. Hitler's Russian timetable never recovered.

Churchill's boldness, based on the weakest of capabilities, thus won huge advantages. His real strategic priority, throughout the months of "standing alone," had, however, been to bring the United States into the war against Hitler on Britain's side. America was indeed Britain's last best hope. In June 1941, Hitler attacked the Soviet Union but, in a few weeks, Stalin's lot was even worse than Churchill's. German troops stood deep inside Russian territory, and the Red Army was falling to pieces. Churchill had offered Stalin a British alliance, but it was aid from the weak to the weak. Only America could reverse the balance for either.

Churchill's intellect had told him so from the inception of the disaster of 1940. A master of strategic analysis, he saw that Britain's numerical and economic inferiority to Hitler's Fortress Europe could only be offset by massive American assistance. He was also aware that an America at peace, barely recovering from the depths of the Great Depression, could be brought to intervene only step by step. It was there his cun-ning showed. Half American as he was, and long intimate with his mother's homeland, he recognized the strength of American suspicions of Britain's imperial position. He understood that President Roosevelt's profession of commitment to common democratic ideals and repugnance of European dictatorship was balanced by calculations of national interest and domestic policy. Where a less subtle man might have blustered and demanded, Churchill cajoled and flattered. All his efforts at establishing a "special relationship" were made by indirect appeal, through artistry and symbolism.

Five pledges. At Argentia Bay in August 1941, where Roosevelt arrived on the USS Augusta and Churchill on the HMS Prince of Wales-to be sunk five months later off Malaya by the Japanese-the prime minister extracted from the president five pledges: to give "massive aid" to Russia; to enlarge American convoys to Britain; to strengthen convoy escorts; to send American bombers to join the Royal Air Force; and to patrol the western Atlantic against U-boats. The two statesmen also agreed on a commitment to world democracy later to be known as the Atlantic Charter. It was a heartening encounter, of which Churchill made the most at home. The results still fell short of what Britain needed: a full-blooded American alliance.

That was brought him in the weeks after Dec. 7, 1941, when the Japanese Combined Fleet attacked Pearl Harbor. "So we have won after all," Churchill confided to himself that evening. His hopes ran ahead of events. Pearl Harbor merely opened a Japanese-American war. It was Hitler's megalomaniacal decision on December 11 to declare war on the United States that made America Britain's ally. Even then Churchill had much careful diplomacy to complete before he could be sure that the weight of the American war effort would be concentrated in Europe rather than in the Pacific. In the opening months of 1942 the American people's ire was directed against Japan, not Germany. Even though Roosevelt shared Churchill's judgment that Germany was the more dangerous enemy, America's generals and admirals had to be convinced of the correctness of "Germany first" as a strategy. The admirals never fully accepted it. The generals were bought to do so only by reasoned argument. Then, paradoxically, they had to be restrained. George Marshall, Roosevelt's great chief of staff, and Dwight Eisenhower, future supreme Allied commander and president, pushed in mid-1942 for an attack on Hitler's Fortress Europe at the earliest possible moment. Their impetuosity aroused Churchill's caution. Strong though his gambling instinct was, his memory of the Dardanelles disaster, the greatest setback of his career, remained with him. He was terrified by the prospect of a beaten Allied army falling back into the sea. His relief at Marshall's and Eisenhower's recognition of the prematurity of their plans was evident to all.

His caution would persist throughout 1943. It is from that year that the waning of his powers of leadership dates. He was approaching his 70th year and failing in health. He suffered a mild heart attack and other illnesses. He was confronted by a vote of confidence in the Commons, where sufficient of his old enemies remained to reproach him for the military disasters at Singapore and Tobruk. Roosevelt stood by him. "What can we do to help?" the president had asked after the fall of Tobruk in June 1942. Other Americans were less patient. They pressed for action from which Churchill increasingly appeared to shrink. The Russians were even more exigent.

Left out. Stalin took to deriding British halfheartedness, eventually to mocking Churchill to his face. At the three-power Tehran conference of November 1943, Stalin taunted Churchill to declare a final date for the invasion of Europe. Roosevelt lent Churchill no support. It was the beginning of a new, Russo-American special relationship, from which Churchill felt excluded. He was becoming an old man. His glory days were over.

There was to be a recovery. On May 8, 1945, the day of Germany's surrender, he made a speech to the London crowds in which he found his old voice and repaid the people for all he had asked of them in the dark days of 1940. "God bless you all," he trumpeted. "This is your victory. Everyone, man or woman, has done their best. Neither the long years nor the dangers, nor the fierce attacks of the enemy, have in any way weakened the independent resolve of the British nation. God bless you all." He, however, was not to be repaid for his lionlike wartime courage. His reputation as a young social reformer was long forgotten. The reputation given him by his Liberal and Labor opponents as a reactionary was not. In July 1945 the electorate voted against the Conservatives by a landslide. Churchill ceased to be prime minister, not to return to office for six years.

When he did resume the premiership in 1951, his powers had left him and his administration of government was an embarrassment. His resignation, forced by illness in 1955, was greeted with relief even by his closest friends and family. Yet the years since 1945 had not been without achievement. He had written a great history of the Second World War, which won him the Nobel Prize for Literature. He had become a European statesman, welcomed and honored in all the European countries that, in 1940, he had promised to liberate from Nazi tyranny and lived to see free again. He had become a hero in the United States, his mother's homeland, where he remains today the object of a cult status he does not enjoy in his own country. He had, above all, become the standard-bearer of a new crusade against a new tyranny, that of Stalinism. At Fulton, Mo., on March 5, 1946, he had warned against the descent of an "Iron Curtain" cutting off Eastern and Central Europe from the free world. The development reminded him, he said, of the appeasement years of the '30s, and he urged America and his own country not to become "divided and falter in their duty" lest "catastrophe overwhelm us all."

The Fulton speech, now so celebrated, aroused strong hostility at the time, both in America and Britain. It nevertheless laid the basis for the West's democratic resistance to the spread of communist dictatorship that, culminating in the fall of the Berlin Wall in 1989, at last restored the world to the condition of freedom that had been Churchill's central ideal and for which he had struggled all his life. "I asked," he answered his critics after the Fulton speech, "for fraternal association-free, voluntary. I have no doubt it will come to pass, as surely as the sun will rise tomorrow."

Churchill's sun, at the beginning of the third millennium, has risen and, if it should seem to shine fitfully at times and places, is nevertheless the light of the world. No other citizen of the last century of the second millennium, the worst in history, deserved better to be recognized as a hero to mankind.

The Rommel Myth

JAMES R. ROBINSON, COLONEL, US Army Reserve

Field Marshal Erwin Rommel rode across North Africa onto the pages of history. His legend secure, Rommel will be forever thought of as a military genius who, but for bad fortune and the faults of others, might have changed the course of World War II. His noble nature was crowned tragically by his involvement in the failed attempt on Adolf Hitler's life and his subsequent forced suicide. Legends, however, offer little in the way of direction for students of operational art. Those students must learn, directly or indirectly, from lessons locked in plans, maps, technical comparisons and analyses of others. It is through the disciplined application of critical analysis that campaigns of the past are transmuted into lessons for the future.

What did Rommel accomplish in North Africa, and how should those accomplishments be judged? Is he one of the "Great Captains," or is he more legend than genius, more image than substance? Exploring these issues is germane to future strategists, as it illuminates the tasks, skills and responsibilities at the heart of the operational level of war. Examining Rommel's North African campaigns under the scope of operational art requires not just revisiting battles, but identifying and analyzing the critical elements that constitute campaigns. Of particular importance to current operational-level thinking are lessons that teach us the oft-hidden effects of political, psychological and social factors on a campaign's purpose and execution.

Analyzing Operational Art

The renaissance in US military thought about the operational level of war provides an enhanced means to examine military efforts-past, present and future -that pursue political or strategic goals. Operational art is the planning and execution of military efforts to achieve political aims. It correlates political needs and military power. Operational art should be defined by its military-political scope, not by force size, scale of operations or degree of effort. Likewise, operational art provides theory and skills, and the operational level permits doctrinal structure and process.

While the emerging corpus of operational art and the establishment of an operational level of war are relatively new, operational art has existed throughout recorded history. Nations have long pursued political goals through military actions, and campaigns of any period can be examined from the existential perspective of operational art. Although a broadly accepted primer of operational art is yet to be written, current schools of thought share the fundamental view that military success can be measured only in the attainment of political-strategic aims. This is, in its broadest sense, a truism, valid for all wars in all times.

Operational art comprises four essential elements: time, space, means and purpose. Each element is found in greater complexity at the operational level than at the tactical or strategic level. This is true, in part, because operational art must consider and incorporate more of the strategic and tactical levels than those levels must absorb from the operational level. Although much can be gained by examining the four elements independently, it is only when they are viewed together that operational art reveals its intricate fabric.

The challenge of operational art is to establish a four-element equilibrium that permits the optimal generation and application of military power in achieving the political goal. Viewing time, space, means and purpose as a whole requires great skill in organizing, weighing and envisioning masses of complex, often contradictory factors. These factors often exist for extended periods, over great distances and with churning mixes of players, systems and beliefs, pursuing political goals which may or may not be clear, cogent or settled. Meanwhile, an enemy seeks to create options beyond our thoughts. Compounding factors from other dimensions of power create further, and inestimable, ambiguity and chance.

Mission analysis. The operational-level strategist possesses numerous tools to frame and guide his thinking, but chief among these are mission analysis and end state. Mission analysis answers the question "What is to be accomplished?" Through mission analysis, the operational-level planner fuses political aims and military objectives. In so doing, the planner determines what application of military force will create military power to achieve the political purpose. Subordinate processes here include defining objectives and centers of gravity, but excessive dependence on analytical mechanisms can create false security. The final test rewards success, not the quality of the argument. Conversely, we cannot hope to "feel" our way to victory-complexity demands an integration of thought

and structure. A prime challenge to operational-level strategists is to strike a balance between mechanisms and intellect. Too much or little of either reduces the possibility of equilibrium over time and, with it, success.

End state. The end state answers the question "What will constitute success?" The campaign end state is not merely a visualization of the military goal. It also establishes a touchstone for the tactical, operational and strategic levels, along with other dimensions of power. The end state crystalizes the intended results of military power and exposes any limitations. Indeed, an achievable end state may require employment of nonmilitary elements of national power. As such, it recognizes that military power alone may not be capable of attaining political success. The flesh and blood of the military effort are the campaign plan and its execution, but at its soul must be the satisfaction of political goals as defined by the end state.

Operational-level strategists must continually inventory and weigh time, space, means and purpose, extrapolating from them outcomes and probabilities. To accomplish this, practitioners need both skill and theory, experience and knowledge. At the operational level, skills and experience must usually be developed indirectly, through formal training, military history and wargaming. Success at the tactical level is no guarantee of success at the operational level, because there is no natural transition. Without a strong grounding in the theory and application of operational art, a successful tactician has little hope of making the demanding leap from tactics-mastery of operational art demands strategic skills. The operational-level strategist must see clearly and expansively from the foxhole into the corridors of national or coalition authority. In particular, there is a real, but unwritten, requirement for operational-level strategists to consider the plausibility and coherence of strategic aims, national will and the players who decide them. Successful operational art charts a clear, unbroken path from the individual soldier's efforts to the state or coalition's goals.

Factors in viewing World War II. Several factors affect any operational-art examination of Rommel's North Africa efforts. First, the Germans did not use the operational level as a formal doctrinal concept in World War II. While operational art was known within the German forces, its awareness and practice was limited principally to general staff-trained officers. As stated before, the existential na-ture of operational art means that examining Rommel's efforts against political aims is valid irrespective of the doctrine or structures of the period. In this, operational art's elements-time, space, means and purpose-illuminate thoughts and actions of any era, regardless of the prevailing doctrine or structure.

A different challenge is faced in addressing, under any framework, portions of the World War II epoch. World War II's sheer size, scale and complexity create a historical mass possessing its own relativity. It is impossible to separate and examine a sizable segment of the war without seeing that examination "bent" by the weight of other considerations, views, factors and potentialities. It is not just the military dimension that skews the image; the political, economic, social and psychological dimensions are as firmly entwined here as in any conflict in history. Moreover, retrospective "what ifs," while fundamental to analysis and learning, suffer much from an inability to reach conclusions amid an almost incomprehensible array of facts, figures, actors and chaos. These factors challenge not just efforts to "what if" the North Africa efforts, but those who seek to establish truth.

Interests and Aims

The arrival of German forces in North Africa was precipitated by a political need to bolster the sagging fortunes of Italy's fascist leadership. In 1940, the British quickly swept the Italians from the air and drove them back to Tripoli on the ground. Except for delays caused by regrouping and resupplying, then diverting forces to the doomed Balkan effort, the British would likely have defeated the Italians, taken North Africa and forestalled a German entry. Hitler feared an Italian defeat in North Africa could cause a political collapse in Italy, leading that nation to a separate peace. Hitler was unwilling, however, to pay a great price for propping up the Italians. North Africa was to be an economy of force effort, a sideshow to Hitler's upcoming Russian campaign.

An alternative, larger aim offered by some historians sees a German "pincer" strategy, whereby Germany would proceed several thousand miles around the Mediterranean, across the Middle East and link up with victorious German forces near the Caucases. Access to oil is seen as the primary goal of this strategy.1 But the pincer strategy is specious, for it greatly exceeded strategic or operational-level feasibility or rationality. The axis lacked means to man, equip and sustain additional armies, fleets and air corps needed to seize and maintain the enormous territory envisaged. Moreover, a second, exposed corridor to Russian and Middle East oil, operating on far-external lines,

was unneeded. A German victory in Russia, essential to the pincer strategy, would provide secure internal lines, required no additional effort and would free up huge forces for further strategic schemes.

British interests in North Africa related to strategic freedom of movement, while the German interests were to steady a faltering ally. The relative importance of each nation's interests are debatable. The British were not as overextended as the Germans were, given the demands of Russia. The British could, with extensive US materiel support, fight the Germans and defend their interests. Moreover, battling the Germans in North Africa fit within the British "peripheral" strategy, in which Britain hoped to attack and weaken the Germans by engagement along the continental Europe perimeter, and avoid what the British felt would be a more costly direct attack via invasion. This plan was later abandoned after US rejection. After the invasion of Russia, that country urged the British (and later the Americans) to relieve pressure from the Eastern Front by engaging German forces wherever possible. Time, space, means and purpose combined in an odd weighting in North Africa, a good reason these elements should always be considered together.

Rommel at the Operational Level

Rommel was ill-prepared by training, experience or temperament to lead an operational-level German effort in North Africa. World War I treaties limited Germany to a small army of 100,000 soldiers and reduced its officer corps from 35,000 to 4,000. However, the remaining officers were the creme de la creme, a significant number of whom were vaunted general staff members. Further, the German army circumvented the treaty restrictions against training and retaining the general staff, thereby continuing Germany's cultural commitment to this concept. Rommel's brilliant, aggressive small-unit actions in World War I secured for him a position in the post-war army, but he was never invited to attend the multi-year training of, or serve on, the general staff. Rommel was autodidactic, but little is known of his specific studies of the higher levels of war. His disdain for the general staff and its mental trappings is clear. Except for a brief, unhappy stint on a corps staff during World War I, Rommel did not serve in a division or higher headquarters until he commanded the 7th Panzer Division in 1940.2

This lack of higher staff responsibility stands in marked contrast to his contemporaries, many of whom came from the general staff ranks. Their interwar years were marked by service on higher staffs, to include extensive wargaming and brief interludes of command.3 Rommel's impetuosity and dynamism were often at odds with his peers' more disciplined, controlled approach. General staff training and service had at its core a commitment to knowledge, logic, detailed analysis and a shared, almost interchangeable, approach.4 Against this Rommel presented an antipodal approach, one that saw battle as not merely flowing from strategy but often leading it. Rommel was not without support in this line of reasoning. A famous quote from Count Helmuth von Moltke, the renowned 19th-century German strategist, offers that "The demands of strategy grow silent in the face of a tactical victory."5

Rommel's impetuosity and brilliance continued to serve him well as a division commander in 1940 France, although even there his actions began to betray his weaknesses. There were disturbing faults in staff procedures, time-phasing, communications and battlespace, but these were lost in the victory and in Rommel's growing persona.6 When Rommel stepped onto Africa, he seized the mantle of operational art, and in that world tactical brilliance alone would not suffice. Much has been said of the miserable German-Italian command structure for the theater, but the simple matter is Rommel took hold of the operational-level controls and never let go. The German Armed Forces Command's initial guidance to Rommel was clear and followed the strategic plan to defend the Italians. Rommel was to help hold Libya and not exceed an operational depth of 300 miles. Rommel quickly mounted an attack on the British which, given the situation, was entirely justified. This early seizing of the initiative amounted to a tactical offensive in support of an operational-level defense. But Rommel did not stop there. With his forces disembarking piecemeal, Rommel drove on to Egypt, greatly overextending his operational depth, to say nothing of his military

From the initiation of his First Offensive campaign until the withdrawal from El Alamein two years later, Rommel never offered an operational plan that pointed to achievable aims and balanced the four elements. Rather, he proceeded into an extended series of battles, unencumbered by an achievable sequencing of operations and means and disregarding the limited aims given him. There was no pretense of the supremacy of strategy over tactics. Rommel simply pushed his forces forward, pulling behind him like so much unnecessary baggage a century of German strategic thought and practice.

After the war, Field Marshal Gerd von Rundstedt, elder statesman of the German generals and quintessential product of the general staff system, said of Rommel, "He was a brave man, and a very capable commander in small

operations, but not really qualified for high command."7 Rommel did what he knew-tactics. He failed to do what he did not know-operational art. Rommel reveals his limitations in his own words. In an 8 April 1941 letter to his wife, Rommel makes what must be one of the oddest admissions of any operational-level commander: "I've no idea whether the date [of the letter] is right. We've been attacking for days now in the endless desert and have lost all idea of space or time."8

On 17 January 1942, Rommel writes his wife of his approach: "I work out my plans early each morning, and how often, during the past year and in France, have they been put into effect within a matter of hours? That's how it should be and is going to be in [the] future."9

Rommel never grasped the extended dimensions of his challenge and never comprehended the elements of time, space, means and purpose in any framework. Often, he merely rationalized or dismissed them, particularly when he addressed logistics. As Martin van Creveld has noted, Rommel failed to recognize the nature of his logistic challenges and incorporate them in his plans. He blamed logistics for not giving him all he wanted, where and when he wanted it-for not hewing to his battle desires.10 In this, he failed to grasp that, as Joint Chiefs of Staff Publication 1, Joint Warfare of the US Armed Forces, so succinctly puts it, "Logistics sets the campaign's operational limits."11 Instead, Rommel attributed even huge logistic shortfalls to failures in attitude and initiative at various levels. He blamed the Italians, the German general staffs and his own logisticians.12 It was as though the gallons, the tons and the overextended and exposed supply lines could be reduced to issues of human will.

A striking irony is that, had the British correctly identified and addressed Rommel's logistic vulnerability, they could have greatly reduced his successes. As it was, the British were a major provider of Rommel's operational depth. The British displayed a remarkably unfortunate propensity to surrender to the Germans all manners of supplies, often at key points in the campaign. Particularly startling are the vast quantities of trucks and fuel that fell into German hands. Amazingly, captured British trucks formed the bulk of German ground transport assets and were essential to maintaining German operational depth. That, of course, made them high-priority air targets, thereby incurring for the British the cost of destroying their own trucks. The great failure at Tobruk was not the fall of the town itself, for Rommel could not have maintained, at that point, his forces against rapidly increasing British air and ground power. The true failure was permitting the large stores of supplies and equipment in Tobruk to be captured by the Germans, for without those supplies, the Germans could not have gone on to El Alamein.

Time after time, Rommel's initial and ongoing mission analyses were limited to bringing the enemy to battle and defeating it. There was little linkage to operational aims-or concern for their absence-or to a feasible sequence to attain them. Some of his greatest tactical victories offered no decision, contained no feasible branches or sequels and held no true logic. These truths were lost to the world audience and to the German and British people and their leaders. The sounds of guns drowned out thoughts of strategy. All that was seen was victory, glory and national joy or sorrow. Rommel gave brilliant tactical performances. He consistently stayed within the British decision cycle by combining attacks, counterattacks, deceptions and risk taking. In this, he was aided by weaknesses in British command and tactics, particularly the British tendency to split heavy forces and offer them up to Rommel piecemeal. Nevertheless, Rommel's impulsiveness, surprise, improvisation and daring made him one of the most brilliant tactical leaders of the modern age.

Rommel knew that German strategic needs elsewhere would not permit sufficient reinforcements in North Africa, even if ways could be found to land them, move them to the front and sustain them once they were there. Colonel General Franz Halder, the German Army Staff chief, was one of many who attempted to open Rommel's eyes to the futility of his efforts in North Africa. On one occasion, Rommel told Halder he would need additional armored forces to capture Cairo, the Suez and swing into East Africa. Halder asked how, even if Germany could provide them, would those large formations be resupplied? Rommel replied that this was someone else's problem. No wonder Halder, in his war diary, referred to Rommel as "this soldier gone stark mad." 13

Rommel-and to an extent his foes-confused the campaign's nature. Tactical brilliance and public emotions reinforced the participants' beliefs that this was a theater where maneuver and individual battles could or would be decisive. In fact, North Africa became a theater of materialschlacht (battle of materiel) where the rhythms of war confused its participants, but where the inputs of war-weapons, manpower and supplies-determined the outcome. Tactical brilliance offered little hope for a decisive German victory, in no small part because that victory was never realistically defined. What if, in 1942 after Tobruk, the Germans took Alexandria, Cairo and even the Suez? No

plausible German sequel can be construed. Time had run out for Rommel: his operational depth was hopelessly overextended; the enemy's means far exceeded his; and his purpose was now delusional. British gains in air- and sea-dimensional superiority were increasingly dominating the Axis forces throughout the theater battlespace, while ground force reserves in Egypt were building rapidly.

Several days after El Alamein, the US Torch landings occurred in Northwest Africa, leaving the Germans little choice but to withdraw from Egypt or dramatically reinforce Libya. Hence, it was confirmed that tactical initiative is no guarantee of operational success. Rommel's overextension and pointless quest for battle played little part in theater decisions. Tobruk and El Alamein, far from the major events portrayed then and now, were virtually epilogues of the Second Offensive campaign, as by then the pendulum of military power had swung away from the Germans, never to swing back.

German thinking was disinterested with an expanded strategic purpose in North Africa and Rommel knew it. The Nazi strategic focus was Russia, where Germany's fate would be decided. In fact, each German North Africa offense surprised Hitler and the German Armed Forces High Command. Even as late as January 1942, Rommel's Second Offensive was unexpected. Not until the end of April was a strategy meeting held with the Italians-one which produced sloppy, confused thinking, resolved nothing and set no future course.14 "What to do in Africa?" was Italy's and Germany's continuing refrain.

Factors. Despite the dramatic sense of vast open areas, the North Africa campaigns were actually conducted on a long, narrow strip that followed the coast, rarely exceeding 50 miles in width. Ground combat in North Africa followed this long lane, limiting campaign efforts to linear, sequential warfare. Forces fought battle after battle, town to town, with no real operational-level maneuver. Tactical maneuver abounded but did nothing to break the string of sequential battles or the back-and-forth investment in destruction of lives and materiel.

Technology impacted time, space and means but never hoped to resolve the absence of purpose. The Germans entered a theater where the British and Italians had fought at limited ranges with rickety planes and outdated ordnance. The Germans immediately upped the technological ante with battle-proven, high-performance airplanes and far superior weapons. On the ground, the German 88 millimeter dual-purpose antiaircraft/antitank gun proved insurmountable to the British. The 88's effective range, killing power and accuracy terrorized the British ranks. It was not until 1942, when British air superiority permitted air-ground efforts targeting the 88s, that the weapon's battlefield supremacy was diminished. The Germans maintained, albeit to an ever diminishing degree, tank technological superiority throughout the North Africa campaigns. Germany showed a strong capability to upgrade existing models to meet new challenges. However, over time, British gains in quantity and quality, provided principally by the United States, attenuated earlier German advantages. The combination of two technologies-radio intercept and code breaking-were of major importance throughout the campaigns, but they require separate examination.

Myth and Meaning

Contemporary photographs and newsreel clips of Rommel are familiar even to those born decades later. Rommel is almost always depicted as a bronzed, handsome man, projecting transcendent wisdom and courage. His daring and valor earned him Germany's highest military medals in World Wars I and II. No 20th-century military foe approaches the enduring fame awarded Rommel by English-speaking peoples.

In truth, Rommel was and is a myth, crafted during his life by friend and foe alike to satisfy various political, social and psychological needs. It was a myth created from an admixture of truth, fiction and emotion, ever enshrined in popular culture and military history. Rommel's myth was used to explain events, to promote beliefs and to entertain, just as myths have done throughout the ages.

Rommel achieved some measure of fame in World War I and in the 1940 Battle of France, but North Africa forms the bulk of his legend. During the war, his deeds were trumpeted in countless newsreels, books and articles around the world. His fame in Germany was enormous. Shortly after the war, B.H. Liddell-Hart, one of this century's best-known military theorists and historians, proposed Rommel for entry into the pantheon of "Great Captains."15 Most views of Rommel offer similar songs of praise. Martin Blumenson, the distinguished World War II chronicler, could hardly contain himself in a 1989 piece, claiming that Rommel "is increasingly regarded as a soldier who had a clear and compelling view of strategy and logistics and a sound and balanced touch for grand operations."16

Rommel's myth was shaped not just by the Germans, but by his enemies as well. Rommel's brilliance mitigated for the British their defeats in North Africa. Rommel became a demigod of war, even to his enemies. During one period of the "Desert Fox's" successes, British Prime Minister Winston Churchill made his now-famous speech before the House of Commons, saying, "We have a very daring and skillful opponent against us, and, may I say across the havoc of war, a great general . . . "17 No doubt Churchill meant his words; but little doubt can exist either that by acknowledging Rommel's putative genius, Churchill helped excuse British errors, thereby deflecting political criticism of his government.

Image and Power

Rommel traveled the paths of glory not just on the strength of his record and abilities, but also from his personal relationship with Hitler. Rommel met Hitler briefly in 1934 and again in 1935, but it was Rommel's temporary tours of duty as commander of Hitler's headquarters party for the invasions of Czechoslovakia and Poland that cemented the relationship. Hitler read and enjoyed Rommel's book Infantry Attacks, which was based on his exploits in World War I. In 1939, Rommel was promoted to general officer and assigned as the Fuhrer's headquarters full-time commander. Less than three years later, Rommel was a field marshal, surely one of the most meteoric rises in any modern army. Rommel was neither Prussian, an aristocrat nor a member of the general staff, factors greatly increasing his appeal to Hitler. Rommel was, to Hitler, a wholly acceptable ally, one disenfranchised from the army's usual social elite that Hitler detested and distrusted. In 1940, Rommel was assigned 7th Panzer Division command through Hitler's intercession. On arrival at the division, he shocked his new subordinates by using the "Heil Hitler" greeting.18

Rommel clearly was not above increasing and using his political power. Rommel was quick to realize the subtle interactions among public appeal, political value and personal goals. While in North Africa, Rommel often communicated directly or indirectly with Hitler, bypassing his German and Italian higher headquarters. Rommel's aide, SS Lieutenant Alfred Berndt, maintained close ties with his former boss, Propaganda Minister Joseph Goebbels.19 Rommel often used Berndt to intercede with Hitler, Goebbels and others. Sometimes these were political or strategic matters but were often more mundane issues.

Goebbels guided the building of Rommel's reputation in Germany. Like Hitler, Goebbels saw the political, social and psychological benefits that accrued to the Nazis from the handsome, dashing Rommel, whose political acceptability was rewarded with extensive press coverage. He was the first division commander to receive the Knight's Cross for efforts in the fall of France, and he received the lion's share of press coverage. Even Goebbels, though, recognized Rommel's unpredictable nature and the risks of his actions. In an April 1941 diary entry, Goebbels wrote, "We have our hands full trying to hold him back." 20

For Hitler, the daring headline-making exploits of Rommel were too enticing to give up, even if there was no military-strategic logic behind them. Rommel, for his part, knew and cultivated the rewards of image. Prior to his departure for Africa, Rommel met with Hitler and examined American and British magazines lauding the Italian defeat by the British. Soon, Hitler and the world would see German victories there, and the photogenic Rommel would see his fame expanding. The Desert Fox found time to communicate to Goebbels concerns on the quality of his media coverage. Goebbels reacted, in a diary entry of 7 June 1941, that Rommel "deserves the best presentation we can give him. . ." and later that month wrote that Rommel and his forces "deserve the highest praise and a fame that will go down in history."21 Goebbels lived up to his promise, as Rommel became one of the most highly promoted Third Reich heroes. Thus did fame come to Rommel, and with it power.

In the end, the myth was too powerful for even Hitler to destroy. When Rommel came to terms with the irrationality and horror of the Nazi madman, he joined, in some form, the conspirators who hoped to kill Hitler and overthrow the Third Reich. Ironically, the unsuccessful putsch was organized and predominantly made up of Rommel's longstanding foes, general staff officers. Rommel was forced to commit suicide, but the public, of course, was told only that their hero died of wounds. Only after the war would the world learn the truth, a truth that would magnify the myth. In death as in life, Rommel was a hero.

Ultimately, German efforts in North Africa served only to delay the war's outcome at excessive costs. Rommel's failure to envision a realistic end state or to conduct an operational-level mission analysis meant there was never meaning to his battles. For the Germans, little good came of all their tactical and technological brilliance. In the end,

they accomplished no clearly identifiable, meaningful objectives. Rommel was untrained and ill-suited for the intellectual rigors of operational art. Rommel came to North Africa, fought countless battles over two years, shaped his legend, but achieved no enduring political goals. In all this, he never met the challenges of operational art and never blended time, space, means and purpose.

Rommel fought battles, but never determined why. For his enemies, the price paid in blood and treasure was later repaid many times over in improvements to equipment and doctrine, and in the inestimable value of battle experience. By any measure of success at the operational level of war, Rommel failed. By most measures of history, he succeeded. The difference is absorbed within the myth. The Rommel myth fulfilled psychological needs for Germany, offset British failures and transfixed the world. His legend as a heroic, tragic figure endures. But operational art is unforgiving-it sets its judgment on success, and Rommel achieved none. It was not just that Rommel failed at operational art, he never really attempted it. He had not learned it, had not practiced it and could not meet the intellectual challenges he faced.

Rommel and North Africa are windows into the future. No, not every circumstance will be repeated, at least in any single campaign. Nonetheless, we must look for each, either in ourselves and our allies or in our foes. For within each weakness is vulnerability. Perhaps the most dangerous risk is permitting public emotions to poison reason. We must beware of heroes, legends and tales, for they can lure political leaders and the public away from the reality of war.

Rommel will be borne by his legend across the sands of time. Nothing said now will change that; nor should we wish to rewrite the tale, for heroes are hard to come by. But let us ensure that today's warriors-at least the strategists-separate the man from the myth, the deeds from the drama and the futility from the glory. We owe that not to the past, but to the future. **MR**

Notes

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- 2. David Fraser, Knight's Cross: A Life of Field Marshal Erwin Rommel (New York: Harper Collins, 1994), 563-65.
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- 15. Liddell-Hart, The Rommel Papers, xii-xxi.
- 16. Martin Blumenson, "Rommel," in Corelli Barnett (ed.), Hitler's Generals (New York: Quill, 1989), 293.
- 17. Winston Churchill, A History of World War Two, Volume 3, "The Grand Alliance" (Boston: Houghton Mifflin, 1950), 200.
- 18. Len Deighton, Blitzkreig: From the Rise of Hitler to the Fall of Dunkirk (New York: Ballantine, 1982), 54.
- 19. Berndt is mentioned frequently in Goebbels' diary before, during and after his time as Rommel's aide. He later became an SS general and died in action.
- 20. Joseph Goebbels (Trans. & ed. by Fred Taylor), The Goebbels Diaries, 1939-1941 (New York: G.P. Putnam's Sons, 1983), 339.
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Leadership

Leadership for the New Millennium LIEUTENANT GENERAL PAUL E. BLACKWELL, US Army

LIEUTENANT COLONEL GREGORY J. BOZEK, US Army

The Army has undergone tremendous change over the past five years while simultaneously increasing the force's operations tempo (OPTEMPO) by about 300 percent. The Army will continue to change to adapt to warfare in the 21st century, and Force XXI is the process for that change. It is the Army's vision for transitioning from our current Continental United States-based force-projection Army - capable of conducting operations in Somalia, Haiti, Kuwait and Bosnia - to a capabilities- and knowledge-based Army for the 21st century. Force XXI is the Army's process to harness and incorporate information-age technological advances. The ongoing efforts associated with the Force XXI process are well documented. Among all this change, however, there are some constants. To be successful in war and operations other than war, units will continue to depend upon courageous soldiers, excellent training and quality leadership.1 Therefore, rather than focus on what is changing in the Army, this article will address one constant of Force XXI and future warfare - quality leadership capable of executing 21st-century battle command. Because of the complex environments in which we will operate, and the wide range of missions our forces will execute, there is a greater need than ever for smart, tough, decisive commanders to lead our soldiers in war and other operations.

The Strategic Environment

The world changed dramatically after the former Soviet Union's collapse. As a result, the Army has changed and is continuing to change to deal with the new strategic environment. Our Cold War strategy of containment with large, forward-deployed forces has changed to a strategy of engagement and enlargement. Our National Military Strategy identifies three sets of tasks we must perform to achieve the military objectives of promoting stability and thwarting aggression: peacetime engagement; deterrence and conflict prevention; and fighting and winning our nation's wars. From a joint perspective, our strategic concept for the foreseeable future will remain that of overseas presence and power projection, which defines the requirements for the Army.

As a strategic service, our Army - with a greater reliance on the Reserve Components than ever before - must be capable of providing forces that can quickly deploy worldwide to fight and win our nation's wars or to accomplish various other assigned missions. This demands a high readiness state and versatility to accomplish the wide range of possible missions and to operate under diverse conditions. The Army is prepared to deploy on short notice anywhere in the world to secure national interests. As we maintain our current readiness, we are working to shape the force to meet the next century's challenges.

What has changed. Throughout history we have seen how battlefield innovations have revolutionized warfare. For example, the inventions of gunpowder, the internal combustion engine and nuclear weapons each served as a primary force for revolutionary change in the conduct of warfare. We have typically seen "energy-based" inventions serve as the basis for change, providing better ways of harnessing energy to improve weapon lethality or enhance battlefield mobility. These improvements caused major changes in how armies organized, equipped and fought on the battlefield.

Today's revolution is different. Now we are in the midst of an information-based revolution. The microprocessor is revolutionizing how we organize, equip and fight by providing new and improved battlefield capabilities. Operations Just Cause and Desert Storm gave glimpses of some powerful new capabilities the information age can provide. The future battlefield will have newer and more improved capabilities - increased lethality through improved precision; improved ability to mass effects on the battlefield from forces in dispersed formations; and an enhanced ability to find enemy forces while making our forces difficult to detect. As a result of these new capabilities and the Force XXI process, the future Army will equip, organize, fight and train differently.

Force XXI battle command. Of the many enhancements the Army will gain through the Force XXI process, battle command and its integration capability are the most exciting and promising. The Force XXI capability to maintain battlespace awareness and to integrate all combat-power elements faster than the enemy is truly revolutionary.

Some people feel threatened by these prospects, fearing that Force XXI enhancements will reduce the authority of some commanders. Articles in professional journals and discussions with future commanders have highlighted

concerns about the threat to a commander's authority brought about by increased situational awareness. Will improved situational awareness allow senior commanders to direct every move on the battlefield, taking away the tactical decision-making responsibility of junior commanders and leaders? Some see information-age technologies as providing a simple, foolproof decision-making capability. Given our strategic environment and powerful information-age enhancements, the commander's role on the 21st-century battlefield and his battle command capability will be more critical than ever. However, through the Force XXI process, the Army is developing the capabilities to empower the commander to better execute the art of battle command in an environment that will place greater demands than ever on officer and noncommissioned Officer (NCO) leaders.

Decision Making

Our doctrine recognizes two main components of battle command: decision making and leadership.2 Although information- age technology and the strategic environment will affect each aspect of battle command differently, both components will remain crucial to battlefield success.

Our experiences since the Cold War indicate that conflict now and into the 21st century will place great demands on battlefield leaders' decision-making abilities. Leaders are finding themselves operating in environments that are increasingly more complex, faster-paced and more lethal than ever before.

Increased complexity and greater ambiguity complicate the conditions in which our forces must operate. The threat to our national interests is no longer another world superpower. Our threats are more diverse and less defined than during the Cold War. They consist of regional instability, proliferation of weapons of mass destruction and economic threats. The nature of these threats and the environment in a disorderly, unpredictable world bring about complex and ambiguous factors our forces have to deal with: ill-defined enemy forces, unfamiliar climates and terrain, newly formed coalitions and task forces and a diverse set of tasks and missions. Tactical-level decisions can have operational or strategic consequences. A world media stands by to critique, to a worldwide audience, each operation. Mission requirements span the entire spectrum of war and other operations. Hurricane relief in Florida, peacekeeping operations in Bosnia, operations to restore democracy in Haiti, deterrence operations in Kuwait and Korea, and combat operations to compel adversaries in Southwest Asia and Panama are recent operations highlighting the wide range of missions our forces have performed. These factors and conditions, combined with the increased speed of operations, have placed greater demands on our leaders.

Our doctrine describes the requirement to act faster than the enemy as a "precondition" to gaining battlefield initiative. Improved information-age technologies are designed to aid decision makers, but they also support increased OPTEMPO, generating requirements for quicker decision cycles for leaders. This creates a basic trade-off in decision making between the quality and timeliness of decisions. General George S. Patton Jr. believed timing was more important than the quality of a decision: "A good plan violently executed now is better than a perfect plan next week." In combat, timing is critical, and leaders need to decide, in a timely manner, how to sustain the high OPTEMPO and gain or sustain the initiative.

Increased battlefield lethality, combined with smaller organizations, raises the consequences of commander decisions. Our way of waging war has changed with the fielding of information-age capabilities. Previously we employed an attrition strategy based on building up combat power and wearing down enemy forces through direct pressure provided by industrial might and large forces. Now we have smaller units, and we are expected to be successful while being more efficient in protecting lives and saving resources - gaining quick, decisive victories with minimum casualties. This reduces the margin of error for leaders in decision making and force employment. Their decisions, at every level, tend to have greater consequences than ever before.

Increased complexity and ambiguity, high OPTEMPO and greater lethality have all increased the demands on battlefield leaders' decision making. Under these conditions, leaders can no longer develop their Cold War-era General Defense Plan Battlebooks and rehearse every possible contingency of an operation for years, nor can they rely on "checklist solutions" or "by-the-number responses." They have to understand the environment in which they are operating and be able to think on their feet with timely and accurate decisions.

We tend to seek technological solutions to problems, and combat decision making is no exception. However, we have to realize that even with our improved information-age systems, uncertainty in combat operations continues to plague leaders. The fog, friction, chance and uncertainty that Carl von Clausewitz wrote about over 160 years ago

still accurately describe the environments our forces are operating in today - and will continue to operate in for the foreseeable future. Technology will assist decision makers in gathering information and providing situational understanding, but given the environment and the nature of warfare, war and other operations will not be clean and precise, and decision making will not be simple or foolproof.

In his study of the evolution of command in war, Martin Van Creveld concludes that uncertainty has been a central fact throughout warfare; "From Plato to NATO, the history of command in war consists essentially of an endless quest for certainty." 4 Systems designed to support a commander in his battle command functions include several components, with technological systems being a single component. They also include soldiers, organizations, communications, doctrine and standing operating procedures. All system components need to complement the entire system to support a commander's information needs. Commanders also must recognize that uncertainty exists, and they essentially have two options in dealing with it: increase their command system's information-processing capacity or develop their command system to deal with less than perfect information. Given warfare's nature and its demands on leaders, battlefield decision making remains more an art than a science and requires smart, decisive leaders with sound tactical judgment.

Recent examples remind us that decision making, even in the information age, remains fallible. "The commission of inquiry into the shooting down of an Iranian airliner in the Gulf War Zone by the USS Vincennes in 1988 concluded that the warship's Aegis missile system, capable of identifying and engaging numerous targets at great range, using large amounts of "artificial intelligence" had performed faultlessly. The data had, however, been `misinterpreted' by the crew."5

More recently we heard about the fratricide incident in Northern Iraq. In that case, an Airborne Warning and Control System and fighter aircraft identified, then mistakenly engaged and destroyed, two friendly helicopters. These are two unfortunate examples of technology providing the right information, but being misinterpreted or misunderstood - leading to disaster. Just having the right information is not sufficient. Leaders have to use this information to support their decision making.

The strategic environment in which our forces will operate and warfare's very nature create conditions that are not clean and precise, and decision making is neither easy nor foolproof. Decision makers, operating in environments that place great demands on them, even with the best possible information available, still have to apply their best judgment to make a good decision in a timely manner. But decision making is only one element of battle command.

Leadership

Even with all the battlefield innovations and technology to aid decision making, battle command has a second critical component - leadership. War remains a very human endeavor. People are involved, and soldiers and leaders have to deal with the human emotions of fear and confusion in the face of a determined enemy. As Maurice de Saxe wrote, "The courage of troops must be reborn daily." That is the role of leaders. The missions we conduct in war and other operations require soldiers on the ground, operating in harm's way. Author T.R. Fehrenbach described it well in his book This Kind of War: "You may fly over land forever; you may bomb it, atomize it, pulverize it and wipe it clean of life - but if you desire to defend it, protect it, and keep it for civilization, you must do it on the ground, the way the Roman Legions did, by putting your young men into the mud."6

Soldiers operate in hostile environments whether they are fighting in the streets of Mogadishu, building bridges over the Sava River, walking patrol in Port-au-Prince or keeping the peace in Tuzla. Leadership is important in motivating soldiers in these operations - perhaps it is the most important ingredient in battlefield success. General Frederick M. Franks Jr. stated, "Battlefield leadership at all levels is an element of combat power. It is difficult to measure, but nonetheless is present and a decisive contributor to victory in battle."7

Recent battlefield experiences serve as good reminders that there is a human element to battlefield decision making and leadership. History is replete with examples of leaders turning the tide of battle through their personal courage and leadership in the face of the enemy. And the information age has not changed the requirement for leaders to influence the course of battle through their personal leadership. Leaders have to motivate soldiers to overcome their fear and confusion to defeat the enemy.

In Vietnam, a major tactical command and control innovation was the helicopter. The helicopter provided first-generation situational awareness by giving the commander a "bird's eye" view of the battlefield and a great vantage point from which to observe and direct the fight. But in the heat of battle, situational awareness and the ability to direct the fight was not sufficient. Recognizing they had to lead and motivate their soldiers, commanders landed periodically to meet face-to-face with subordinate commanders to share hardships and get a better feel for the battle and the state of their soldiers in combat.

On 8 June 1966, Troop A, 1st Battalion, 4th Cavalry Regiment was caught in an ambush at Ap Tau O by the elite 9th Vietcong Division's 272d Regiment. Lieutenant Colonel Leonard LeWane, the squadron commander, supported the ambushed troops from his observation helicopter. He directed units to the right position, adjusted fires and called for close air support. But that was not enough: "On two occasions in the heat of battle, LTC LeWane landed his OH-13 inside the laager under heavy fire. He wanted to eyeball his troops and determine the state of their ammunition. He walked from vehicle to vehicle and found the troops full of fight and with plenty to shoot. His presence in the thick of battle was just what the troopers expected of their commander."8

Brigadier General John C. Bahnsen learned a similar lesson when, as a major commanding 1st Battalion, 11th Armored Cavalry Regiment, he observed "Command from a helicopter gives better communications and usually better visibility and control, but does not normally outweigh the morale aspects of sharing ground troops' hazards under fire."9

The commanders recognized that situational awareness to aid their decision making and control of the battle was not sufficient. They met with subordinates to influence the situation by their physical presence on the battlefield and to share information that could not be effectively transmitted over a radio.

This idea is supported by commanders who fought in operations Just Cause and Desert Storm. Their positioning on the battlefield was critical - to personally see what was happening, to get a feel for the battle and to increase their soldiers' morale and spirit during the fight.

In Desert Storm, where a wide variety of communications systems were available, Franks said that "more than 50 percent of battle command in VII Corps was non-electronic." 10 Commanders had the technical capability to communicate in several ways, but they met face-to-face and talked to one another to ensure they could effectively communicate with one another and get the feel for the battle.

General John H. Tilelli Jr. understands the positioning of the commander in battle and how it can support decision making and influence the battle. After Desert Storm, he discussed the commanders' role, saying "Commanders should show a command presence on the battlefield. Not for the sake of the commander, but for the sake of the soldiers, for the sake of information, for the sake of doing an oil check if you will, on the battalion commander to see how things are going from his perspective and, at the same time, setting an example where commanders should be, and that's up front in the battle."11

The lessons and emerging insights from advanced warfighting experiments (AWEs) over the past couple of years support these same lessons of leadership and decision making we have learned on the battlefield. Information-age technologies offer tremendous potential to improve how we operate by providing information to support decision making. Our experiments show that units tend to operate digitally in the planning and preparation phases. But during operations, and especially during combat, units use voice communications. The verbal communications and the face-to-face communications remain vital to provide the full picture of the situation. Soldiers need to see their leaders and to hear their calm, confident voice on the radio directing the fight. A battlefield commander's role is critical in exercising leadership and gaining a feel for the situation.

The Force XXI process has helped lead us through this change in warfare and provide us the equipment and organizations to be successful on future battlefields - but our approach is not just about equipment and organizations. We recognize the art of battle command required in effective decision making and leadership, and our doctrine emphasizes its importance. It is reinforced at our combat training centers (CTCs) and with the Battle Command Training Program. The battalion, brigade and division commanders and command sergeants major of the 21st century are currently in our officer and NCO schools - and they are in our units participating in AWEs and CTC rotations and NCO and officer professional development programs. Their study and their experiences are crucial to

developing leaders with the necessary knowledge, skills, tactical judgment and intuitive feel for battle they will need to meet future challenges.

Force XXI has reshaped our Army for the 21st century by providing the right tools to empower our soldiers and leaders to more effectively and efficiently accomplish whatever mission they are assigned. The hard work and intellectual energy the Army as an institution is putting into the Force XXI process will keep us trained and ready now and prepared to meet 21st-century challenges.

The environment our forces will operate in will be more complex and challenging than what we have known in the past. History and recent lessons learned point out that the human aspects of decision making and leadership are relevant now and for the foreseeable future. As we continue building the Army After Next, we will continue to need quality soldiers led by superb leaders as we deploy them to answer our nation's call. *MR*

NOTES

- 1. US Army Field Manual (FM) 100-5, Operations (Washington, DC: Government Printing Office [GPO], 1993), 2-12; and GEN (Ret) Donn A. Starry, "On Making Our Smaller Army a Better One," Field Artillery Journal (February 1991), 20-21.
- 2. FM 100-5, 2-14 and 2-15.
- 3. GEN George S. Patton Jr., War as I Knew It (Boston, MA: Houghton Mifflin, Co., 1975), 354.
- 4. Martin Van Creveld, Command in War (Cambridge, MA: Harvard University Press, 1985), 264.
- 5. Christopher Bellamy, The Evolution of Modern Land Warfare (New York: Routeledge, 1990), 52.
- 6. T.R. Fehrenbach, This Kind of War (Washington, DC: Brassey's, 1994), 290.
- US Army Training and Doctrine Command Pamphlet (TRADOC Pam) 525-100-1, Leadership and Command on the Battlefield (Fort Monroe, VA: GPO, 1992), vii.
- 8. GEN William E. DePuy, "Troop A at Ap Tau O," in Selected Papers of General William E. DePuy, ed COL Richard M. Swain (Fort Leavenworth, KS: Combat Studies Institute, 1994), 383.
- John C. Bahnsen, Douglas H. Starr and Arthur L. West III, "Attacking Dismounted Infantry with Armored Cavalry," Armor (September-October 1986), 15.
- 10. TRADOC Pam 525-100-1, 34.

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Technology, Leadership and Effectiveness MAJOR CHRISTOPHER D. KOLANDER, US Army

The Army's vision for transformation involves striking, almost revolutionary, technological innovations to enhance the information management and combat efficiency of what is arguably the finest land force in warfare's history. The smaller yet more lethal force, capable of rapid deployment to any remote corner of the globe, will be the world's most technologically advanced power projection instrument. Through innovations in guidance and information technology, the Army can place overwhelming ordnance on target with more speed, precision and accuracy and report the results faster than any of our potential foes can imagine. In fact, one might argue that we are in the midst of a lethality revolution.

The digital battlefield will fundamentally change uncertainty as well. Instantaneous tactical situation updates, precise reporting and navigation, and logistic data fed directly and accurately to all with the need to know and the capability to do something about it will reduce some factors related to battlefield uncertainty. Commanders and staffs will be able to make more informed decisions and transmit them immediately to the units responsible for applying them. While digital technology will inevitably result in some new and improved uncertainties, we should expect an order-of-magnitude increase in firepower and information efficiency.

The key issue is whether the development of an efficient force is sufficient. Technology can never eliminate human nature and the fog, error, unpredictability and heroism that come with it. If we accept that combat generally runs in observation-orientation-decision-action cycles, then digital technology will increase the speed and fidelity of our ability to observe, orient and decide. In a critical moment between decision and action, individuals and units either implement those decisions or refuse, and courage and resolution or fear and panic prevail. In that moment reigns humanity, which no amount of technology can overcome. The deciding factor in the critical moment is the quality of leadership and the resilience of the organization.

Technology certainly increases our efficiency, but we must accept that it is, in itself, an incomplete framework for creating the quality of force we need in the next quarter-century. As Greek philosopher Aristotle argued over 2000 years ago, "whenever skill and knowledge come into play, these two must be mastered: the end and the actions which are the means to the end." Greater efficiency through technology is an important means to the end, but it is not an end in itself. The true goal is the development of excellence.

To achieve excellence we must combine efficiency with things and effectiveness with people.³ True transformation means developing both components with equal vigor. If we focus solely on improving efficiency as a means to achieve excellence, but neglect human effectiveness, we will soon find that we have arrived at the wrong address.

Learning the Lesson

The experience of warfare in the early 20th century warns that when seeking battlefield excellence, technical innovation alone is no panacea. World War I, the first conflict to experience a fundamental technological and communications revolution, showed the limits of technical solutions to battlefield effectiveness. The cable, the field telephone and in some cases the wireless telephone were the early 20th-century answers to the command and control nightmare created as mass armies locked in materiel warfare. These communications innovations, so it was thought, would give the command post real-time tactical information with which the commanders and staffs could make and transmit decisions rapidly. At Ypres, Verdun, the Somme and Passchen-daele soldiers went over the top while commanders and staffs went into bunkers and dugouts. While leaders armed with new communication technology manned telephones and awaited information on the progress of the offensive, their soldiers ventured into no man's land and were mowed down. The commanders and staffs were quite efficient, but their armies were completely ineffective. Not until 1917 did the Germans develop an intelligent response to the technologically driven attrition warfare.

This response, known as *Hutier* or storm troop tactics, was not merely a tactical improvement; it was a cultural innovation. Relying on the tradition of independence and initiative developed by Prussian General Gerhard Johann David von Scharn-horst and later refined by Prussian General Helmuth von Moltke, the Elder, the Germans developed a framework that restored fluidity to positional warfare. While the German Army eventually collapsed

under the combined weight of the American, British and French forces and its own flagging morale, the doctrine of mission orders and decentralized execution had once again found currency. This doctrine (termed *Auftragstaktik* after World War II) was later used to devastating effect from 1939 to the winter of 1942-when Adolf Hitler and his henchmen, much to the dismay of many field commanders, rejected independence and initiative in favor of obedience and the "fixed defense." Later *Auftragstaktik* was employed in isolated incidents until 1945, but by then the culture of the *Wehrmacht* as a whole had fundamentally changed.

Auftragstaktik, the concept praised by advocates of maneuver warfare, was not so much a tactical doctrine, as many mistakenly believe, it was a cultural weltanschauung (worldview). Through Auftragstaktik the Germans were able to establish a paradoxical framework in which the martial virtues of discipline and obedience could coexist with independence and initiative. The commander's intent-what he wanted to accomplish-was the unifying force in tactical and operational decision making. Within this framework the subordinate commanders were expected to use their initiative and judgment to fulfill the commander's intent and act independently when their initial orders no longer reflected the reality of a changed situation-as long as their actions operated within the framework of the commander's intent. To illustrate this point, German officers often pointed to the admonishment by Prince Frederick Charles to a blundering major who claimed that he was just following orders: "His majesty made you a major because he believed that you would know when not to obey his orders." With this particular cultural mindset the German army achieved qualitative excellence and defeated opponents who were often numerically and technologically superior.

Choosing the Right Path

We are at a crossroads today not unlike that which faced our predecessors in World War I. The significant technological breakthroughs that we are about to embrace offer us some important choices. We can travel along the path of centralization and place a primacy on efficiency as did our predecessors in World War I, or we can move along the path of excellence by coupling efficiency through technological innovation with effectiveness through the development of leadership, institutional culture and organizational climate.

Loosely defined, culture is the set of shared values, beliefs and behavioral patterns of a given society or collectivity. Culture establishes a coherent behavioral framework within which the members are voluntarily expected to act. Army values encapsulate our institutional culture. Additionally, according to Army leadership doctrine, "an organization's climate is the way its members feel about their organization. Climate comes from people's shared perceptions and attitudes, what they believe about the day-to-day functioning of their outfit." As professional soldiers, leaders need to address issues of culture and climate along with those of technology. Technology leads to efficiency, but effectiveness is only achieved through a healthy culture and climate. Ultimately, the nature of the institutional culture and organizational climate primarily determine the difference between excellence and ineffectiveness. Developing leadership should be the first priority since it is the key to forging an effective organizational climate.

US Army Field Manual 100-5, *Operations*, asserts that leadership, rather than firepower, protection or maneuver, is the most important dynamic of combat power, which suggests where attention should focus. And yet, day to day the more-visible aspects of combat power are all-consuming, and even over the long-term challenges such as the impact of technology are familiar distractors. Perhaps even more troubling is the use of information technology to micromanage subordinate leaders and organizations. The mere ability to gather and process information can increase the appetite for it, regardless of utility. Subordinate leaders then find themselves consumed with reacting and responding to directives and requests for information rather than exercising initiative and judgment within guidelines established by their leaders-a peacetime habit that could be disastrous in combat.

While enhanced technology improves efficiency with information and materiel, increased efficiency does not necessarily portend greater effectiveness with people. To paraphrase General George S. Patton, wars may be fought with weapons, but they are won by soldiers. Raising the qualitative level of excellence means increasing the effectiveness of units and soldiers through a revitalized attention to leadership and organizational climate.

An effective organization combines desired performance results with healthy, shared values. The human force of leadership synergizes these results and values to form the organizational climate. A winning, healthy climate developed through leadership makes an organization effective. Because an organization is made up of component units, like any living organism, it is only completely healthy when all of its component units are. Therefore, the desired culture must be inculcated throughout the institution and the desired climate throughout Army organizations via the leaders. The task for organizational leaders is then twofold. First, they must clearly define and align results and values at the top; then develop subordinate leaders to operate willingly within that performance and behavioral framework. A simple typology illustrates the necessity of nurturing this synergy as well as the danger of affirming a "performance only" culture.

According to Jack Welch, CEO of General Electric, those in charge of units generally fall into one of four broad categories. The first type of leader accomplishes great results while upholding the values of the organization. This leader has established a healthy, winning climate inside the unit and is the type of person we need to recognize, reward, mentor and prepare for greater responsibility. The second type of leader accomplishes poor results with no values. This one is an easy call and should be encouraged to make a new career choice very quickly. The third type achieves poor results but still operates within the values of the organization. Such people still have potential. Because they uphold the values of the organization, they should be coached, allowed to learn from mistakes and given the opportunity to improve. Given the chance and the mentoring, many of these soldiers will become leaders of the first type.

The last type of leader gets great results but fails to uphold the values of the organization. This situation is deceptive because the results are there. However, this person's dysfunctional behavior is dangerous and rewarding it is cancerous. Left unchecked, it may lead to destructive competition and selfish individualism, both of which are anathema to an effective organization. We all realize that we should help this type of person make a new career choice as well, but instead we often find ourselves rewarding behavior we instinctively despise because of the results. This becomes our own leadership failure, and we must be willing to change our response to this type of person.

The fundamental difference between the third and fourth type of leader is the impact each has on the organization. Because the third type exhibits constructive behavior, training can overcome the shortcomings in results unless the person simply lacks ability. The fourth type exhibits destructive behavior, which has a decidedly negative impact on the organization as a whole. His unit may look good, but selfish individualism will compromise the overall organizational effectiveness.

Furthermore, the results attained by this sort of person are always short term. While the unit may look good from the outside, it is often rotting on the inside-shiny boots hiding trenchfoot. Subordinates will either be disillusioned by or will imitate the behavior of their superior, especially if that behavior is rewarded, and over a period of time the unit will always fall apart. Unfortunately, because leaders, particularly officers, remain in charge of units only briefly, the dysfunctional nature of the unit often becomes apparent only after the perpetrator has left. A person who proudly proclaims that the unit was great while he was there but fell apart after he left merely admits that his dysfunctional leadership focused on shortterm results with blatant disregard for the longterm, positive development of subordinates. An effective leader leaves behind an effective unit; a dysfunctional one leaves behind a dysfunctional unit. A unit takes on the character of its leader, and the impact is long lasting.

Restoring Character

Leaders are responsible to align results and values to train and evaluate subordinates against the backdrop of organizational climate. Just as clearly defined and attainable standards help achieve desired performance results, clearly defined values are crucial to organizational effectiveness. We then set the behavioral example by walking our talk and by holding our subordinate leaders accountable to that standard. An effective, healthy, winning organizational climate is achieved when we align results and values, hold ourselves accountable to those standards first, then expect the same of our subordinates.

For instance, if we consider teamwork as one of our critical organizational values, then attempting to improve results by pitting units against each other and rewarding the winner would be an example of a failure to align.⁸ In this

scenario there is only one winner, and the rest are losers-we are talking teamwork but rewarding (walking) individualism. We can talk teamwork all we want, but all our subordinates will hear is individualism because actions diminish words.

On the other hand, if the competition is against a clearly defined performance standard and units are rewarded on the basis of meeting that standard, then we begin to align desired results with the value of teamwork. Everybody can win, nobody can win or a happy medium. Beating the standard is what matters at the organizational level, not beating each other. We now begin to establish an environment in which teamwork can take place. The key is to train and reinforce the desired attitude and behavior and make the value of teamwork a reality in the organization.

Certainly, we will never completely eliminate people's desire to compete and outdo each other. Nor should we. Such competition can be very healthy and a spur to performance in the right context. The difference is whether we allow these tendencies to become dysfunctional behavior at the organizational level, or merely manifest themselves as friendly competition among team members. A good test of the system is to see whether the competition encourages the cross-talk and exchange ideas that make individual teams and the organization more effective.

Leadership plays the decisive role in formatting culture and climate. As a result, conscious choice to develop the leadership is necessary to foster healthy, winning organizations. In doing so, several points are important to inculcating this type of leadership and climate within an organization. First, leaders must rely on Army values as the cornerstone of effectiveness, both in terms of a leader's character and in terms of the organization as a whole. They then define these and other organization-specific values, making them as understood throughout the organization as performance standards. Using Appendix B of Field Manual 22-100, *Army Leadership*, leaders should integrate these values into monthly performance counseling and empower subordinates inform them of any alignment problems within the organization.

Furthermore, leaders must make clear the consequences of achieving short term results through dysfunctional behavior. Perhaps most important, they must realize that leadership based on character begins on the inside. Leaders must hold themselves to these standards first before expecting them of anyone else-a soldier can spot a hypocrite very quickly and will never follow one. These important issues have no easy answers or quick fix solutions, but they are critical in creating effective Army units.

The Army needs to embrace sweeping technological innovations. Efficient communications, logistic and weapon systems are crucial to maintaining a qualitative edge over any potential foe. Efficiency, though, is only the lesser half of the battle. To achieve excellence, leaders need to invest at least as much energy in upgrading the unit effectiveness, developing leaders who live our institutional values and set the proper organizational climate. Technology can improve efficiency, but only leadership can enhance effectiveness. An effective organization accomplishes superior results within the framework of healthy, shared values and provides an environment within which people will naturally want to work together and excel. To achieve such excellence, the Army must develop these qualities of effectiveness through leadership with the same rigor devoted to efficiency through technology. MR

- 1. For further development see Christopher D. Kolenda, "Between Decision and Action: Leadership at the Critical Moment," Armor (May-June 2000).
- 2. Aristotle, Politics, Book 7, written in 350 B.C., trans. Benjamin Jowett, xiii, 1331 b24b39.
 3. Stephen Covey, The 7 Habits of Highly Effective People: Restoring the Character Ethic (New York: Simon and Schuster, 1989), 1701.
- 3. 4.Trevor N. Dupuy, A Genius for War: The German Army and General Staff, 1807-1945 (Englewood Cliffs, N.J.: PrenticeHall Inc., 1977), 302307.
- 5.US Army Field Manual 22-100, Army Leadership (Washington, DC: US Government Printing Office, August 1999), 3-12.
 6.Jack Welch, Chief Executive Officer of General Electric, uses this typology in outlining the importance of values in his organization. For a further discussion see Lynne Joy McFarland, Larry E. Senn and John R. Childress, eds., 21st Century Leadership: Dialogues with 100 Top Leaders (New York: The Leadership Press, 1993), 152153.
- 5. 7.Marcus Tullius Cicero, *De Officiis* (Oxford University Press, June 1994). Cicero wrote eloquently in cautioning the Romans to be wary of unprincipled people with unbridled ambition.

6. 8. Another example is to talk initiative but then overmanage the daily activities of subordinates. Stephen Covey, *The 7 Habits of Highly Effective People: Restoring the Character Ethic*, uses the notion of alignment to discuss the causes of dysfunctional behavior in organizations, 229230.

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Leadership in Literature

HENRY G. GOLE

Military journals, the popular press, and glossy copy from the Department of the Army tell us that high-tech is in. Photos of soldiers with one each of everything from RadioShack draping their bodies confirm it: scientism, voiced in New Age incantations--like "total information dominance"--is the right stuff of future wars. High-tech solutions, promising bloodless victories in war, are attractive in the homeland of Benjamin Franklin, Thomas Alva Edison, and Bill Gates. Americans willingly spend dollars to spare lives. But if antiseptic victory via missiles entering doors and windows without knocking seems too good to be true, it probably is.

Exaggerated claims for high-tech tend to characterize war as gallery games played by warm, dry, and well-fed geeks. Icons, feeling neither fear nor discomfort, zap other icons, or are themselves gezapped. Reality becomes blips on screens accompanied by audio dissonance, obscuring a brutal fact: decisive combat sooner or later pits our tough kids against their tough kids in one of the world's back alleys, where the weather is always bad, communications always break down, and the action always occurs at the junction of four map sheets. Bad decisions can put our warriors in the wrong place, and poor leadership can squander elite formations. Victory in war requires more than gadgets. And it is seldom bloodless. *Menschenführung*, one of those clumsy-precise German words, means leading human beings. That is our subject.

Field Manual 100-5, *Operations*, says what leadership does: it provides purpose, direction, and motivation in combat. And it is important. Combat power comes from the courage and competence of soldiers, training, equipment, doctrine, "and above all, the quality of their leadership." Field Manual 22-103, *Leadership for Senior Leaders*, defines leadership as the "art of direct and indirect influence and the skill of creating the conditions for sustained organizational success to achieve the desired result." We once learned a simpler formulation, that leadership was gaining the willing cooperation of our troops, but the definitions are compatible. The former reflects the organizational concern of high command, the latter the eyeball-to-eyeball relationship in which leaders share with their soldiers the hazards and hardships of combat. Definitions, axioms, pet theories, and checklists abound, but leadership, like sex, is a doing thing.

Command Climate

The US Army War College's 1970 *Study On Military Professionalism* addressed the difference between saying and doing, finding a command climate "in which there is disharmony between traditional, accepted ideals (summarized as Duty, Honor, Country) and the prevailing institutional pressures." Here is a pregnant excerpt:

A scenario that was repeatedly described in seminar sessions and narrative responses [to questionnaires] includes an ambitious, transitory commander . . . engulfed in producing statistical results, fearful of personal failure, too busy to talk with or listen to his subordinates, and determined to submit acceptably optimistic reports which reflect faultless completion of a variety of tasks at the expense of the sweat and frustration of his subordinates.

The damning study rocked Army leadership, not least because respondents were front-runners in the grab for the brass ring, not embittered losers. They were faculty and students at the War College, students at the Command and General Staff College, and others deeply knowledgeable of the officer corps. The Army published the findings and briefed them to US Army audiences around the world.

The rot revealed in the 1970 study antedated our war in Vietnam. "Zero defects," white rocks, starched fatigues, and spit-shined jump boots worn in the field were some of the manifestations of the victory of form over substance, a constant and insidious military proclivity. Scientific management and graduate study for officers were in vogue. In the 1990s, the outward signs of form over substance are field grade officers grinding out slick PowerPoint briefing charts (a task once performed by junior enlisted soldiers or the people in "graphics"). This show-and-tell is accompanied by a highly centralized system which, in unholy alliance with the selling of high-tech in the glib language of advertising, tends to reward brisk performance of narrowly prescribed tasks. The cost is initiative, the sine qua non of military leadership from squad to field army.

We should not await the shock of violent combat to reveal our defects. It is time to restudy the Army's command climate, a subject of inquiry more pertinent to the health and effectiveness of the Army than fixation on the latest gadget or viewgraph. Until we have conducted, digested, and acted upon such a restudy, imaginative and historical

literature remains the laboratory of military leadership. What makes literature more useful to leaders than lists and axioms is context. Leadership functions or fails in the real world, a world best replicated in fiction, memoirs, biographies, and histories in which leaders play the cards they are dealt. Immersion in this literature is second only to actual combat leadership experience in shaping leaders.

Apprentice to Generalissimo

Rudyard Kipling's Stalky & Co. is a delightful boys' story and a penetrating insight into the source of British leaders in those days when the sun never set on the empire. The setting is the British public school, that peculiar institution which shaped the youths who later manned the ramparts in every corner of the empire as Her Majesty's professional officers and civil servants. The public school produced Wellington's officers, by his own testimony, and the youngsters who led British troops over the top through more than four years of trench warfare in World War I, if they survived. Among the latter were poets and writers of prose still in print, men like Sigfried Sassoon, Robert Graves, and Wilfred Owen, who created the picture in our heads that is the Western Front of World War I. The subculture of the public school instilled in most of the boys a permanent value system of noblesse oblige (in addition to producing some world-class spies and scoundrels; see George MacDonald Fraser's "Flashman" novels for a laugh a minute). Somehow the schoolmasters (see James Hilton's Goodbye, Mr. Chips, and weep with Mr. Chips as the names of the old boys killed are read out at Chapel, 23 on a single Sunday after the Somme), tradition, social pecking order, games, and a liberal arts curriculum transformed filthy little beasts into patriots unable to let their side down. Privileged treatment in a rigid class system produced its share of self-centered fops, but in extremis the public school boy distinguished himself by caring for his soldiers and dying well. A wounded and decorated "old boy," just two or three years out of school and known to most of the boys still in school, returns from India and addresses the school community. The reader witnesses the transformation of street urchin to aspiring winner of the Victoria Cross. Readers soak up the ambiance of the public school, enhancing their appreciation of how Britain cultivated apprentice leaders who would maintain a great empire for a long time.

Soldiers, like much of humankind, dream of advancement, as suggested in the sardonic toast of young officers stagnating in grade: "Here's to a bloody war and a pestilential season." (See Byron Farwell's *Mr. Kipling's Army* for a penetrating look into that army and chuckle on every page.) Few of us are sufficiently introspective to ask if we are up to the demands of high command. Being "up to it" is one of several important issues raised by Correlli Barnett in *The Swordbearers: Supreme Command in the First World War*, an absolute gold mine for the student of leadership at the top. His theme, "the decisive effect of individual human character on history," is personified in four national commanders-in-chief at critical decision points: two Germans (Colonel-General Helmut Johannes Ludwig von Moltke and General Erich Ludendorff), one Frenchman (General Henri Philippe Omer Pétain), and one Englishman (Admiral Sir John R. Jellicoe).

Moltke, Chief of the General Staff and de facto Commander-in-Chief of the Field Army of the German Empire for nine years, said of himself in 1905, when he knew he was the likely successor to Count Schlieffen:

I lack the power of rapid decision. I am too reflective, too scrupulous, and, if you like, too conscientious for such a post. I lack the capacity for risking all on a single throw, that capacity which made the greatness of such born commanders as Napoleon, or our own Frederick II, or my uncle

He was right. Though the bold German offensive conducted in 1914--designed by Moltke to knock the French out of the war before the Russian offensive in the east became decisive--was nothing if not a single throw of the dice, Moltke was still correct in his self-assessment. Barnett describes Moltke during the critical phase of the battle as "visibly prostrate with worry, with his almost hallucinatory awareness of all the moral and general issues at stake." He goes on to say:

It mattered nothing now, in the crude business of leadership in war, that Joffre was an intellectual pigmy. . . . Equally it mattered nothing that Moltke had a first-class intelligence and a brilliant staff record; he could no longer control his army for he had lost control of himself.

Moltke was effectively relieved of his duties on 14 September 1914--"effectively" because, as he told the Kaiser, "It wouldn't make a good impression in the army abroad if I were to be dismissed immediately after the retreat of the army." He remained at his headquarters pro forma, but, as he expressed it, "Everything was taken out of my hands and I stood there as a spectator." Formal relief was on 3 November 1914, and he died in 1916.

Several works dealing with Moltke's wartime experience describe the temper of Europe as war began as well as the particulars of combat at the cutting edge. Barbara Tuchman's *The Proud Tower* captures the mood of the various classes in Europe before the war, and her *The Guns of August* brings home to the reader the massive sweep of the initial German offensive. See also at the point of the arrow the opening gambit from the perspective of Walter Bloem, a German reserve officer and rifle company commander, in *The Advance From Mons*, and through the eyes of French intellectual Marc Bloch, a sergeant of the reserve positioned to blunt that arrow at the Marne, in his *Memories of War*, 1914-1915. Erwin Rommel, in *Attacks*, shows the initial clashes on the Western Front--and close combat on two other fronts later in the war--through the eyes of the reflective professional soldier, while Alexander Solzhenitsyn, in *August 1914*, shows combat between Germans and Russians--and how not to lead. See also Emilio Lussu, *The Sardinian Brigade*, for combat between Italians and Austrians in the high Alps a little later in the war.

Barnett calls Jellicoe a "sailor with a flawed cutlass." Highly regarded for his knowledge, skills, and "profound self-confidence," Jellicoe had been chosen long before 1914, by Admiral-of-the-Fleet Sir John Fischer and First Sea Lord from 1904 to 1910, as the man who would one day lead the British Fleet to victory over the German High Seas Fleet. Early in 1914, Jellicoe was appointed Commander-in-Chief designate of the Home Fleet, to assume his post in December when the term of Admiral Sir George Callaghan expired. On 31 July, with war imminent, Winston Churchill told Jellicoe to be prepared to assume his new duties instantly. Jellicoe's reaction was curious. It is not "profound self-confidence" that one sees in his reflection later, nor in the flurry of messages exchanged at the top of the navy's hierarchy. "This intimation came upon me as a great surprise, and I protested against such an appointment being made on what might possibly be the very eve of war." In fact, told to "do it," he protested to his superiors not once but four times: on 1 August--to Churchill, First Lord, and to the Marquis of Milford Haven, First Sea Lord--and on 2 August, on 3 August, and on 4 August.

But he assumed command of the Home Fleet and fought the German High Seas Fleet in the Battle of Jutland, a battle described by Barnett as high drama. To appreciate the stakes involved in the only great fleet engagement of the war, reflect on Churchill's view that it was possible for Jellicoe to lose the war during the afternoon and evening of 31 May 1916. The details of the battle and debates following the battle are fascinating, as are the connections Barnett draws between national character, education, the soul of the military, and the character of leaders. Some critics charge Jellicoe with indecisiveness for not pursuing the German fleet that broke contact; others praise his prudence in not risking the British Fleet through a charge into the literal and figurative fog of war. Leaving the debate to sea dogs, one still must note the German tactical victory (British loss of 111,980 tons of warships, German loss of 62,233 tons; 6,945 British casualties, 2,921 German) though coupled with strategic defeat. The German High Seas Fleet did not venture out of its protected harbors again until 1918, when German sailors mutinied rather than play a role in a Wagnerian Twilight of the Gods.

The *Generalissimo*, like the poker player, must know when to hold and when to fold. Despite almost two million French casualties by the end of 1915, despite the 362,000 lost at Verdun alone in 1916, the French bloodbath continued. The failure of General Robert Nivelle's offensive (16 April to 17 May 1917) resulted in the replacement of Nivelle with Pétain as Commander-in-Chief. This failed offensive, the inability to defeat the German submarine threat, and paralysis caused by the March revolution in Russia combined to raise the question: Could France hold on? The sacrifice without benefit that caused despair in Russia brought mutiny to the French army in May 1917. Half of the French divisions experienced mutinies, the *Internationale* was sung, and leaflets were distributed saying, "Down with the war! Death to those responsible for it!" The only good news was the entry of the United States in the war in the spring of 1917.

Pétain expressed his policy in a single sentence: "We must wait for the Americans." He decided "to wear out the enemy with the minimum losses to us." Because Pétain had seen the realities of modern war as a brigade, division, corps, army, and army group commander, and because of the mood of disillusionment after the failed offensive, his realism was acceptable.

The British and Germans took far better care of their troops than the French, of whom Barnett says: Their food was scanty, "welfare and recreational facilities of a Crimean standard, sanitation and washing facilities medieval. . . . All they got were floods of cheap wine--upon which so many of the mutinies were to be fueled." He notes that France had slipped far behind Germany in population and industrial strength, and it fell to Pétain to repair the mistakes of 40 years while in a great war. He turned promptly to the morale of French troops with a two-pronged approach: swift and severe punishment of ringleaders in the mutinies, and a more humane treatment of French soldiers

exemplified by the liberal leave policy beginning 8 June 1917. Transportation was provided from the front to rail station, and in a clean uniform. Information and welfare stations were established, and canteens and barber shopsall things the British and German soldier took for granted. These measures, and the suspension of the pure waste of sending troops "over the top" to be ground up by machine guns and rapid-firing artillery, allowed the French army to stay in the field until the Americans arrived. Pétain nursed his army back to health and saved it from collapse.

Barnett calls the final section of *The Swordbearers*, dealing with General Erich Ludendorff, "Full Circle," because, "as the war had opened, so it was about to close--with the nervous disintegration of another de facto Supreme Commander of the Field Army of the German Empire." In deft sketches, Barnett reveals the personalities and roles of the German high command late in the war. The Kaiser was titular Commander-in-Chief of the Field Army, a role he thoroughly enjoyed playing in victorious peacetime maneuvers, but he was passive during the war, leaving matters almost entirely to his generals. (Barnett calls the German government a "slothful front organization" for the military.) Hindenburg was Chief of the General Staff, and Ludendorff was *his* Chief of Staff, taking the title First Quartermaster General. The calm, dignified Hindenburg, feudal in his dedication to his monarch, filled the classic Prussian role of *Feldherr*, while the intelligent, restless, driving Ludendorff served as the General Staff's brain and catalyst. Their "military marriage" was nurtured by their spectacular early victories in the east against the Russians that propelled them to command in the stalemated west in 1916.

In early 1917, German submarines adopted a sink-on-sight policy that brought the United States into the war on 2 April 1917. Millions of fresh American soldiers would go to Europe. The Russian-German armistice in the east ended German military operations there on 16 December 1917, thus permitting some German troops from the east to join the war in the west. At a conference on 11 November 1917, Ludendorff decided on a German offensive in France in the spring of 1918, before the Americans could arrive in force. It is noteworthy that the conference deciding German national strategy was not held in Berlin with the Kaiser or Imperial Chancellor presiding. It was held at an army headquarters in Mons, chaired by Ludendorff and attended by General Staff officers.

He would attack the British using tactics developed at Riga and Caporreto based on infiltration by storm groups-riflemen, light machine guns, flame-throwers, mortars, engineers--up to battalion size. They would take paths of least resistance, not worrying about flanks or maintaining a continuous front line. "The reserves must be put in where the attack is progressing, not where it is held up." These tactics required first-rate junior leadership at the cutting edge and the best soldiers the attacker possessed. At 0440 on 21 March 1918, the dice were rolled in "a desperate final gamble" whose outcome would decide the war.

Barnett's description races along. "British accounts agree on the paralyzing effect," reducing the Fifth Army, and to some extent the Third Army, to uncoordinated elements of gassed and blasted troops. The Germans "achieved overwhelming tactical as well as strategic surprise," while the British experienced "complete anarchy, a chaos of rumors and ignorance" as their artillery suffered "a total breakdown of coordinated counterfire owing to the smashing of tele- and radio-communications." In a single day the Germans had broken clean through into open country, and Haig expresses concern in his diary entry of 23 March that "the British will be rounded up and driven into the sea!" On the 21st he had asked Pétain for three French divisions; on the 23d he asked for 20. The Kaiser returned from the front bursting with news of German success: "The battle is won, the English have been utterly defeated." (From the British side, see the protagonist in C. S. Forester's novel, *The General*, a corps commander on the receiving end of the initial German success on 21 March. Not quite sure what is happening or why, he instinctively mounts up in the best British tradition--with his sword--and rides to the sound of the guns prepared to die for King and Country.)

But the Kaiser's pronouncement was premature. While German assault troops were successful at many points, they were in constant danger, exhausted, and unsupported. (See Ernst Juenger's *The Storm of Steel* to appreciate how brave and skilled they were. Further, Juenger and others loved the wild abandon of close combat, an attitude in sharp contrast to the pacifistic tone of most other personal accounts, including Erich Maria Remarque's *All Quiet on the Western Front*.) The motorized and mechanized forces and supporting arms of 1940 were simply not available to the German assault teams of 1918, and the torn-up terrain at the front meant that local successes could not be translated to victory as British and French reserves, advancing on roads, arrived faster than German reinforcements. Further, as Ludendorff spent 348,300 men in his offensive, 179,703 Americans had arrived in France. He pressed on in May, this time against the French, but again was unable to make strategic victory out of his local successes. He called off the offensive in June.

The massive French offensive that followed in mid-July, after the last of so many supreme German efforts, produced Allied success. On 26 October 1918, Ludendorff asked to be relieved. The Kaiser obliged him.

Barnett writes of Ludendorff's "disintegration," but one suspects that the dramatic effect of beginning and ending with a similar human frailty in Moltke and Ludendorff involves some poetic license. Moltke never made it through the first inning; Ludendorff offered his resignation when the German army was demoralized and defeated in the field after the throw of the dice came up craps. The lesson of *The Swordbearers* for prospective leaders is a question few ask as they reach for the brass ring: Am I up to it? (See also Barnett's *The Desert Generals* for excellent portraits of five generals under the strain of high command in battle in the Middle East theater, 1940-1943. The 1982 version is subtitled *New and Enlarged Edition*, incorporating commentary on documents released since the 1960 original. Barnett contends that Winston Churchill and Field Marshal, First Viscount Montgomery of Alamein, created a myth that "scorned" British Commonwealth Forces before Montgomery's advent, doing "a grave injustice to Sir Claude Auchinleck.")

Three Levels of War in One Theater

Your reviewer confesses to a loss of academic detachment as he reexamines William Slim's *Defeat Into Victory*, John Masters' *The Road Past Mandalay*, and George MacDonald Fraser's *Quartered Safe Out Here*, each of which combines masterful use of language with the essence of British-Japanese combat in Burma in World War II at one of three levels: that of the commanding general, the general staff officer, and the squad leader ("section leader" in the British corruption of the American language). My self-assigned messianic task is to tell soldiers to read the books for professional development and for the good of their souls. Only a conscious act of self-discipline prevents your reviewer from extensively quoting from the first-rate prose.

William Slim was a great soldier and a great teacher of soldiers. He fought at Gallipoli and in Mesopotamia (see his laughing-out-loud account of his World War I experiences as a junior officer in the Middle East, *Unofficial History*), rose to brigadier in the Indian army between the wars, and began World War II commanding in Sudan, Iran, and Iraq. The focal point of *Defeat Into Victory* is the retaking of Burma from the Japanese, first as corps commander and then as commanding general of the 14th British Army. It is a textbook on generalship, but two lessons seem particularly pertinent.

The first might be anathema to contemporary American professional officers conditioned to egalitarianism, mired in correctness, and subject routinely to unreasonable expectations. Slim played tennis, enjoyed a gin and tonic at sundown, and made a point to get a good night's sleep when he commanded an army. Because tens of thousands of lives and the fates of nations are affected by his decisions, the decisionmaker should be clear-headed. Furrow-browed intensity, fear of failure, the quest for perfection (when the good would do), looking over one's shoulder for approval, and shows of puppy-like enthusiasm are not characteristics Slim demonstrated or recommended in a commander-in-chief. His soldiers knew that Slim, reacting to the darkened reputation earned by the chateau generals of World War I, preferred to lead from the front and that he was a modest man.

Fraser reports that once, after Slim addressed a unit preparing to go into action in Burma, a soldier actually shouted out, in an un-British manner: "We'll follow you, general!" Slim responded: "Don't you believe it. You'll be a long way in front of me." Fraser says Slim was

the only man I've ever seen who had a force that came out of him, a strength of personality that I have puzzled over since. . . . [I]t was that sense of being close to us, as though he were chatting offhand to an understanding nephew. . . . [H]e had the head of a general with the heart of a private soldier. . . . [W]hen it was over and he spoke of what his army had done, it was always "you," not even "we," and never "I."

Masters reports Slim's initial remarks as he assumed command of the 10th Indian Infantry Division in Iraq. The regulars expected the usual lecture from "a pompous old blatherskite," but Masters was struck by the division commander's observations about morale. "The dominant feeling of the battlefield is loneliness, gentlemen, and morale, only morale, individual morale as a foundation under training and discipline, will bring victory."

The second lesson for the prospective general is to recall how he obeyed as a private or cadet: He saluted, followed by "Yes, sir" and about-face, and then did what he was told to do. Douglas MacArthur and Mark Clark forgot that.

MacArthur could accept neither the "Germany first" strategy that made the war in the Pacific in World War II a secondary effort, nor later, in Korea, could he accept the primacy of civilian leadership in our American system of government. Clark, similarly, had difficulty in accepting that the invasion of France and the Allied charge into Germany took precedence over the campaign in Italy, his campaign. Ego, arrogance, even hubris, stood between these two American generals and our ideal of greatness. Slim, the good soldier, understood that political decisions established the priorities of Allied strategy: defeat Germany; win the war in the Pacific; and only then, with the resources left over, win in China-Burma-India. He saluted, endured, and ultimately whipped the Japanese with what Clement Atlee called "the scrapings of the barrel." He later served as chief of the Imperial General Staff, was made field marshal in 1949, and served as governor-general of Australia from 1953 to 1960 when he was created viscount. Greatly admired by Masters and Fraser, true soldiers both, his stolid dignity and compassion stand in sharp contrast to the bullies and shouters of more recent vintage.

John Masters fought like a lion, wrote like an angel, settled in the United States after World War II, and dedicated *The Road Past Mandalay* to "those who remained on the paths, on the hills." Is there an old sweat out there who could read those words and not read on? Or not recognize the truth of this, about eating in the bush with danger not far away: "It was not the food that refreshed and renewed us as much as the occasion." (See his *Bugles and a Tiger*, an autobiographical account of how the "schoolboy became a professional soldier of the old Indian Army"--a Gurkha--before the big show opened in 1939. See Byron Farwell, *The Gurkhas*, to learn why British officers loved leading their Gurkhas, and Farwell's *Mr. Kipling's Army*, for an insider's view of that army and his witty descriptions of it, such as calling it "a social institution prepared for every emergency except that of war.") Masters experienced combat in the Middle East before being sent to Staff College in Quetta, a rite of passage about which he wrote: "You may laugh more than you ever have, but you'll never laugh as lightly again. In military terms you are about to become a field officer; in civilian language, a responsible adult."

The bulk of *Mandalay* takes place in Burma, where Masters serves as Brigade Major (principal staff officer) and later commander of 111 Brigade, a component of Orde Wingate's Chindits, a deep penetration force that engaged in hard walking and bitter fighting against a tough foe. Later he is the principal staff officer in 19 Division during the bloody concluding phase of combat with the Japanese, who refused to surrender. Masters tells a war story and a love story (his wife-to-be is in India) even while rendering valuable professional instruction, including an appendix that is an ops order. His reflections on commanders and upon assuming command of 111 Brigade will be read twice by pros; his love of soldiers, pride in British accomplishments, and investment of self in service are moving. He writes, "We--but I have called this a personal narrative; why do I use the impersonal `we'? I must, because the `I' had disappeared." This is wise, powerful, literate stuff about service and leadership; it continues in George MacDonald Fraser's *Quartered Safe Out Here*.

Fraser joins an infantry "section" (a ten-man squad) as a replacement to engage in close combat in Burma for a year before leaving as a corporal to attend officer school. Attachment to mates, what makes squads work, and why soldiers fight have been done before, notably by Cornelius Tacitus, Stephen Ambrose, James Jones, Norman Mailer, Erich Maria Remarque, Hans Hellmut Kirst, Robert Graves, Willi Heinrich, Jean Larteguy, and others, but no one does it better than Fraser. Corporal Hutton, squad leader when Fraser was new to the squad, says of their company commander as the men watch him "looking as though he hadn't a care in the world" just before an assault: "Happy as a pig in shit. E's a lad, oor John." Fraser adds:

That, incidentally, is about as high a compliment as a Cumbrian soldier can pay, and was a just reflection of the company's feeling. They didn't give their admiration lightly, but they wouldn't have swapped Long John for any officer in the Army. He was a wildcat in action and a gentleman out of it; forty years on I watched him finding seats for latecomers to a memorial service in Carlisle Cathederal, mild and unobtrusive as he handed them their hymn-sheets--and remembered him coming out of the dark with that bent bayonet on his rifle.

As Fraser leaves the company in Burma for the selection boards in India that will send him to officer school, his commander offers this sage advice: "Well, good luck, and remember not to scratch your arse or giggle--they can't stand gigglers." And finally, seeing the squad for the last time from the back of a truck:

But if I couldn't call good-bye, there was something else I could do. It came to me as I looked back, the thought: you must never forget this moment. Fix it in your mind forever, because it's the ending to a chapter of your life, and you'll never see anything like it again. Salt it away in your memory, so that you'll always be able to close your eyes and see the single file of dark green

figures in the dusty sunlight, marching at ease, the bush-hats tilted, the rifles slung. That's something you must always remember.

Well-told tales of proud service as a subaltern with a Highland regiment in the Middle East after World War II are found in Fraser's short stories in *The General Danced at Dawn*, *McAuslan in the Rough*, and *The Sheikh and the Dustbin*. The stories evoke alternating spasms of loud laughter and quiet tears as the reader is guided to steal peeks into artfully crafted case studies in morale. For erotic and exotic misadventures of the most dishonorable cad, craven coward, and shameless bully ever to serve His Majesty (and land on his feet with honors and reputation as better men die doing their duty), see any of the many *Flashman* books by the same author.

Lest this screed become an uncritical paean to British leadership and the regimental system, one notes the evacuation of British troops at Dunkirk in 1940 and their ignominious defeat at Singapore in 1942. Within a decade, saved only by Inchon, the US Army would come close to experiencing something like its own Singapore, or repeating its own ignominious defeat in the Philippines in 1942.

Korean War and Unpreparedness

The war in Korea did not produce a literary canon. The Great War gave us Graves, Sassoon, Owen, and Hemingway, to mention just a few who wrote in English; World War II put Wouk, Mailer, Shaw, and Jones on at least American must-read lists; but there was little writing about the Korean War and even less first-rate writing. After Fehrenbach, Marshall, Michener, Frank, and Russ, there wasn't much more.

- T. R. Fehrenbach's Korean War book, *This Kind of War: A Study of Unpreparedness*, has held up remarkably well, particularly in its reference to the ill-fated Task Force Smith, the initial American force sent to repulse the North Korean invasion of South Korea in 1950. The debacle--the North Korean People's Army whipped the US force, revealing both the unreadiness of the troops and the inadequacy of their weapons, most notably the basic infantry antitank weapon--so impressed top army leadership in the mid-1990s that "no more Task Force Smiths" became a mantra stressing the need for readiness for the first battle. Boy Scouts know to "Be Prepared."
- S. L. A. Marshall's *The River and the Gauntlet* confirmed Fehrenbach's litany of Army failures early in the war and some deficiencies that persisted until the war's end. Among the policies he questioned was the rotation system, insuring that American rookies fought Chinese veterans. He shows us leadership--some deplorable, some effective, even noble--and GIs both bugging out and hanging tough. It is clear that neither troops nor leaders were ready for the war they found in Korea early on.

Cushy living in occupied and pliant Japan ill prepared combat troops for "this kind of war," close combat in terrain requiring physical fitness, basic military skills, and the will to persevere and win. Belief that American air supremacy and possession of atomic bombs would deter any enemy was a disincentive to conduct training requiring grunts and sweat. A sense of superiority pervaded the Army and the country that had imposed unconditional surrender on Germany and Japan. America was riding an unprecedented and seemingly endless upward economic spiral as the rest of the world--including the British Empire, the European Continent, and the Soviet Union--was down and almost out. The sure knowledge that God is an American created an arrogance verging on hubris.

Fehrenbach's subtitle concerns preparedness, but the "this kind of war" in the title also differentiates what Dwight D. Eisenhower called a crusade from another kind of war: the nasty and protracted war for which conscripts might not be suited; the kind of war fought in Korea, French Indo-China, and Vietnam; the kind of war that is indeterminate; the kind of war that does not end with a parade. Perhaps only old sweats and mercenaries can be expected to put their lives on the line at the Khyber Pass, in the Pusan Perimeter, at Khe San, and in the Falklands.

Early in the war there was some good news, but not much. Pat Frank's novel, *Hold Back the Night*, shows a Marine Corps rifle company commander overcoming the temptation to simply close his eyes and die. His company executes its mission, providing flank security for the main body as it retreats south while fighting off relentless Chinese infantry and the apathy-inducing frigidity of a Korean winter. The book is fiction, but it is not a far cry from the actual performance of Marines fighting their way south.

The protagonist in James Michener's *The Bridges at Toko-Ri* is a veteran naval aviator of World War II, a man who resents being taken from his law practice and young family to fly hazardous missions in Korea. He is the

quintessential American. He had done his bit in The Big One and was ready to retreat to privacy, home, and hearth. Thus his loyalty to a junior shipmate, the chopper pilot who flies under all conditions to pull downed air crews from icy waters, is a mystery to the pilot's wife to whom the concept of shipmate is foreign. She fails to understand her husband's readiness to sacrifice the few hours they have together in Japan--for a drunken ne'er-do-well jailed for disorderly conduct, fighting, and whoremongering--before he must return to the pitching flight deck and the war. Nor does the admiral understand how our self-indulgent society produces warriors like the lawyer-pilot. The reciprocal is the readiness of the roughneck chopper pilot to lay down his life for the lawyer-pilot, which is precisely what he does in the novel's denouement, exposing the wet-eyed romantics among the readers (including your reviewer).

Martin Russ's *The Last Parallel* is a young marine's accurate account of the World War I-like trench warfare that characterized the static phase of the Korean War. Night patrols, minefields and barbed wire, the manning of outposts and listening posts, contending with nature, and exchanges of artillery and mortar fire constituted the daily routine of the war after the frenetic movement ended in 1951.

In the past decade several first-person accounts of combat in Korea have appeared, presumably intimations of mortality as soldier-scribes get it down while they still can: it's been almost 50 years. In that connection, we can expect a spate of Korean War books as the years 2000 to 2003 mark the half-century since this or that event of the war. The more recent books are commended less for literary merit than for getting it right, but none is an embarrassment.

Harry J. Maihafer's *From the Hudson to the Yalu* focuses on the 574 members of the author's 1949 class at the US Military Academy, many of whom served in Korea during the war of movement, and many of whom went to the newly established United States Air Force. His personal need to write the book uncovers a talented writer. Maihafer was in direct contact with classmates in Korea, corresponded with others, and heard of the fates of still others from classmates and their wives. He recalls the leisurely somnolence, a kind of vestige of the pre-World War II "old Army," which ended with Korea and the realization that the Cold War required a high state of training and readiness. (One recalls a remark by a member of the class of '45 who later said that he could no longer regret having missed World War II upon graduation; he would have his fill of combat with a tour in Korea and a couple in Vietnam.)

James Brady (he of the "Personality Parade" column in Sunday's *Parade* magazine) wrote *The Coldest War*, a fine account of his experience as a USMC platoon leader and rifle company executive officer in Korea in 1951-52. It rings true in the details of combat in that static phase and in references to the omnipresent cold that pervades all soldier accounts of the war. A bonus effect is his unstinting praise of the quiet leadership provided by his company commander in Korea, Senator John Chaffee of Rhode Island, former governor of that state and a Marine Corps combat veteran of World War II.

John A. Sullivan's *Toy Soldiers: Memoir of a Combat Platoon Leader in Korea* is a clear, bitter, and provocative account of brief, intense fighting late in the war before the author was wounded and evacuated. Filled with ideals as he joined a rifle company of the 7th Division, he soon chafed under the military bureaucracy and became scathingly critical of what passed for leadership in the echelons above him, depicting his battalion executive officer as a knucklehead and martinet of the worst kind. His accurate depiction of close combat at night (see Brady and Russ for similar descriptions of the static war) wins credulity and raises a question: where, *at the end of the war*, were the pros? If comfortable living in occupied Japan and arrogance bordering on hubris set Task Force Smith up for the slaughter early on, why was the US Army still a collection of amateurs at the end of the war? My memories are of unimpressive leaders and rookies, mostly conscripts, who outclassed the "regulars," most of whom were bums, drunks, jerks, and fakes. Perhaps, believing Korea to be a feint--and Europe to be the big geopolitical prize--the first team was sent to Europe. Perhaps the old boy net, which would have the lifers run the clubs in Vietnam, saw that in 1950-53 members were sent to Munich instead of the 38th Parallel. In any event, Sullivan was singularly unimpressed with his leaders in Korea. So was I.

Journalist Rudy Tomedi, a Marine Corps veteran of Vietnam, tells us in *No Bugles, No Drums: An Oral History of the Korean War* that in interviews with Korean War vets he was struck by their sturdy attitudes regarding service that so sharply contrasted with those expressed by Tomedi's contemporaries only a decade later. The Korea vets, perhaps influenced by the recent heroics of big brothers in the great crusade of World War II, believed it was their

duty to go. Many in the draft-vulnerable cohorts of Vietnam vintage entertained various ways to evade the certainly inconvenient and possibly deadly task. (For ambiguity about the war in Vietnam, see, among others, William Broyles, Jr., *Brothers in Arms*, in which the combat veteran who returns to Vietnam in 1984 as a journalist tells us in clear, powerful prose how close he came to deliberately missing shipment to Vietnam as a Marine lieutenant. Recall that President Jimmy Carter later granted amnesty to those who opted out of the war in Vietnam.) Tomedi conducted 100 interviews, pegging them to the several phases of the war. His observations regarding generational differences should move the serious student of war to reflect on that theme and its implications regarding service, which, in turn, bears on the question of leadership. (See Stephen Ambrose's *Citizen Soldiers* and Gerald F. Linderman's *The World Within War*. For a sense of what it was to be 19 and caught up personally in World War II, see Samuel Hynes's *Flights of Passage*. For a mature reflection on bearing witness to modern war, see Hynes's *Soldiers' Tale*. See also Tom Brokaw's recent best-selling song of praise to the World War II generation, *The Greatest Generation*. One infers from the reflections on World War II that the men of that war were stars and didn't know it, while the young of later years think of themselves as punk stars for doing the safe and ordinary. They are half right.)

Conclusions

Armies can and do require recruits and prospective leaders to learn leadership by memorizing lists and passages from manuals and whatever else the current general-in-charge favors. Desirable leadership traits have been identified from biblical tales of King David through Tacitus and his admiration of the leadership style of barbaric Germans, from epic tales of El Cid and Roland down to Medal of Honor recipient Sergeant First Class Randy Shughart, who put it all on the line in Somalia by laying down his life for his friends. The traits surely include tactical and technical competence, character, leading by example, personal courage, self-sacrifice, a judicious balance of prudence and risk-taking, and other noble qualities to be found in the Ten Commandments and the most recent checklists from Fort Benning and Fort Leavenworth; but to fully engage the learner, such traits must be shown in context. Lists and mantras won't do.

The best leaders get the mission done and care for their soldiers. The essence of military leadership is to understand the mission clearly, plan carefully, train soldiers well, and create a climate in which soldiers willingly subordinate their individual well-being and private wishes to the well-being and mission of the team, crew, or squad. The latter may be the most important and the greatest challenge to commanders. How one establishes the bonding vital to morale can be found in archives and official records, but it is more readily available to the conscientious leader in good literature that transports the reader to the time and place of decision. Since authors give their works beginnings, middles, and ends, the reading of whole books, not the literary equivalent of sound bites, should be encouraged. The titles in this essay barely scratch the surface.

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Fifth-Century Advice for 21st-Century Leaders MAJOR JOHN MARK MATTOX, US Army

THE US ARMY'S preparations for entering the 21st century have been both deliberate and extensive. The futuristic Army XXI initiatives include, among other things, a thorough revision of doctrine and landmark initiatives in technological research, acquisition and logistics, force structure and personnel management. Any highly successful corporation must consider such things to secure its share of the emerging market and enhance the future bottom line.

But the Army is not a corporation spending the majority of its waking hours working to produce goods or services. To say that the Army seeks to secure a "market share," or worse, that it seeks to "corner" a market, would be merely to attempt a crass and superficial analogy that utterly misses the point of the Army's existence. Most important, the Army does not have a "bottom line" that even remotely resembles bottom lines in the corporate world. That is why budget-conscious government officials sometimes find it difficult to ascertain whether the Army is achieving its goals when it is not actually engaged in combat.

Fortunately, some who understand the US defense establishment's unique character have recognized that for the Army to successfully meet 21st-century challenges, good business techniques alone will not suffice. Future Army leaders will require, more than ever before, a commitment to those moral values that are the source of enduring strength in a free society.

However, we must be very clear that the Army cannot force an "updating" of morals in the same way that it can and must - force an updating of its doctrinal, managerial and technological systems. These latter systems must keep pace with current technology. If they do not, they will be left behind as the rest of the world progresses. Moral values, on the other hand, are by their very nature immune to updating.

Indeed, any institution that seeks to "update" its moral values succeeds in doing nothing more than pulling up anchor and floating - often quite aimlessly and, perhaps, even perilously. To where does it float? Elsewhere. That is because a redefinition - which, in the case of morals, is what updating really amounts to - changes the institution's nature, character and direction. Whatever it was becomes something different.

Moreover, moral values, unlike technologies, are in an important sense "backward looking," not forward looking. That is why leadership manuals, unlike technical manuals, invoke images of moral heroes from the past, such as General George Washington at Valley Forge or Colonel Joshua Chamberlain at Gettysburg. Indeed, moral values tie us to ideas deeply rooted in the past. Although looking to the past for answers on important matters is hardly a popular idea, it has served military leaders of character well throughout the ages. This is so because moral truths do not change with time, nor do they appear as generational creations. For example, even if a generation or a whole society collectively pronounces a practice as "moral" - such as slavery in the antebellum South - the mere pronouncement does not make it so. The passage of time always bears out this point. Rather, morals are better described as the "fixed furniture" of the universe. They are discovered, not invented. It is precisely for this reason that it was wrong a thousand years ago for a soldier to lie, cheat or steal, it is still wrong today, and it will be wrong a thousand years hence.

Accordingly, it should come as no surprise that thoughtful, introspective past military leaders have made some discoveries concerning moral truths that could greatly benefit the US Army - a values-based institution - as it seeks to promote peace and stability in a world that sometimes pays only lip service to moral values.

Where to Look

There are, of course, many places from the past where one could look to gain insights into what constitute the enduring moral leadership values upon which truly successful armies are built. However, the fifth century A.D. holds some particularly valuable lessons in moral virtue for military leaders preparing to step into the 21st century.

Although temporally distant from the present, the fifth century, in certain important respects, was remarkably like our own day. Consider the parallels: the fifth century was a time of tremendous international political and military transformation. Rome, the Western world's only superpower, found itself engaged, or threatened with engagement, in numerous small-scale regional conflicts. Some of them were conventional wars, but the majority were military operations other than war. Nomadic, pastoral tribes from central Asia, such as the Huns, undertook troublesome

insurgent operations that stretched the resources of a once-great Roman Imperial Army, so much so that the army found itself under increasingly stringent budgetary constraints and increasingly reliant upon the Roman equivalent of the national guard to "take up the slack." As if the Huns were not enough, Rome found the Vandals, a Germanic tribe from the north, an even less malleable adversary as Rome sought to shape its foreign policy. The Vandals overran Gaul and Spain and then sallied into North Africa.

It was in North Africa, however, that the Vandals encountered the influence of Augustine of Hippo, one of the greatest Romans of the time and by far the most important philosopher Africa has ever produced. Several of his more than 100 books are recognized universally as belonging among the world's greatest literary treasures. Moreover, for a thousand years following his death, Augustine's pronouncement on virtually any issue on which he took a position was considered the authoritative "last word" among European intellectuals.

Augustine was a Catholic bishop who was posthumously canonized as a saint. Membership in the profession of arms would have been incongruous with the demands of his priestly pursuits. Nevertheless, from among over 200 of his surviving letters, some of which were written to soldiers fighting in North Africa, modern military leaders can find some of the most profound expressions that can be found anywhere, from any period of history, of what it means to be a morally virtuous military leader.1

Marcellinus: Translating Moral Theory into Practice

One of Augustine's correspondents, Marcellinus, was a Roman officer. He was given an assignment not unlike one a 21st-century military leader might expect to receive. He was commissioned by Emperor Honorarius to convene a conference in North Africa to resolve a contentious dispute, known in history as the "Donatist Controversy," which had erupted repeatedly into violence short of general war. Marcellinus found himself in the position of having to undertake a protracted peace-enforcing operation. Although he was unable to achieve a solution that pleased everyone, his letters to Augustine and Augustine's replies clearly indicate that he was a leader intent on doing the right thing, even at great personal sacrifice.

Augustine recognized Marcellinus as a military leader of character. Hence, Augustine was able to teach him some important leadership principles that probably would have eluded one less sensitive to the need to do the right thing for the right reason.

Augustine pointed out to his willing pupil that the popular view of ethics was nothing more than a set of behavioral rules that truly constituted an impoverished view of what it means to live and to lead morally. The moral "rules of engagement" cannot be reduced to an algorithm; they require thoughtful application in both war and peace.

To solidify his point, Augustine used the analogy of a famous physician who prescribed a remedy to a sick man. The treatment worked; so when, on a future occasion, the man became sick again, he attempted a self-diagnosis and prescribed for himself the remedy that the doctor had given him previously. However, this time the man only became sicker. When he went to the physician for an explanation of why the cure did not work the second time, the physician said that although the symptoms may have appeared to be the same, the difference in the man's present circumstances dictated an altogether different treatment.2

Continuing his explanation to Marcellinus, Augustine pointed out that a leader of character will, by analogy, look beyond the letter of the moral rule to assess how to apply it to the nuances of a different set of circumstances. For example, the moral military leader who truly cares for the welfare of his subordinates may be willing to risk criticism for administering different punishments to two soldiers for the same offense when he judges that individualized treatment will best serve the long-term interests of them both. Marcellinus' mentor was by no means advocating some sort of "situational ethics" for soldiers. He simply wanted Marcellinus to understand that true virtue includes not only a knowledge of moral principles but also how to apply them in diverse circumstances.

Future military leaders will have to cope with a staggeringly broad spectrum of moral circumstances. Almost certainly they will find themselves operating among peoples who do not embrace their values. In fact, they might find themselves among peoples whose moral sensitivities have been dulled by protracted civil war in which indiscriminate killing has become the norm. Such settings will require military leaders of character who can correctly judge -on tactical grounds and also on moral ones - when to take life and when to preserve it.

The difference between wartime and peacetime is great. Nevertheless, war does not license the jettisoning of moral values. War is not an amoral condition. Rather, if ever there is a time when one stands in need of the restraining influence of moral values, it is during war, and Augustine understood that. Our future leaders must never forget this. In the information-age wars, every pull of the trigger and every civilian casualty will be subject to public scrutiny. Military leaders will be expected to ensure that every shot fired is both tactically and morally appropriate. Americans simply will not accept another My Lai.

As Augustine informed Marcellinus, he saw no necessary conflict between military and moral imperatives. Whatever conflict one might perceive to exist between the two was resolvable by applying unchanging moral principles to both concerns. Augustine described conduct in war for Marcellinus this way: leaders of character will fight wars not only with a military aim, but also with a moral aim. "Wars might be waged by the good," said Augustine, "in order that those vices might be abolished which ought, under a just government, to be either extirpated or suppressed."3

From this perspective, the soldier is not merely the executioner hired by the state to do its most unsavory work. Rather, the soldier's work, properly understood, is to defend the defenseless, guarantee justice and restore moral virtue. The military leader is vested with the charge to help soldiers understand their high calling's true nature, and ensure the proper use of the special trust that is placed in them. For the military leader, this implies that moral leadership sometimes requires both the leader and the led to bear burdens in the name of self-sacrifice that cold, hard justice alone would not require them to bear. Thus, while a 21st-century repeat of Sherman's march to the sea might pass the Clausewitzian test for strategic adequacy, it could also leave in its wake such gratuitous suffering that the world might view the US Army as having ceded the moral high ground merely in the name of continuing politics by other means.4

Another valuable lesson Augustine taught Marcellinus was that revenge is never a good motive for military action. Even if the policy motivations that underlie the order for military action are founded on revenge, true soldierly integrity demands that the executors of that action must purge themselves of all desire for mere revenge. The military leader bent on vengeance loses perspective and stops focusing on the moral imperative to allow no more violence than is necessary to accomplish the military mission and starts focusing on giving the enemy his or her due. The long moral tradition of which Augustine is a part points out, and history at large attests, that retaliation and reprisal, if they serve any moral purpose at all, serve it only as measures of last resort. That is why General Ulysses S. Grant is still remembered for being devoid of a spirit of vengeance and retribution as he accepted General Robert E. Lee's surrender at Appomattox. Conversely, the international community clearly and unhappily agrees that the continuing bloodshed in Bosnia and the Middle East is a classic example of a cycle of vengeance.

Of course, the military leader must be willing to execute such measures of violence as are necessary to accomplish the assigned mission. He also must maintain the strict discipline of subordinates. Indeed, the enemy's aims often cannot be countered without a display of what Augustine called "benevolent severity."5 For instance, if the military leader merely seeks the destruction of his enemies, he might only at the risk of losing personal virtue - a thing that is very difficult to recover. Hence, Augustine warned that leaders "must be on [their] guard, lest, through desire for revenge, [they] lose patience itself - a virtue which is of more value than all which an enemy can, in spite of resistance, take away from [them]."6

Military leaders might, Augustine opined, sometimes find themselves the personal objects of injustices inflicted by malevolent subordinates, peers or superiors. Indeed, as long as human nature remains what it is, ill-intentioned people will be found, and an army is not exempt from their interference. Even in these cases, however, Augustine argued that a military leader of character will tend to forgive and forbear. As pertaining to such matters, Augustine said, "Why should we prolong the debate, and not rather begin by inquiring for ourselves how it was possible that the Republic of Rome was governed and aggrandized from insignificance and poverty to greatness and opulence by men who, when they had suffered wrong, would rather pardon than punish the offender; or how Cicero, addressing Caesar, the greatest statesman of his time, said, in praising his character, that he has wont to forget nothing but the wrongs which were done to him?" 7 Indeed, "nothing is more serviceable to the State," said Augustine, than the leader who patiently bears the inconvenience of personal injustice; for such a leader thereby sets an example of the kind of behavior calculated to lead to a mending of the offender's ways.8

Some contemporary leaders will find this emphasis on patience and forbearance discomfiting, to say the least. Some find it altogether ridiculous - a mere impediment to "getting the job done." Yet others will sigh and begrudgingly accept it as an unfortunate trapping of political correctness. For Augustine, however, the matter was not superficial at all. Rather, it was a matter that cut right to the ethical enterprise's core: the consideration, not merely of how one acts on the outside, but of how one is on the inside. Morality was for Augustine a highly intimate matter of the heart. If Augustine were alive today, surely he would advise the military leader to weigh his actions not only according to the immediate effects of those actions on the battlefield, but also according to how comfortably he could reflect upon those actions a week, a month, or as Augustine might say, an eternity later. Certainly the 21st-century military leader will not have the luxury of making choices that affect only a secluded locale for an isolated moment. The world will be far too interconnected for that.

In addition to the philosophical, there is also a practical dimension to Augustine's counsels. Wars are to be carried out with "the benevolent design that, after the resisting nations have been conquered, provision may be more easily made for enjoying in peace the mutual bond of piety and justice."9 Just as important as winning the war, Augustine recognized, is winning the subsequent peace. Losing the peace will merely breed more war in time, as wars in this century, to include World War I and, unfortunately, the Gulf War, attest.

Boniface: Standards of Personal Conduct

Another Augustine military correspondent, Boniface, served as the Roman province of Africa governor. He, like Marcellinus, was one whom Augustine affectionately called a distinguished "son."10 He was a controversial figure, however, because, at critical junctures, he selfishly manipulated Roman foreign policy pertaining to the Vandals. As a result, he ended up with a military crisis of his own making. His task was forcefully expelling the Vandals, who had entered Africa at his own ill-advised invitation.

When, at one point, Boniface considered leaving his military command to become a monk, Augustine vigorously urged him to retain his generalship and to fight valiantly for the survival of Roman Africa. As high a calling as Augustine regarded the monastic life to be, he considered Boniface's soldierly calling to be important too.11 Augustine also upbraided Boniface for immoral behavior he deemed to be beneath the dignity of a great military leader. "Let the manner of your life be adorned by chastity, sobriety and moderation."12 As Augustine observed, it is nothing less than disgraceful that a military leader who can subdue others on the battlefield should be unable to subdue his own self-destructive moral vices.13 As recent events at Aberdeen Proving Ground, Maryland, and elsewhere attest, no success as a soldier - no number of Good Conduct Medals - can compensate adequately for a military leader's failure to subdue selfish passions at his soldiers' expense.

While unbecoming conduct is surely a reflection of one's most deeply held values (or lack of them), the influence of one's conduct extends far beyond the individual. As is well known, for better or for worse, subordinates tend to follow the leader's example; and example is a most infectious thing. As Augustine informed Marcellinus, and would have been well justified in reminding Boniface, a "most illustrious Roman historian declares plainly the time when the army of the Roman people began to be wanton and drunken; to set a high value on statues, paintings and embossed vases; to take these by violence both from individuals and from the State; to rob temples and pollute everything, sacred and profane. When therefore the avarice and grasping violence of the corrupt and abandoned manners of the time spared neither men nor those whom they esteemed as gods, the famous honour and safety of the [Roman] commonwealth began to decline."14

However, Augustine's greatest hope was not that Boniface would act virtuously; he also wanted Boniface to be virtuous. "Here is counsel," said Augustine. "Show that you are a brave man. . . . [O]vercome your inward and invisible enemies, that is to say, your passions themselves."15 Augustine knew that a truly virtuous military leader would be, first and foremost, the master of self.

By every measure a realist when it came to his appraisal of human nature, Augustine was under no illusion that, as long as the present order of human life remains, there would ever be a total cessation of the shedding of blood in war. However, he also understood a lesson that eludes some military leaders: morality demands that soldiers accomplish their mission with minimum loss of life, not only to friendly forces, but to the enemy as well. As he said to Boniface, "Let necessity, therefore, and not your will, slay the enemy who fights against you. As violence is used toward him who rebels and resists, so mercy is due to the vanquished or the captive, especially in the case in which future troubling of the peace is not to be feared."16 If Augustine were alive today, one of his aims surely would be

to educate military leaders on the importance of understanding that we do not minimize the loss that we visit upon the enemy simply to save bullets; we minimize the loss because it is the right thing to do - because morality demands it. Leaders intent on conveying this kind of perspective to their troops will act differently than those who do not.

Augustine understood that the military leader who seeks to minimize death and destruction simply because doing so meshes well with the traditional "economy of force" principle could, by that same logic, feel at liberty to kill excessively when the logistic trains are well established and supplies are constantly flowing. Indeed, Augustine appears to be one of the first to argue for the efficacy of what we now call the "surgical strike." As he elsewhere pointed out, "he whose aim is to kill is not careful how he wounds, but he whose aim is to cure is cautious with his lancet; for the one seeks to destroy what is sound, the other that which is decaying."17

Although most people probably associate surgical strikes with the employment of "smart" munitions from afar, the discretion that the metaphor suggests applies equally well to close combat situations. After all, close combat was the only kind of combat known to Augustine, who understood that the ultimate measure of success in military operations lies not merely in the accomplishment of the operational objective, but in the realization of lasting peace and justice that war is used instrumentally to establish. President Abraham Lincoln implied as much at Gettysburg and in his second inaugural address, when he suggested that the key to ensuring that the Union dead had not died in vain lay in the realization of a just and lasting peace.

Throughout his correspondence with Boniface, Augustine's advice is not as nuanced as is his advice to Marcellinus, but then again, how could it be? No military leader can expect to fathom the depths of what ideas such as morality and character really mean unless he is striving personally to practice the same - something Boniface evidently did not always do. With increased practice comes increased ability to recognize what counts as truly virtuous leadership. Perhaps more important, practice enables one to come ever closer to the aim of internalizing the lofty ideals associated with having a virtuous character. As one internalizes these ideals, one no longer views them merely as behavioral constraints imposed by some external law. Rather, one recognizes the ideals as one's own, and this identification with virtuous principles serves to identify the possessor of these principles as a military leader of character - a truly virtuous person.

Augustine knew that if Boniface was to have any chance whatsoever to succeed at his formidable task of ridding North Africa of the Vandals - particularly since Boniface was himself the cause of their destructive presence there - he could do it only if he commanded his troops' genuine respect, and that respect would not result merely from telling his subordinates, "I am virtuous." It would result from his ability to say, "Follow me, and do as I do." We have every reason to believe that 21st-century soldiers will be as well known for their ability to spot a phony as soldiers are today. Boniface needed true moral virtue, because virtue cannot be faked.

Darius: "Traditional" Soldierly Virtues

Exactly what virtues did Boniface need? He needed the same virtues for successful military leadership in the fifth century that successful 21st-century military leaders will need. The core of the Army's emerging Leadership Doctrine XXI features a list of virtues that would surprise no one intent on being a model military leader, whether in the fifth century or at present:

- Loyalty
- Duty
- Respect
- Selfless service
- Honor
- Integrity
- Personal courage 18

Augustine, too, understood the importance of soldiers' exhibiting the traits suggested by these virtues. The leader who does not seek to possess these virtues is, in commensurate measure, less a leader than he should be. Augustine also knew that the possession of virtue implies much more than the ability to recite a list of words. Each of these words stands for something profound. Augustine clearly established this point in an epistle to Darius, a distinguished Roman army officer sent to North Africa by the Empress Placidia on a peacemaking mission to reconcile Boniface and the imperial court. Darius succeeded at his peacemaking mission with Boniface and skillfully negotiated a truce with the Vandals, who originally had come to Africa at Boniface's invitation.

After congratulating Darius on the success of his mission, Augustine commended Darius' soldiers for their moral virtue - surely a reflection, by Augustine's estimation, of Darius' own character.19 In doing so, he drew right from the US Army Leadership Doctrine XXI list of virtues: he commended them, first, for their competent performance of duty (a thing worthy, he said, of singular honor); second, for their bravery; and third, for their loyalty - a thing worthy of even higher praise. Next, however, he provided a remarkable insight into that virtue which our current list denominates as "respect."20

Augustine thus enjoined Darius to understand that respect alone is not enough. He also needed to internalize a genuine appreciation for the sanctity of human life so that he and his soldiers could sense the gravity of their moral duty to preserve life wherever possible and to destroy life only when unavoidable. This higher perspective concerning the correct moral aim for which wars are (or ought to be) fought is the perspective that moral military leaders must maintain if they are to fill the measure of their high calling as defenders of the defenseless and guardians of peace and justice. In essence, "it is a higher glory still to stay war itself with a word, than to slay men with the sword, and to procure or maintain peace by peace, not by war. For those who fight, if they are good men, doubtless seek for peace; nevertheless it is through blood. Your mission, however, is to prevent the shedding of blood. Yours, therefore, is the privilege of averting that calamity which others are under the necessity of producing."21

While understanding respect on that level is necessary, Augustine's insight illustrates that it is clearly insufficient. It illustrates that respect is a virtue that entails far more than merely refraining from racial or gender slurs. Augustine would want Darius to understand that a similar point could be made about all of the virtues found on the Army's list.

Augustine lived during a watershed of history; so do we. Moreover, that watershed was replete with extraordinary challenges for the military leader - not just the routine, albeit important questions of technical and tactical competence, but also perennial questions such as "What kind of military leader should I be?" That same question faces us today.

Of course, it is altogether proper that the Army should keep pace with the times. The attitude that advocates clinging to a manual typewriter rather than embracing computerized word processing, for example, is hardly what the Army needs in its 21st-century leaders. On the other hand, one should seriously and thoughtfully question what, indeed, it would mean for a leader to update his moral values. Some invention yet unconceived will one day replace the word processor and make it seem as antiquated as the manual typewriter now is. However, there is no reason to believe that the demands of morality will ever change. An appreciation of war's true purpose - to right wrongs and restore peace; a sense of justice tempered with the appropriate measure of mercy and forbearance; the ability to apply ethical principles to concrete situations without embracing situational ethics - these commitments and many others like them will still define proper human conduct long after the last word processor has found its way into an archeological museum. Such a claim is strong medicine in a social and, regrettably, political environment, in which the military is publicly castigated for being out of step with American culture at large because it embraces what some regard as outmoded moral values.

The same accusers argue that a military whose values do not reflect those embraced by large segments of a democratic society suffers from a diminished capacity to defend that society and perhaps should be considered an extremist organization rather than the nation's protector. To such critics, the words of Augustine come thundering down through the ages: if society at large, to include subjects, husbands, wives, parents and even taxpayers and tax gatherers truly would embrace moral virtue of the kind he exhorted soldiers to embrace, then the critics would find those virtues to be anything but incompatible with the state's well being. Rather, they would find, said Augustine, that "such virtue, if it were embraced, would be the salvation of the commonwealth."22

The sweeping and multitudinous changes in technology that distinguish the dawn of the 21st-century from the fifth century may obscure the reality that not everything has changed. The principles of moral military leadership are the same today as they were then. The virtues that those principles embody are not merely catchy little words in a list that sergeants need to know when they go before a promotion board or noncommissioned officer of the quarter board. They are not merely words for officers to spout off in academic requirements for military schools. They are ideals to live by and use as the measuring rods for every decision the military leader makes. But they are not ideals alone. They are ideals that must find their expression in the deeds of military leaders who seek to make a positive difference in the emerging world of tumult and change. *MR*

NOTES

- All references to Augustine are based on his collected works as they appear in The Nicene and Post-Nicene Fathers, trans. J.G. Cunningham, ed. Philip Schaff, First Series, vol. 1 (Grand Rapids, MI: Eerdmans Publishing Co., 1956), especially Epistles XCIII, CXXXIII, CXXXVIII, CXXXIX, CLXXXIX, CCXX, CCXXII and CCXXIX. In some instances, the language of Augustine has been adapted to appeal to a broader military audience so that those with or without any particular disposition on theological matters might equally well sense and appreciate the modern-day relevance of his advice to military leaders.
- 2. Epistle CXXXVIII 1.3.
- Ibid. 2.14
- 4. Carl von Clausewitz, On War, trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), 87.
- 5. Epistle CXXXVIII 2.14.
- 6. Ibid. 2.12.
- 7. Ibid. 2.9.
- 8. Ibid. 2.11.
- 9. Ibid. 2.14.
- 10. Epistle XLXXXIX, written to Boniface; and Epistle CXXXIX, written to Marcellinus.
- 11. Epistle CLXXXIX 4.5.
- 12. Ibid. 7.
- 13. Ibid.
- 14. Epistle CXXXVIII 2.16.
- 15. Epistle CCXX 9, 10.
- 16. Epistle CLXXXIX 6.
- 17. Epistle XCIII 3.8.
- 18. US Army Field Manual 22-100, initial draft, Army Leadership (Washington, DC: US Government Printing Office, 31 July 1990), 4-5 and 4-6.
- 19. Epistle CCXXII.
- 20. Epistle CCXXIX 2.
- 21. Ibid.
- 22. Epistle CXXXVIII 2.15.

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The Challenge of Leadership

BRIGADIER GENERAL ROBIN OLDS

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Reprinted from Frontiers of Leadership: The United States Air Force Academy Program (1970), Air Force Office of Scientific Research, AFSC, Aug 71.

Gentlemen, I am happy you asked me to participate in this "Frontiers of Leadership" program for a number of reasons. Although I do not possess advanced degrees, as many of you do, I feel that I have some relevant experience in this area. In our service they don't give you degrees for your ability to exercise the intangibles of leadership; they give you ribbons.

There are a wide variety of leadership positions in our Air Force—positions of command, positions of staff, as well as very responsible positions such as agency or staff head; I am referring to jobs that do not carry with them the authority to say, "So and so is appointed commander of X, Y, or Z outfit; so and so, relieved." And for as many different positions as there are in our Air Force that call for somebody to the "honcho," there are so many different people who vary widely on an emotional, physical, educational, and experience basis who fill those jobs. So getting the right man-job match is extremely difficult, and I agree with Fiedler* that you can't really compare kumquats and oranges. The proof of the pudding is whether the man gets the job done, not really in how he does it. This is certainly true from the military point of view.

I think our Air Force has come a tremendously long way in the past 25 years. On the question of leadership and command, the officers left over from World War II either proved themselves or got out of the service. I think we have matured as a service. I think the people that we have following along today are better men than were their predecessors, en masse.

I've been privileged to go to the Air University, to talk to the Air War College, the Air Command and Staff School, and the Squadron Officer School. Naturally, in talking to these different schools within the Air University, you pitch your talk at a slightly different level to each student body. But the difference is slight as they are all interested in and engaged in the same leadership problems. They are all part of the same organization; and by and large, they have a pretty good feel for what is going on. I found the younger officers full of questions, and darn good ones. The older men were a little more set in their ways, not quite as curious, more resigned to what is happening to them, and more assured in the direction they want to go. I must say, many seemed pretty well aware of how far they can go, which in itself is a very interesting observation. I wondered why; but I am certainly not going to stand before this group and make an analysis, because I haven't come up with a good answer, certainly not an answer that wouldn't be challenged immediately by you. So what I would like to do this morning is to talk a little about some of the theories of leadership as I see them as a practicing leader.

My qualifications for standing before you today are possibly the result of pure luck. Although I really don't believe that, it establishes a nice degree of humility. I became a leader the easy way. I was one of the forty young men that went over with a squadron in 1944 and joined the Eighth Air Force in fighters. I was one of the original forty that joined the squadron; and by the time we were completing our first tour, there were only eight of us left. That made it pretty easy for me because in those days the personnel people had the lovely habit of promoting you, if you were qualified, into any vacancy that might arise. I went from assistant flight commander to squadron commander in something like eight months. That also meant that I went from first lieutenant to major too. Now you can call that luck if you like, but there was something that made me survive. There was also something that made me qualified to be chosen to command that squadron. That is the thing I can't put into words, although I shall try a little later on.

Frankly, I was very grateful that the war ended when it did; otherwise the orders that had already been cut promoting me to lieutenant colonel might have been issued. Even at the tender age of 22, I had the good sense to realize that this was perfectly and absolutely ridiculous. So I went home knowing that I could do a job as a combat squadron commander; and believe me, it wasn't all just flying. I was responsible for a little more than I am responsible for

today, namely mess, discipline, transportation, maintenance, personnel, and so on. In those days the squadron commander had it all. He even had his own communications section.

That may give you pause for thought, gentlemen; but it is quite true. As a 22-year-old major I had more authority than I do today as a 47-year-old brigadier general—more direct authority. If a man goofed, zap! You took away a stripe or two. On the other hand, if he performed well and you had a vacancy, you promoted him. Fiedler covered this in different words in his article. He called it authoritarian—he didn't use the word dictatorship, but he almost said it—which, to him, typifies the military in a combat situation.

To get to the meat of the thing this morning, I want to say that I disagree partially with Fiedler. I think the words that he has used here are just jim-dandy, fine; however, he sets up the situation and then proves his theory—and it just ain't that way! You can't take a high LPC (score on the least-preferred co-worker scale) and a low LPC and say this is it! The one score means the individual is an authoritarian; and the other means that he is a democratic sort of laissez-faire, free-rein type of leader. I would flunk the test. I feel that Fiedler has established a situation which is all black on the one hand and all white on the other. I would suggest that when he is here, you people challenge him to study the Air Force leader. He focuses on two clusters of behavior and attitudes. One is labeled autocratic, authoritarian, task-oriented; and the other is labeled *democratic, permissive*, and *group-oriented*. He says the first type is frequently advocated in conventional supervisory and military systems. Of course, he qualifies it when he says "frequently." He doesn't say "always." I realize this, but I suggest to you that it just isn't that simple. For instance, he talks about leadership behavior and leadership style. The former is how the leader engages in directing others—or specific acts, that is, how much consideration he gives his subordinates, what praise, what kicks. This is leadership behavior, and the style seems to be "Why he does what he does." In other words, what is his basic motivation—to step on others? Is he task-oriented or group-oriented? It is more complex than that. It just isn't that simple. In my estimation, gentlemen, a good leader combines all of these—and more!

Fiedler goes on to say that the high LPC is relationship oriented, has close personal relationships with members of the group. A low LPC on this test is task-oriented. He will step on anybody, and he gets his kicks out of getting the job done successfully. I don't quarrel with the words, but it is shallow—because a good leader combines the two. You've got to relate to your people. You get your satisfaction from the knowledge of having successfully performed the task assigned to you with the resources given but in order to do it successfully, you must relate to people.

Fiedler seems to say in no uncertain terms that experiments comparing the performance of both types of leader have shown that each is successful in some situations and not in others. I don't quarrel with that. No one has been able to show that one kind of leader is superior or more effective. But when he gets down to the point that leaders are not born and that anyone can become a leader—if he learns which types of situations are favorable to his personal leadership style and chooses to exert leadership in these situations—I can't buy that. Again, this is putting forth a situation and then working around it to prove that it is true. In the first instance, I don't quarrel that leaders are not born. I would like to say that perhaps they are lucky, that they've got something. They do have something; they've had the finger put on them. Because how many men have the opportunity to take advantage of situations favorable to their personal leadership style? Well, perhaps it's the guy whose daddy owns 52 percent of the stock in the company. He's got time to go to school and learn how to be a leader in that situation, but God help him if the company merges with another one. He's out.

Look at the people in the Air Force. Look at yourselves, gentlemen. What are you asked to do? You are asked to lead in peacetime, and you are asked to lead in wartime. You are asked to lead in the Pentagon; you are asked to lead on an airdrome; you are asked to lead on the mountain that has a radar station on it. In short, you are asked to lead in every conceivable type of situation except the one in which you have absolute authority, because you don't have it in the Air Force.

I have journeyed too far afield and into too many things that I know little about. I merely wanted to say these things to you to give you my reactions to a very well-written article and one that gave me pause for a lot of thought.

Another thing in your outline that caught my imagination was your attempt to teach the cadets an understanding of formal versus informal authority. I envy you every moment of the classroom time you spend with cadets discussing subjects like this because they are fascinating. Formal versus informal authority—that is really the greatest trick of

the century nowadays—to fulfill a command position and to understand the limits of your formal authority and the horizons of your informal authority.

I mentioned a few moments ago that as a 22-year-old major I had more direct authority than I have today as a brigadier general, and that is true by any standard of measurement. Formal authority has been stripped from today's commanders. You must perform and command within the confines of a shelf full of regulations, a room full of manuals, and a warehouse full of technical orders. And this is to say nothing of the ever-present and ever-watchful eye of the inspector general, staff judge advocate, and the local director of personnel. You just do not possess the degree of formal authority oftentimes essential to the performance of your mission.

For instance, what are the inherent responsibilities of command or leadership? It used to be that first you fed your horse, then you fed your men, and then you looked out for yourself. These are pretty good words really. Translated into today's vernacular it means that given a mission, given the resources, and the facilities, a leader must first concern himself with the training, the welfare, the care (blankets, beds, building, beans), and the morale and the discipline of his troops. If they lack in any of these aspects, you cannot perform the mission. You can continue to launch attacks on Hill 307 as long as you've got two men left. You can't launch the first attack with a full platoon if your men aren't properly trained, disciplined, and of good spirits, and properly led. So this is the first inherent responsibility of a leader.

Does this call for an authoritarian or a democratic, free-rein type? I'm not sure the question is even a relevant one because it doesn't matter who has the job or what his leadership style is, he still has these responsibilities. How does he react to them? How does he react when he finds that his lack of formal authority—which, believe me, is absolutely essential in securing the right reaction from his troops—works horribly against him? He relies heavily on informal authority.

For instance, how does he deal with discipline problems? You cannot properly, quickly, and with complete impartiality discipline a recalcitrant. I've always tried to tell any subordinate commander I ever had working for me that you don't punish the culprit for his own good; you punish him for the good of the command. The men in your unit, collectively and individually, demand justice. Anyone who gets away with something believe me, is a chink in your armor, is a chink in your authority, is a chink in your image.

It used to be that a commander could put a man in the pokey for a week, even the officer of the day could do that. He can't do that anymore. Now it takes the approval of a major force commander. In the meantime this guy and his acts have wrought a pernicious influence on the good of the command.

Now I didn't mean to rant and rave about our lack of formal authority, but I am saying that what it does is place supreme emphasis on informal authority. By informal authority, I don't mean circumventing regulations or the Uniform Code of Military Justice. But you do have to play your game; you have to exercise your leadership; and you have to command in a very different way. I want to make it very clear right here and now that I am not saying this lack of formal authority is bad. As a matter of fact, I think it is rather good because it has, in our service, tended to eliminate the absolute autocrat, the guy who has no qualifications other than the insignia on his shoulders, the man who does not fit any definition of a leader. It has made people use their wits and their ingenuity, and I think it has brought to the surface (please, I am not speaking personally) the very best in our Air Force officers because it is a challenge to command with these difficulties placed in your way.

Now what is informal authority? Well, for one thing, informal authority is the word that goes around the base. Usually the commander is surprised at the authoritative value placed upon as simple a thing as his name spoken by someone else. Now that may not be his given name or his surname. It could be the "old bastard," or the "old man," or the "chief," or the "boss," or whatever you choose to call him; but there is a very definite aura of authority associated with the commander's name.

You will find, for example, the technical sergeant who is the chief warehouseman will exhort his workers to greater efforts in stocking, binning and recording, and keeping the place policed-up by using your name. He'll say, "The old man is coming around tomorrow; now get with it." Boy, zap, zap, zap, everybody gets with it. The same thing with getting a mission off. The bird isn't ready; and according to normal procedures that are all laid down in stacks of books telling you how to do it, it would take two days to get that aircraft back in commission. So the supervisor says

to the indians, "Men, we need this bird for tomorrow night's mission. The old man just told me so, and I think he is going to fly it himself." And zap, zap, it's ready; and off it goes!

Now we could go on for a long time talking about this informal authority. Believe me, it is an all-pervasive force within a command. How many times here at the Academy have you heard: "The superintendent said...."? How many times have you questioned that statement? Who said he said? Did you hear him? Nope. You may never find the source. It could be Dick Davis (Deputy Chief of Staff for Personnel, USAF Academy). He knows what the superintendent thinks. He doesn't say, "He said." He says, "The superintendent sort of likes it this way." By the time it floats down here and over to your shop, "The superintendent said." Right? It's true.

Now I don't want to preach at you; all I'm doing is, recognizing the fact that informal authority does exist. And it is very, very important! But as a corollary, it is absolutely essential that the man who is in a position of command understand informal authority. It can be horribly abused by ambitious staff officers and subordinates. It can get you into trouble faster than anything I know. It also places the requirement upon you to recognize that this is happening and to be prepared to take advantage of it. Recall the warehousemen who really had the place in beautiful shape; they were proud of it. You know it's because of *you* they did it. They did not do it because they like to put little boxes on shelves and write a lot of numbers on a card that goes into a machine. They did it for you. So, by golly, you had better make sure you go around there and look at it and find a little bit wrong with it if you possibly can and just praise the hell out of them. And do this as a regular practice everywhere in your command—everywhere.

Of course, you realize I am talking about something as simple as a military command. Last year I was asked to talk to a businessmen's executive club meeting at Scottsdale, Arizona. I was very flattered to address this group of gentlemen. The night before I read very carefully the brochures and the autobiographies of each of the men in attendance. They made no bones about it. There was a pecking order, and the work of each of the industries or companies was right there in black and white. One man would have a company worth \$25 million. There was another one there worth \$500 million, which I thought was pretty interesting. So I sat down that evening and tried to figure out the worth, the intrinsic value, of a fighter wing. The more I pondered, the more things I thought of on that base for which I had really been responsible. When I stood up to give them my talk, I informed them of what the firm I had just run was worth; and I gave them the round figure number. They laughed when I reported my executive salary. That set the stage for my thirty-minute speech.

I would like to try to get down to the specifics of leadership instead of generalizing. I am just going to say what I feel, and you can tear it apart. Instead of talking to you about the principles of leadership or the techniques, or theory, I want to tell you a little about the practice. Even this is a very difficult subject.

Your effectiveness in a position of command is determined by you, plus your mission, your situation, where you the status of the unit that you take over, and the circumstances that prevail. Remember, it's you plus these factors. You must adapt yourself, even your personality, to suit what's needed from you or of you as a commander. Having assessed this hurdle, maybe intuitively, maybe objectively, the next thing you had better do is find out all you can about your people, individually and in work groups or task groups. How is their morale? How effective are they? Do they work well together? Have you got any problem areas? Remember that it is your personality and even your reputation that they are now going to look at very closely. In order to accomplish the mission, as a boss you've got to have a lot of guts, or courage, or faith—anything you want to call it; it all equates to the same thing.

You have to have the courage of your convictions. You have to have the courage, the faith, and the guts to delegate authority. You have to have the courage and the fortitude to punish, when punishing is necessary—and you had better understand exactly when it is necessary and act swiftly. You have to have the good sense to praise when praise is due. You have to have the guts to exercise authority that frankly may not even exist; but if you act like it does, you exercise it. You have to have the courage to allow your subordinates a lot of swinging room because when you assign that responsibility, you have to delegate some authority. Unless you make that subordinate *feel* responsible for the job that he is doing and give him the authority to do it, the job may not get done. He is going to make mistakes; he might get your neck in a sling, so to speak. But you, in my estimation, are next to nothing as a leader if you don't give your people a job and say, "O.K. now go do it. Here is what you need to do it with—here are the people, the facilities, and the resources."

By the same token, you have to supervise, you have to manage, you have to watch. Don't stand on their toes. That's a terrible mistake, because you might just as well do it yourself. Believe me, if any one man thinks he is as smart as a whole collection of people, he is out of his mind.

I want to explain one of the techniques I have used in taking over a flying outfit because I could get away with it (I don't pretend that I measure up to what I am about to say, but some of you in the audience may not know the difference). In Thailand I had never been in combat in an F-4. So I just told the truth—gathered them all in and said:

O.K., I'm new. I haven't the vaguest idea what's going on here; and I expect you men to teach me, everyone of you. That goes for the supply officer, the electronics officer, the communications officer, the engineering officer, materiel guys, club officer, special services, everyone of you. You are going to teach me, and I'll fly "green 16" (last aircraft in the formation) until I know as much about your job as you do. And when I know as much about your job as you do, look out because then I start getting nasty, terribly arrogant, and superior. I may even tell you how to do your job, so just stay ahead of me. Make sure you know more about it than I do.

Then you follow up. You had better, by golly, go around and have each guy tell you what he does and why and what his purpose is; and then ask him, "How do you fit into the whole?" The special services man probably never thought about it that way, or the club officer, or the motor pool maintenance officer, or the dispatcher in base operations. What you are doing is starting to mold them and weld them together. Each one feels that there is not a wheel that rolls down the runway that isn't his direct interest and something that he contributed to directly. Boy, if you can get those troops to feeling that way, you've got them. And it isn't difficult really, providing the circumstances are right.

What are some of the qualities that a leader should have? Mind you, I am speaking from a very limited background so my remarks are oriented a little bit more toward operations than they are toward other aspects of our services. By failing to cover the whole broad spectrum, I'm not ignoring anybody; I just plead ignorance.

What qualities must a leader have? I think he must have bearing (these are all written down; I didn't think of them), courage, decisiveness, dependability. You know all of these things: enthusiasm, initiative, judgment, integrity, a sense of justice, knowledge, loyalty, tact, unselfishness. You know them because they're right out of the dictionary, right out of the manual. You better have a whole lot of all of these and a tremendous amount of some of them. Any failings that you have as a personality, a human being, in any one of these qualities, you better cover up with a plethora of capability in the others.

Some men think that to be a good leader you have to be popular. This is so fallacious that it is absolutely unbelievable. Any man who thinks this way is doing the Air Force and himself a disservice. You are not running a popularity contest. You are there to command a unit, to perform a mission. It takes every man in the unit to perform that mission, including you as a catalytic agent. After you have taken care of your equipment and your facilities, then know your mission. Whatever the situation demands, you better make sure that you maintain good order and discipline through whatever talents you have. You train those men, equip them, house them, feed them, motivate, and lead them. You must instill discipline, the right kind of discipline, and a high sense of duty and personal and individual responsibility. Willing obedience, not obedience through fear, stems from spirit, pride, and morale. If you do these things, I'll guarantee that you'll perform your mission well.

Each man in your unit, I said earlier, must feel that his job is necessary. I submit to you that a leader, whether he be in industry, in the Air Force, or in any other place, must make sure that everyone knows exactly where he fits and that he is necessary to the output of the whole. Sometimes your actions in this respect will be grossly misunderstood and misrepresented.

Let me give you an example.

At my base in SEA I made it a rule that any man who was lucky and shot down a MiG would come back down that runway and do a roll on his return. This wasn't fighter pilot bravura as some people thought. I didn't make the rule for the benefit of the pilot. I didn't want to satisfy a childish inclination for showing off, a "Hey, look at me." I did it for every airman on that base, because I wanted to make sure each airman felt that that victory was his. It reached

the point where, after a good mission, almost every airman on that base came down to greet the returning aircraft because he wanted to, because he was part and parcel of that mission and felt it in his heart.

I would like to talk a little bit about loyalty. This is a very difficult trait of leadership for some. When I speak of loyalty, I mean loyalty first to something that is almost passé in many circles today, loyalty to country, the symbolism of your flag, the meaning of your oath of commission to protect and defend the Constitution, not the President, nor the Secretary of Defense, nor even the Chief of Staff—the Constitution. That's your oath. That's where your loyalty lies. It's loyalty to your country, to everything it stands for, everything it is today and everything it better be in the future. That is what you are fighting for—working for. You've got to believe in everything that is good and hate everything that is bad. Of course, you make that choice yourself. You can't go wrong, far wrong, by listening to the chaplain a little bit and the dictates of your own conscience, your own upbringing, and your own heritage.

You must give loyalty to those above you—that means loyalty also to the men on the staff in the headquarters just above you. I don't mean a kind of deliberate, calculating, "What's in it for me" type of loyalty to those hard-working staff types, I mean *full* loyalty. Get to know them as people and work with them, not against them. If you don't, you have made one of the biggest mistakes you can make in your career. Sure they are all idiots, but so are you. They are hard pressed, dedicated, wonderful guys, working under a situation of stress that you, the commander, sometimes can't even appreciate.

In one outfit over in SEA, loyalty was purely internal. This was fostered by the commander and his staff. The men of that wing were told they were the best, the bravest, and the smartest. Everyone else was wrong; they were always right. No one else could do the job as well as they. This was common knowledge in the whole unit. Didn't they tell themselves constantly that this was so? Therefore, it had to be right. They owed loyalty to no one but themselves. Such mass ego-pumping is not uncommon, but it is always dangerous in any organization and almost invariably leads to serious trouble. In this instance, the unit hushed up a monumental goof, to the ultimate embarrassment and international discredit of our government, and all because of a warped sense of loyalty.

One other subject I would like to discuss with you just briefly is the process of taking over another unit on any level. A few minutes ago I talked about the popularity business, and then I trailed off on another subject. I would like to return to it.

The first thing a new commander must do—the new officer boss or whatever—is to get the attention of his people. He can do it in a lot of different ways. First, he must assure job output—mission accomplishment, mission capability, or whatever you want to call it. If he is not sure that the unit he has taken over can handle this task and is fully capable, then he should shore it up. This is the attention-getting step. By doing this, he is going to earn respect or hatred, depending upon his personality and methods. He may be thoroughly hated, but he could care less about that. As long as he is fair and has the other traits of judgment, unselfishness, and so on that we discussed earlier, this will earn him respect; and out of respect, gentlemen, will come loyalty. He may still be disliked, but I doubt it. He's got that loyalty. Once he's got loyalty, it's a "piece of cake." He has obedience that is willing and spirited. He has to hold them down now, not kick them. He has built good morale and high spirit, and everybody absorbs that "can do" attitude.

Popularity is the last attribute a leader should ever seek. It is the least important; and if improperly placed on the priority list, it can certainly be the most damaging. All of you know that you have to be consistent. You have to praise when praise is needed and correct when corrections are called for.

A leader also has other responsibilities, and these are to his subordinate leaders. A good leader ensures that the people to whom he passes authority and responsibility properly fulfill their roles in turn. He works with them to be sure they are properly oriented toward their mission and job, that they are fully aware of all the facilities and means available for accomplishing that mission, and that they receive the assistance they need to do the job.

You have to demand of your officers, for instance, adherence to standards. If you see an officer walking down the street and an airman does not salute that officer and the officer doesn't do anything about it, I suggest you walk up to that officer and say, "What the hell's the matter with you? Didn't you see that airman fail to salute you? Why didn't you do something about it?" If he answers, "Well, I don't know," then you had better get rid of him, because he is not on your "ball team." He let that airman down, and he let him down badly in a military organization. I suggest the

same thing is true in a corporate setup where men fail to say good morning or fail to follow the normal courtesies of human relationships.

What I'm saying here, gentlemen, is that you can't let your subordinates, the officers, and NCOs give up their own sense of responsibility in their positions of leadership. They can't pass the buck up to you. You've got to keep that "buck" well spread. In spite of the fact that there is a dearth of formal authority backing the movement of each of your subordinates in the chain of command, you've got plenty of informal authority.

I suggest also that a leader must be a leader whatever his job may be, and this is where I perhaps quarrel a little bit with Fiedler. He makes it too easy—it's too much this way or too much that way. Each of us knows in the military we have a wide variety of jobs, and any one of them may fall our lot. If we rip our knickers in any one of them, we are never going any further in the Air Force. So the great challenge to the military man is to be a "jack of all trades" and good in everything. Our system is designed to make allowances for the fact that we do have this variety of jobs. How, I don't know. I'm not sure it was even thought out, but it is built in. The system makes allowances. This can be illustrated in an assignment to the Pentagon.

When you report to the Pentagon, you are given time to learn your job. You go through the three stages. First, you are a "polyp," then you are a "raging bull," and finally you become an "elder statesman." Nobody expects anything out of you in the "polyp" stage—not even where the nearest men's room is located. Leaders in the Pentagon know that it takes time to learn the ropes; and when you get to the "raging bull" stage, they make allowances for that also, in most cases. I know this system motivated me. I moved from the basement to the joint staff. When you are an "elder statesman," you've really got it made; and you can count on having three or four tours there during your career.

What are the things that you the leader must try to be? I suggest that a good leader must be his own severest critic. You know it if you are leading well. You know it if you are doing a good job. But if you ever think that "you've got it made," if you ever think that everything you are doing is just absolutely apple pie and ice cream, then it's time for you to move on.

If you are doing the job well, don't be afraid of the ideas of your subordinates, or be afraid to admit it when it is perfectly obvious that you've made a mistake. Admit it any way you like. You don't have to admit it openly, but let them know that you know you goofed. With their help you can pull yourself out of it. I guess what I'm trying to say is that you've got to be authoritarian, and yet you've got to be democratic. You've got to use people, but you've got to be human. You've got to know your job, which means you've got to know your subordinates' jobs to the best of your ability. If you know their jobs, they'll be more interested in them.

Finally, I think you must be psychologically prepared to fail along the way and to get "hung," because in the final analysis that's what the leader is for. He's the scapegoat, because he's responsible. When you take on that position of command and walk grandly onto the base and see your name and title plastered on a sign out in front of headquarters, get down on your knees and ask for a little guidance and a little help because you're going to need it. I guarantee those of you who take over that squadron, that air base group, or that wing—or any job where a piece of paper says you are the commander—I guarantee that within the first month your accident rate is going to go up. It never fails to happen. I guarantee that your incident rate and your disciplinary rate are going up too. I guarantee that some clod is going to run a truck over the commanding general's staff car, or some idiot is going to prang one of your airplanes. I guarantee it! So you better be prepared. You had better know these things are going to happen and be prepared the day you arrive. I know; I've had all of these experiences.

I pity the man who takes over a squadron or a wing that has an unblemished accident record stretching back for three and one-half years. I wouldn't want a job like that for anything in this world. In the first place, there is no such thing. There were some things going on in that wing that were wrong. There must have been some slightly shady reporting—some little cover-up. The systems that were in effect because of the forceful personality of the outgoing leader are going to fall apart when he leaves. So in you come, thinking how wonderful it is that you finally are going to command your own wing. The first thing you know you are going like this (down) because the airplanes are falling out of the sky, and all sorts of other things are happening.

I can't close without something being said about the rewards that come from being a commander. The greatest reward you can have is when you have severely disciplined a young fellow (you're a 29-year-old lieutenant colonel,

commanding a little base), and this guy is a bad apple. O boy, is he a bad apple; and you very severely disciplined him. You are way out in the boonies, so your methods of discipline are a little bit different when the inspector general is not sitting there looking at you. When his enlistment is up and this young man is about to leave, he storms his way into your office and stands there with tears in his eyes and thanks you for what you did for him. He's going home now, and he's going to be a far better man for the four years he has just spent in the service. Gentlemen, that's when you get a lump in your throat and you realize what leadership is all about.

You taxi out on a mission for which you have been preparing for a couple of weeks, and you note the overtime work of the guys that have already been working ten hours a day for seven days a week. One bird is sick—but the airman is determined it's going to go. He doesn't know where or why or when, but it's going to go. He's out there for something like damn near forty hours without sleep working on that airplane of his. So when you taxi out, he's lying on that hot concrete under the blazing noonday sun with his head on a wooden wheel chock, out, dead to the world, absolute exhaustion; but his bird has gone. And his bird knocked down a MiG-21 that day too. That's a reward of leadership gentlemen.

You see all the heartache, all the responsibility, and all the frustrations have not been in vain. You see that everything falls right into place, and you are a happy man. You have all the rewards and all the success that you could possibly ask for as a leader.

The moment comes when you have to depart a job. The situation is charged with emotion because you are a pretty emotional type, as much as you didn't want the guys to know it. They give you a parade, and the airmen come running across the ramp just to shake your hand, to say goodbye. And, buddy boy, if you don't have to go to the men's room at the club when the guys carry you in on their shoulders and hide from them for fifteen minutes or so, you aren't human. Those are the rewards of leadership.

*Fred Fiedler, "Style or Circumstance—The Leadership Enigma," *Psychology Today*, Mar 69.

Air Force Officers and Leadership COL MARK CHAPIN

Officers in the United States Air Force have two daunting leadership challenges in today's dynamic environment of dwindling officer and enlisted retention rates, increasing opportunities in the private sector, and the rapidly changing requirements of a high-technology workplace. First, officers must develop and maintain their own technical and professional competencies, and second, they must promote a positive and disciplined organization that is organized for, and capable of, immediate and sustained combat operations. We all live and work in an increasingly threatening world, subject to conventional and unconventional military attack, as well as terrorist actions. It is not only the combat aircrews that must understand war and inculcate the professionalism of warfare. This paper highlights some thoughts about professionalism and the officer's responsibilities in today's Air Force.

It is the responsibility of the commander and the officers in the unit to provide the overall direction and to facilitate the motivation needed to move subordinates and peers in the organization to the accomplishment of the mission. Whatever else gets accomplished in the unit, in addition to that mission, is pure gravy. The commander often gets the credit when things go well and a good commander ensures that the recognition is passed along to the men and women under his or her command. Invariably too, the person at the top gets the blame when the mission fails. There is no question that the commander is ultimately responsible for the organization's success or failure in accomplishing the mission...period. Every officer in the unit is an extension of the commander and represents the commander everyday in every situation. Hence the term, chain of command.

A good leader does not simply preach about the good of the cause or the importance of the mission. Everyone already has their own experientially formed notion of what the cause is and whether it's worth fighting for. The good leader does not resort to the cause, as it may appear an attempt to convince men to participate. A good leader holds up the men themselves as being capable of fighting and winning. For he realizes these men are fighting for their lives, for the lives of their friends, not for the cause back home. For them to be capable and ready to win, the personnel in a unit must be fit and disciplined. Moral goes hand in hand with discipline. Moral strength and unity comes from confidence in the top leaders. Discipline comes from morale and morale comes from knowing you are a success.

To get this job done often requires that the commander take unpopular positions especially as needed to ensure that Air Force standards and requirements are met. By extension, each officer, SNCO, and supervisor is responsible for ensuring that those standards are met. Unfortunately many supervisors these days are reluctant to criticize substandardize performance or pass judgement on professional shortcomings. But, that is a task that leaders must perform for the good of the service, the individual, and the organization. Gen Curtis LeMay, writing as the CSAF, said that every officer should be given a course in how to fire people. His point was that officers are more inclined to tolerate poor performance than to confront it head on and rehabilitate poor performers or replace them. He saw that leaders were afraid to pass judgement. William Bennett writes in Imprimis, "The problem is with the increasing number of people who want to avoid judgment altogether. Firm moral convictions have been eroded by tentativeness, uncertainty, and diffidence. During the last 30 years we have witnessed a relentless assault on traditional norms and a profound shift in public attitudes. We all know that there are times when we will have to judge others, when it is both right and necessary to judge others. If we do not confront the soft relativism that is currently disguised as a virtue, we will find ourselves morally and intellectually disarmed."

In "The Anatomy of leadership," E.E. Jennings write, "The leader's role is initiating, beginning. It is born of imagination and a sense of mission." Captain, later Gen., H. Norman Schwartzkopf arrived in South Vietnam to take command of an Army Infantry Unit from another Capt about to return to the States. The men were sullen and disrespectful to the officers and the camp was in total disarray. There were few proper defensive positions and sanitation was not practiced. What Schwartzkopf found was a total lack of leadership and responsibility, not only on the part of the commander but on the rest of the officers and NCOs as well. He immediately assigned work details to carry out improvements to the camp, building defenses, erecting showers, and holding inspections. What he did was simply his job as commander...he took responsibility for the men and the mission. He didn't accept the status quo or pass the buck. Authority is contingent upon respect and is a product of mutual respect between the leader and the led. The qualifying test of any leader, at every level, is the judgement placed upon his or her military abilities by those who serve under him. Enlisted personnel and officers have greater respect for the state of decency, discipline and order that is the mark of a proper military organization, than for the insignia of rank of any individual.

Leaders must stand up for what is right and must do what is necessary, what is best for the organization, even when it is unpopular to do so. As William Penn said, "No cross, no crown." In other words...no guts, no glory.

When individual, highly personalized military leadership declined so did the "binding force" that caused people, not only to be good but also to be good followers. Great military leaders imparted great confidence and gained the loyalty of the followers. Many times, in the use of military force, the cause is questionable, the means doubtful, the outcome uncertain, but it is the devotion to the leader and to the group that emboldens each follower to get the job done.

Loyalty is an absolute requirement at every level and it doesn't matter whether the organization is a headquarters division, a front line combat unit, or a rear area supply squadron. Loyalty means giving your all to the organization and its leadership even when the decisions and direction are unpopular. It means having the initiative and gumption to put forth your ideas, to make your best case for your position or direction. And once a decision is made, then loyalty requires you to salute smartly and support the decision, both in your own actions and in directing others. A professional doesn't pass the buck or sidestep responsibility for the actions of the unit by blaming a decision on higher authority. To do so greatly undermines the integrity and effectiveness of both the leaders and the organization. Loyalty means that sometimes you don't get your way but you're professional enough to accept it and move on.

Maj Price Bingham, in writing about professionalism said, "The leadership of the Air Force should regard the retention problem as an indication that more and more AF officers have not sufficiently developed a sense of corporateness of a professional, and thus the professional motivations of service and devotion to his skill." Do we truly understand war and all it's consequences or are we in a rut of day to day tasks and responsibilities that have little relevance to air power or combat? The same can be said about making the tough decisions when it comes to supervising, mentoring and disciplining those who work for us and those we work with. As a member of the Air Force and the profession of arms, you are not only responsible for your subordinates but for everyone man or woman in uniform.

Members of the military services have but one primary purpose, to get the mission done. That is as true for the E-4 as it is for the 0-6. Each member of the unit is responsible for their own assigned tasks and to pull together with the rest of the organization. That's what it means to take the oath and to put on the uniform each day. We join a profession, not a union. We take the oath willingly, and we are expected to exercise it fully. Each officer and NCO of the Air Force owes it to the service to maintain standards, to adhere to the rules, to know the requirements of the job, and to carry out their duty. That responsibility extends to enforcement of those standards amongst subordinates. When supervisors fail to uphold standards in their subordinates they fail the organization and the mission. Whether it is weight standards, uniform wear, professional bearing, professional education and development, or customs and courtesies...all officers and NCOs must enforce the standards.

Military customs and courtesies are proven traditions that explain what to do and what not to do. They evolved as a result of the need for order and a sense of fraternity among military personnel. Military image is the most important aspect of AF appearance standards. Others draw conclusions about you, your unit, and the AF based upon what they see. Our customs, uniform, courtesies, and ceremonies have been influenced by tradition over the years and reflect image the Air Forcd intends to project. Unfortunately, some members of the military say, "I don't care." To them I say, "Find another job!" One of the best lessons I ever got was back in Strategic Air Command days at Carswell AFB. As a new 1Lt on a bomber crew I was wide-eyed and eager. I thought I knew the Air Force and how the chain of command worked. Then one day, standing in line in the Finance Office, I watched an amazing display of professionalism, courage, and dedication. At the head of the line was a TSGT, badly in need of a haircut, waiting to have his voucher processed. Behind him in line was a Major, minding his own business. When the MSGT from Security Police walked in and saw the TSGT's appearance he calmly walked up, pulled the TSGT aside, put him at attention, and proceeded to tell him in no uncertain terms that his appearance was unacceptable. The TSGT, listened intently and realized he'd screwed up. He didn't argue the point. He left right then and went to the barbershop. And that wasn't the end of it. The dedicated cop then proceeded to walk right up to the Major, asked him his full name and organization. The stunned officer told him and then listened in amazement as the MSGT told him how disappointed he was that the Major didn't have the dedication or the nerve to admonish the TSGT and send him to the barber. He told the Major it was his responsibility to do the right thing, no matter who the individual worked for, and that subordinates and peers all across the base were certainly watching and taking their example from him. The Major could only blush and keep quiet because he knew the SNCO was right. When all was said and done, the

MSGT took his place at the end of the line. You could have heard a pin drop in there, but lives were changed that day, and professionalism was enhanced.

The high standards and ethics of the military profession are not negotiable and require we constantly practice the highest standards of behavior, obedience, and loyalty. The supervisor sets the example for others in the way they conduct themselves personally and professionally. Their individual commitment to integrity leads the way for others to follow. All officers are responsible to conduct themselves so as to inspire trust and demonstrate maturity, high ethical standards, moral courage, physical conditioning, moral courage, physical conditioning, and professional competence

Auftragstaktik: A Case for Decentralized Combat Leadership LIEUTENANT COLONEL JOHN T. NELSON, US Army

(Extract from an article that appeared in the Sep 1987 issue of Parameters under the title <u>Auftragstaktik: A Case for Decentralized Battle</u> by Lt Col John T. Nelson USA

...desire for increased leader initiative was in full consonance with the German Army's perception of the nature of war. First, speed was considered imperative for victory at both strategic and tactical levels. German field service regulations emphasized that "the first demand in war is decisive action." At the tactical level, the idea was to react after enemy contact with a series of rapid maneuvers to force the adversary into a largely reactive posture.

Second, the Germans believed that the appropriate maneuvers to take in the face of the enemy could not be pre-planned in meticulous detail. Since war was viewed fundamentally as a "clash of wills," enemy action would seldom conform to expectations. Added to this was a keen appreciation for the disruptive effects of friction on military activities.

Third, the Germans considered every situation in war unique. This required competent leaders to make rapid estimates and decisions, and then to act on them swiftly. Furthermore, such decisions would always be made with incomplete, inaccurate, or conflicting information. Uncertainty and the fog of war stalked the battlefield. Thus the leader had to be a thinking soldier. He needed both intuitive powers to interpolate correctly and creative powers to devise a successful course of action.

Thus the German view of war fully supported granting junior leaders great scope for initiative -- if that was what it took to generate the speed necessary for victory. At the same time, this situational...perspective on war shaped the framework for the exercise of leader initiative. This framework provided for three essentials: proper leader character, sound methodology for issuing and carrying out orders, and enlightened senior-subordinate relations.

Not suprisingly, the German field service regulations stressed that the noblest quality of a leader was his willingness to assume responsibility. To do so under stressful conditions required considerable moral courage, self-reliance, and self-confidence -- attributes the German Army prized highly.

Closely related were the attributes which stressed risk-taking and decisive action. Since all decisions were made under conditions of uncertainty and since every situation was unique, there could never be a demonstrably perfect solution. Therefore, one should not demand one. The object was to pick any reasonable plan swiftly and then to execute it with energy and dispatch. Good leaders made a rapid estimate, adopted as sound a course of action as feasible, and executed it decisively. In this view, speed was more essential than precision; a decent plan carried out immediately was superior to a superb plan carried out much later.

To operate in this way, a leader had to assume great risk willingly. To encourage this, the German Army framed two rules. First, in situations clearly requiring independent decisions, a leader had not only the latitude to make them, but the solemn *duty* to do so. Second, inaction and omission in such situations were considered much worse than judgmental error based on a sincere effort to act decisively. The former was the shameful antithesis of leadership. While errors in judgment might cause unsuccessful local engagements, the broad exercise of initiative by all leaders, it was felt, would carry the battle.

The second part of the framework for exercising initiative consisted in the methodology of issuing and carrying out orders. Insofar as he could, the commander told subordinates *what* tasks to accomplish, but not *how* to accomplish them. He also gave them sufficient resources to accomplish those tasks, stated any restraints, and provided required coordinating information.

Leaders so trained, it was thought, would better handle the unexpected in battle, where split-second decisions were often decisive. Such leaders would also feel more ownership for their actions, thereby stimulating greater determination in carrying them out. Self-reliant leaders would derive more personal pride and satisfaction from their duties, causing them to identify more closely with their units. This, in turn, would strengthen unit cohesion.

In issuing orders, the most important part was the statement of the commander's intent. In carrying out their tasks, subordinates were always to focus on the intent. Subordinates using initiative in response to the unexpected had to conform, insofar as possible, with this intent.

This system of operating did not lessen the need for commanders to control their subordinates. Commanders habitually positioned themselves well forward. In no way did commanders relinquish any command authority or responsibility. They would intervene when subordinates were doing something clearly unsound. They would add or delete assigned tasks, or change their intent, as they saw fit. In short, they supervised and controlled, but in a manner encouraging initiative and thinking in subordinates. Subordinates, on the other hand, made every effort to maintain contact with their commander and to keep him fully informed of the situation.

A third element of the framework for exercising initiative was that of senior-subordinate relationships. Commanders were responsible for developing in their subordinates the desired character and leadership attributes discussed earlier. Equally important, they spent much time teaching subordinates how to think on their feet in making estimates of the situation and in applying tactical principles. The object was not only to train subordinates but to educate them. Leaders were taught not so much what to think about, but, more important, how to think. Superiors and subordinates spent time together in map exercises, terrain walks, sand-table exercises, and field exercises discussing tactical problems. A central focus of every field exercise was the development of subordinate leaders. This involved a close teacher-student, coaching-like relationship.

The result was that the leader and his subordinate got to know how each other thought. This was important to the commander; it allowed him to anticipate intuitively how his subordinate would exercise freedom of action in various situations. From this close relationship flowed mutual trust, which in turn nourished initiative. The subordinate would feel confident that his exercise of initiative in battle generally conformed to his commander's intent. The commander would trust his subordinate with greater rein in accomplishing tasks.

The training and education process, both in units and military schools, facilitated the exercise of initiative in another way. It promoted among leaders a common outlook on the nature of war, on desirable character and personality traits, on the importance of initiative, on proper senior-subordinate relationships, and on how to issue orders. It also taught a common approach in understanding and applying tactical principles to the different types of operations, emphasizing the peculiar features and characteristics of each. Military terminology was precise, standard, and widely understood. The result was a remarkably uniform perspective in tactical operations which facilitated concise orders, accurate but brief communication of intent, and a sensing of how the unit as a whole might respond in given situations. This common outlook and language reassured both leaders and subordinates, reinforcing that sense of mutual trust and dependability so conducive to initiative and freedom of action.

The standard approach for conducting critiques of tactical exercises promoted initiative as well. Since every situation was unique and since no training situation could encompass even a fraction of the peculiarities of a real tactical situation, there could be no approved solutions. One acceptable solution was as good as another. Critiques of leader actions focused on identifying the student's rationale for doing what he did? What factors did he consider, or not consider, in making his estimate of the situation? Were the actions taken consistent with this estimate? How well were orders communicated? Were the actions taken tactically sound? Did they have a reasonable chance of being successful? These questions served as the basis for critiques. The idea was to broaden the leader's analytical powers, experience level, and base of knowledge, thereby enhancing his creative ability to devise sound, innovative solutions to difficult problems. Critiques were lenient and understanding, rather than biting and harsh. Mistakes were considered essential to the learning process and thus cast in a positive light. The focus was not on whether the leader did well or poorly, but on what progress he was making overall to develop as a leader. Damaging the leader's self-esteem, especially publicly, was strictly avoided. A leader's self-confidence, it was felt, was the wellspring from which flowed his willingness to assume responsibility and exercise initiative.

It becomes clear that *Auftragstaktik* was an extraordinarily broad concept, holistically embracing aspects of what today would be called a theory of the nature of war, character and leadership traits, tactics, command and control, senior-subordinate relationships, and training and education. In addition, these aspects were organically consistent, mutually reinforcing, and inseparably interwoven.

The centralized philosophy of command visualizes war more as a science than as an art. At its extreme, the centralized approach sees a higher-level commander attempting to make precise decisions in a virtual zero-defects fashion. He then devises detailed plans to carry them out, and supervises the execution by micromanagement. All key decisions are referred to this commander. Decisions are based on massive amounts of information designed to cut through uncertainty. Slow responses are compensated for by massing overwhelming men and materiel against the enemy. In this view, far-reaching initiative from subordinates is not critical to success. Massive relative combat power is. In fact, there is an inherent skepticism that subordinates can make judgments which are precise enough. The centralized plan is sacred.

The decentralized style of command, on the other hand, views war more as an art than a science. It values the initiative of subordinates, striving especially to harness their creative energies toward simultaneous problem-solving at all levels. The desired effect is speed based on sound judgmental ability developed by trial and error. Adequate, not perfect, solutions are sought. In this view, commanders issue general instructions, relying on subordinates to get the job done within a broad charter for action. Plans are viewed as provisional, with the understanding that no plan is ever implemented exactly as envisioned. The leader must continue to think on his feet, aggressively, analyzing, recommending, anticipating, and adjusting.

This style has deep roots. As Assistant Commandant of the Infantry School in the late 1920's, George Marshall did all he could to develop young officer-students into thinking leaders who could operate in a decentralized manner. He often issued students foreign or outdated maps, provided only sketchy intelligence, and compelled them to make their own decisions by cutting off communication with higher headquarters. He routinely made them face the unexpected in order to stimulate their imagination and ingenuity. One of his first orders was that "any student's solution of a problem that ran counter to the approved school solution and yet showed independent, creative thinking would be published to the class."

Another supporter of the decentralized style of command was General George S. Patton. He allowed his subordinates great freedom of action, being tolerant and patient with their errors. He demanded speed and risk-taking. "Never tell people *how* to do things," he said. "Tell them *what* to do and they will surprise you with their ingenuity."

...we would seek to develop thinking, tough-minded, self-reliant, confident, and courageous leaders who can respond to friction, the fog of war, and unexpected enemy actions with initiative and grim determination...such leaders, to paraphrase Teddy Roosevelt, will at best know the triumph of high achievement, but even in failure they will at least fail while daring greatly.

Developing Leaders Reprinted from NAVMC 2767

The Marine Corps builds leaders. Marine leaders are not born or mass produced or given to us--we develop thempatiently, individually, artfully. The development of a Marine leader begins when he joins the Corps and continues as long as he remains a Marine. The mold is cast in boot camp; polishing is done in field units.

Graduate recruits are highly motivated towards the Corps and the standards it represents. They leave the recruit depots with great expectations of receiving from and giving a lot to their Corps. They seek tough training and dynamic leadership. Too often, after reporting to their units, leadership by example diminishes; standards become lowered; training becomes routine and boring; expectations dim; motivation drops; tarnishing sets in. Improperly supervised, the future leader is often thrown too completely on his own and is not always ready for this situation. He may follow the most influential Marine available--frequently the "sea-lawyer" who leads him in the wrong direction. Sometimes he may be promoted too soon and is not prepared for the accelerated responsibilities.

Command emphasis must be placed on stopping this trend. With the quality of Marines in the Corps today, we must challenge these disciplined and spirited Marines who respond magnificently to positive leadership. The DI and boot camp must not be the only significant event in a Marine's active duty experience. Commanders and unit leaders must set the example and ensure that the development of our Marines continue when they join a unit. A Marine should find good leadership, a sense of belonging and meaningful work. Training must be challenging, demanding, interesting and with a clearly discernible purpose.

Paragraph 1100, Marine Corps Manual, is our charter for leadership responsibilities in the Corps. These long practiced goals of leadership have withstood the test of time from Nicaragua to Grenada, in war and peace.

Four elements are essential to effectively develop good leaders: a clearly understood role; a comprehensive training program; selective screening for promotion; and, most important, command attention.

A quality program to develop leaders must be a goal of every commander. Good units have good subordinate leaders because their seniors conscientiously train them in military skills and sound leadership. The following is essential to an effective program:

- a. Commanders must set a high priority on leader development and ensure they are trained and challenged to their maximum potential.
- b. Maximum use should be made of mission oriented orders, succinct statements of the commander's intent with guidance which permits maximum initiative at the subordinate level. Commanders/supervisors must: provide clear, well thought out directions to subordinates; convey their intentions; give subordinates freedom of action; accept subordinates' mistakes and teach from them; and establish a climate of trust, confidence and prestige for our subordinates. Subordinates must: be responsible and use initiative; perceive the intentions of their seniors; use their abilities for the good of the mission; and take action with unknown and incomplete information.
- c. All subordinates must be trained and educated. Commanders must ensure Marines who attend NCO/SNCO Schools meet the eligibility criteria and demonstrate outstanding potential for advancement. Graduates must be challenged to use new skills. Requiring NCO's to train their subordinates and holding them accountable for the results will place responsibility squarely on their shoulders. NCO's who cannot attend formal schools must be trained in unit level NCO development programs.

A Comprehensive View of Leadership

HUBA WASS DE CZECE, BRIGADIER GENERAL, US Army

Every Army leader, active or retired, should be considered knowledgeable on the subject of leadership. This is only natural since this has been the essence of the military profession. I have learned much from the views of others and have developed my own way of thinking about leadership and how to talk to younger leaders about it.

Before one can understand and write about what leaders ought to be, know and do (and that is a good way to talk about leadership), one ought to be clear about what leaders are for in a more fundamental sense. What are the critical leadership functions performed by Army officers as they lead small and large units within an Army preparing for, deterring and conducting war on behalf of a free society? How are these functions performed differently as one proceeds up the scale from sergeant to general? How do being, knowing and doing change at each level and how do we prepare our leaders to advance? The purpose of this article is to propose a systematic way to ask and answer those questions and to thus learn more about the science and art of leadership.

There is general agreement that leadership is the art of influencing others to take action toward a goal, and that military leadership is the art of influencing soldiers in units to accomplish unit missions. It is also generally understood that small-unit leaders rely on direct-influence processes while senior leaders rely more on indirect processes in proportion to their seniority. This is a slim framework for understanding the leadership function—why we have leaders.

What are the key leadership functions that must be performed to produce military organizations? Effective organizations have clearly defined purposes, respond to direction, are composed of people motivated to pursue organizational purposes along clearly identified paths and have programs that sustain their effectiveness over time. Organizations without these critical characteristics are not effective. Leaders provide purpose. They also establish direction, generate motivation and sustain effectiveness. They really do more, but they cannot do less. Thus effectiveness can be reduced to four leadership functions—providing purpose, establishing direction, generating motivation for unit actions and sustaining the effectiveness of the unit for future tasks (providing for continuity and constant improvement of the organization). All other functions are really subfunctions of these four; they facilitate the accomplishment of one or more of these four primary functions. For instance, setting the proper unit values may facilitate all four, but the reason for having the proper values is not that they are an end in and of themselves but they are a means to an ultimate end—a unit that can be led to accomplish its intended aims with greater effectiveness.

Four Primary Functions of Effective Military Leadership

Although the four primary functions of effective leadership are interdependent, we discuss purpose first because effective directing, motivating and sustaining require a focus or aim. We discuss directing next because it is composed of the actions the leader takes to guide the unit in the direction of purpose. Motivating follows this because it comprises the actions the leader takes to impel individuals within the unit to follow the directing guidance. We discuss sustaining effectiveness last because it is primarily an activity with long-range payoffs.

Provide and Instill Purpose. The effective leader must be an effective link in the chain of command. The leader must possess a broad vision to guide the organization drawing meaning or purpose from this vision for unit activity. The leader must have a clear idea of how the organization fits into a larger scheme—why they are doing what they are doing. The leader imparts a sense of purpose on subordinates and instills a sense of purpose in soldiers, aligning unit missions, goals and objectives within broader schemes and purposes.

To shape the vision, the effective leader may draw upon many sources:

Beginning with the oath of office to defend and support the Constitution, or even higher moral and spiritual imperatives.

Draw on institutional and national values, goals and aspirations to formulate the concept of purpose he articulates to subordinates.

A leader's commander and the next higher headquarters will transmit their articulation of purpose both directly and indirectly. In combat, this may be directly and clearly expressed (paragraphs lb., 2 and 3 of the operations order he receives). A leader may have to read between the lines of their words or actions to clearly understand the commander's intent (or the vision from which they derive purpose). This is called "restating the mission" and "identifying the implied tasks." A leader must remain aware of events beyond those involving the unit. In reality, this may require filling gaps in the picture of purpose by deductive or inductive logic.

However arriving at the conception of purpose, the effective leader passes on a coherent picture of how the unit mission fits into the "big picture." Imparting a sense of importance of the tasks to be accomplished and how success or failure of the unit mission will affect the world beyond the unit. In combat, events will not unfold as planned, assumptions may prove to be wrong and assigned tasks may not be appropriate. Knowing the purpose of the unit mission helps subordinates judge what new tasks would be more appropriate. Understanding the purpose of unit missions (the "intent of higher commanders") aids them in coordinating their unit's actions with those of others and leads to overall harmony in execution and economy of effort toward common goals. It provides a frame of reference for independent thought and decision making by subordinates to solve unanticipated problems, which are best resolved and acted on rapidly.

As one proceeds from squad to the highest strategic levels, the leader must become more active in clarifying and transmitting purpose as it becomes more conceptual, longer range and ephemeral. At the highest levels, there may be a great deal of latitude in shaping, articulating and refining purpose. And higher values such as the oath of office and moral and spiritual imperatives, while important at all levels, play a more significant role because less specific guidance is provided. At squad level, it may be simply to know, pass on and imbue squad members with a simple idea such as "We must take out that bunker because it is holding up the platoon or company advance," or "We will train hard because we want to be the best squad in the company."

At all levels, it is the duty of leaders to clarify the purpose of their missions by asking appropriate questions, if time permits, and to inform subordinates appropriately. (It is also well known that there is a motivational side benefit of letting soldiers know the purpose of their sacrifices—the more important the purpose, the greater the motivational benefit.) The key benefit of providing and instilling purpose is to ensure that what is to be done is accomplished so as to fit into a higher scheme. This is the mechanism that aids synchronization in an environment where initiative is highly valued.

Providing Direction. Effective leaders provide unambiguous direction and guidance for action. They have a clear vision of what must be done, what is necessary to get the job done and how to proceed. They clearly articulate and assign objectives, missions and goals to subordinates. In addition to such direct guidance, they also provide indirect guidance. They promote values; set standards for accomplishment of tasks; enforce discipline; establish standard operating procedures; ensure the training of soldiers and units in appropriate doctrine, methods and techniques; and establish policies and regulations. At the highest levels, military leaders also may be responsible for development of doctrine, methods and techniques in some or all areas.

Providing direction effectively requires command and control skills, processes and functions—information gathering, analysis, decision making, issuing instructions or orders, performing appropriate supervision and monitoring the effectiveness of the resulting actions. Effective leadership in combat is measured in terms of the speed and effectiveness of this cycle (often called the decision cycle) relative to that of the enemy.

As leadership advances from the squad to the highest levels, the function of providing direction becomes more complex. Setting and communicating standards, promoting values, enforcing discipline, establishing methods and procedures, and command and control processes become more dependent on systems and organizational functionaries than on direct interpersonal relations. Management, the control of things and the coordination and sequencing of events, while applicable at all levels, becomes an important tool in providing direction at senior levels of leadership. It is in this sense that it relates to leadership.

Effective senior leaders know that even the act of gathering information about the activities of subordinates may cause a reorientation of those activities. They take this into account in designing systems that will gather information purposefully. They ask for meaningful reports and develop unobtrusive ways to find out what they need to know without unintentionally reorienting the focus of subordinate activity.

Providing Motivation. Effective leaders provide motivation—they harness the willingness of subordinates to work toward common goals, missions, objectives and tasks. All combat is, in the end, a test of will, both of soldiers and leaders. In combat, leaders must motivate soldiers to do difficult things in trying circumstances. In peacetime, motivation to perform tasks well is important. In combat, it can be decisive. Marshal Maurice de Saxe, writing in the 18th century, pointed out that "a soldier's courage must be reborn daily," and Ardant du Picq, writing in the 19th, remarked that "you can reach into the well of courage only so many times before the well runs dry."

It is common knowledge that motivation promoted by rewards is more effective in generating commitment than motivation promoted by punishments. Providing positive motivation should be the aim of all leaders, but negative sanctions are also important for delineating the limits of acceptable behavior. Effective leaders elicit willing compliance and devote a considerable effort to obtaining it.

Means and methods for motivating soldiers differ at various levels. At all levels of authority, mutual trust and confidence are key, but styles may differ.

The moral force that impels subordinates to action at all levels is rooted mutual trust and respect. This in turn stems from a record of association and a reputation for ethical behavior and sound decision making. Values, or held beliefs, when appropriate and shared in the unit, are important motors. "This unit can't be beat" and "This unit doesn't leave its dead on the battlefield" are examples. Ethics are standards of behavior in relation to values. Mutual trust and respect derive in part from perceptions of ethical behavior and in part from a record of success. Mutual trust and respect derive from "taking care of the troops." When troops know that their efforts will not be wasted on unnecessary tasks; that the leader recognizes the value and quality of their labors and is doing the best to meet their needs within the constraints imposed; is concerned about them as human beings; listens to their grievances; and respects subordinates and builds their self-esteem; they will give their full measure of support. All of these factors combine to provide the leader the moral force he needs to motivate in stressful situations in combat, or anytime.

American soldiers have always fought well when they feel they are in a good outfit and trust their leaders. At the lowest levels, direct daily face-to-face appeals to values, insistence on standards and a record of fairness, self-discipline, competence, displays of example, courage and resourcefulness the most effective motivators. At times, especially in combat, resorting intimidation may be necessary, but intimidation never elicits a full measure of commitment. At the highest levels, personal displays of courageous example, self-discipline, fairness, competence, and force of personality (in both a positive and negative sense) are occasionally necessary and effective, but a more complex system of authority, mutual trust and confidence must be established.

At the higher levels, soldiers learn to trust the collective leadership of "higher headquarters" when that leadership is reliable and demonstrably sound. A trusted and respected senior leader will have difficulty overcoming the deleterious efforts of a fumbling staff. Senior leaders ensure a positive command climate because they understand that they must influence soldiers through layers of their subordinate leaders. They cultivate positive leadership among their immediate subordinates and resort to face-to-face persuasion to bolster will as the occasion warrants (but usually with subordinate commanders and staffs).

While discipline is primarily a direction-providing tool, in the sense that disciplined soldier or unit does what is expected even when the "boss" is sent, maintaining discipline also plays a motivational role. A disciplined unit is responsive. One of its internalized values is "We always do what's right," and what is "right" is following the direction of the leader toward the purpose to be achieved..

Commanders at all levels establish or administer formal systems of rewards and punishments. Traditionally, on the positive side, this has been in the form of pay and benefits, promotions, decorations, skill badges, service ribbons, symbols of unit recognition and time off. On the negative side have been judicial and nonjudicial punishments ranging from extra training to the gallows, as well as release from the service and so forth. They use the provisions of military regulations and the Uniform Code of Military Justice to administer punishments. In order to motivate effectively, these systems must be seen to be fair by those they seek to motivate.

Commanders at higher levels have a more powerful, more important, and perhaps more difficult role in establishing and maintaining a just system of formal rewards and punishments. They have a more powerful role in that they have more latitude and authority. The importance of their role stems from the impact they have in this powerful tool to

motivate positively through an effective system, and the potential damage they can cause with an ineffective system. Their role is difficult because they have to work through many people who administer the system.

As mentioned earlier, soldiers who understand why an action is necessary and worthy of their sacrifices will fight more fiercely or work harder toward unit goals and missions. This function of informing and educating also becomes more complex with seniority of position. At more senior levels, it involves command information programs of great complexity and subtlety.

Sustaining Continued Effectiveness. The final function of military leadership is different in that it orients to the future. Providing purpose, direction and motivation has immediate payoffs, but leaders must also ensure the continuity, health and further development of the organization. It is difficult to find one word to describe this function; the closest would be sustainment—sustaining the effectiveness of the organization over time. This implies continuity in a Darwinian rather than a static sense—the ability to remain a viable organism through adaptation as conditions change. It implies health in that all elements of an organism remain sound and function as intended. It implies further development in that leaders should never be satisfied with the current levels of proficiency and always seek to improve in areas which are weakest. Leaders should think of organizations they head as organisms and not as machines. Machines have no built-in recuperative powers, and they perform best when new. They wear out with use. This is not the case with organisms and organizations. Organisms can learn, adapt, grow, become more effective and stronger. They can also unlearn, maladapt, shrink, become less effective and weaker. And they can die. An organism cannot be stressed near maximum capacity for too long a time before it becomes less capable, but an organism can peak well above normal levels of effectiveness for short periods. Effective military leaders recognize these characteristics of military organizations and lead them accordingly.

Some have said that the most effective leaders provide for their succession. Others have said that they develop "high-performing" units. They do both and more. The good squad leader cross-trains the new man on the machinegun, teaches the machinegunner to be a team leader and coaches the team leaders. This squad leader trains the squad to be a cohesive and highly adaptive organism; looks for ways to take the pressure off when no expenditure of effort is required and ensures that squad members needed rest when possible. When a tough chore is to be performed, squad peaks for it.

Leaders at higher levels do essentially the same. The higher the level, the more systematic and institutionalized the process becomes. Senior leaders must prepare for attrition of key personnel, the introduction of more modern weapons and a myriad of environmental changes affecting the health and effectiveness of their command. In performing current tasks, they must consider future tasks. In combat, they may mortgage the future for a vital present mission or hold back to save strength and peak for a more vital task to come. They train their soldiers and leaders in peacetime and during lulls in battle. They build or rebuild morale or physical strength. They build teamwork between units of different branches and develop "high-performing" staffs. The essential elements of this function are present at all levels, but at the most senior levels these efforts are formalized and highly organized. In the long term, tending to this function is as important as providing purpose, direction and motivation.

Effective military leadership requires that four key functions be performed well to influence soldiers and units to successfully accomplish tasks and missions over time. To be successful, military leaders must:

- a. Provide purpose and meaning for unit activity—fitting the specific mission into a broader framework of guidance derived from higher purpose, direction, motivation and sustaining sensings.
- b. Establish direction and guidance for the actions of subordinates leading to mission accomplishment.
- c. Generate or instill in his subordinates the will, or motivation, to perform assigned missions well.
- d. Sustain the effectiveness of his organization over time—provide for the continuity, improvement and future effectiveness of the organization.

The effectiveness of large military organizations depends on the performance of all of these functions up and down the chain of command. Although these functions are performed at every link in the chain, they are performed differently at each level. While there is room for variations in style (or the way functions are performed), there is little room for variations in values and ethical standards or in the understanding of doctrinal fundamentals. These and the purpose function at each level provide that glue that binds smaller organizations together to form larger ones—to make them one organism.

Differences in Levels of Leadership. Intuition tells us that there may be distinct differences in the way the purpose, direction, motivation, and organizational sustainment functions are performed, and what leaders must be, know, and do to perform them at different levels. What follows is an intuitive sketch of some key distinctions by level based on 28 years of fallible experience and some historical reading over that time.

Junior noncommissioned officers (NCOs) who serve as squad leaders and team leaders and their equivalents practice "do as I do" leadership almost exclusively. For them, "Showing" is as important as "telling." In combat, "Do as I do" leaders are at or near the front of their organization to direct and to motivate effectively. They derive purpose from company-level goals, missions, and values. They embody the warrior ethic of their branch and specialty and reflect the values inculcated in them by more senior NCOs. They provide direction by leading from the front, by establishing and enforcing squad standards and values, by demonstrating "how to do it." They enforce discipline directly and on the spot. They motivate by example and by the respect they have earned within the squad. They work to achieve a cohesive, "high-performing" squad. They care for and about their men. They provide for continuity by identifying talent among the younger soldiers and by providing for their own succession from among them. They cross-train soldiers to perform more than one task in the squad, and perform necessary individual training.

Senior NCOs (platoon sergeants, master sergeants, first sergeants, and sergeants major) also practice "do as I do" leadership, often not as directly, but they do more. They are primarily responsible for junior NCO development. They execute policies, supervise activities, and advise officers in the performance of all of their purpose, direction, motivation, and organizational sustainment functions. They are the repository of organizational values.

Company grade officers also practice "do as I do" leadership. They lead literally and directly, face-to-face. (Some headquarters company commanders with close to 300 men performing disparate functions over a wide area may not fit this mold; they face a challenge similar to the next higher level.) They act as important value setters, making short-term policies, setting short-term goals, and executing short-range tactical schemes. They make a given organization function. Their longer-range policies and goals are interpretations of higher-level ones and their plans are very dependent upon plans and priorities set above their level. They are expected to display initiative and continuity in the short-term execution of tasks.

Junior field grade officers alternate between indirect and "do as I do" leadership. They are the first level of real value shapers. They are responsible for company grade officer development. They make longer-term policies and set longer-term goals. They execute short-range combined arms tactical schemes. They make a task force with nonorganic parts function.

Indirect leadership is characterized by some physical detachment due to time and space. These leaders must work harder to maintain intellectual and spiritual attachment. Every leader beyond the lowest levels must understand that time and space limits those in the organization whom the leader can touch personally. And this implies a decision as to whom within the organization, to how many and how far he can spread his personal influence. The leader must choose carefully, for there are pitfalls to spreading too thin as well as to staying too near the headquarters. One can visualize this as a series of concentric circles. There is a pitfall in bypassing a circle or two and trying to reach all the way down to deal with the soldier in the ranks too often. This affects the mutual trust within a chain of command. It is best to reach out by degrees and occasionally "test the waters" beyond the three rings any leader can influence effectively. Some may be better at reaching out farther. Each leader should know this "range" and stay within it.

Senior field grade and junior general officers practice mostly indirect leadership. They are important value shapers and are responsible for junior field grade development. They shape command climates in the Army. They are long-term policy makers and goal setters. They execute complex combined arms tactical schemes. They create task forces, shape organizations and make large, complex organizations function.

Senior general officers practice indirect leadership except on rare occasions and with a small segment of their subordinates. They lead other general officers and senior field grade officers in direct ways and work hard to shape consensus among their peers. They are the very long-range institutional value shapers. They are responsible for the development of field grade and junior general officers. They shape the command climate on Army posts, within major commands and within the Army for long periods of time. They make policies and set goals that have impact many years beyond their tenure. They are responsible for the execution of complex operational and strategic

schemes. They create organizations and set long-range trends. They shape institutions and make long-term important decisions frequently based on intuition because easily recognizable tradeoffs are not apparent.

There are differences other than those identified in this short sketch, and they should be identified and studied. Study may reveal that this intuitive grouping of ranks is not the best. Whatever grouping is used, a matrix can be developed. This could be useful for developing effective leaders because we could then identify what the be, know, and do requirements are for each level.

There is much written on the subject of leadership. U.S. Army Field Manual (FM) 22-100, Military Leadership, and FM 22-103, Leadership and Command at Senior Levels, are the best leadership manuals we have had. The historical record is full of useful material as are more recent studies by behavioral scientists. But until we undertake an orderly and scientific study of the functions of leadership and understand more fully what leaders must be, know and do at each level to effectively perform those functions in peace and war, we will only be partly informed.

Troop Leadership Tenants

A. A. VANDEGRIFT, LIEUTENANT GENERAL, USMC

FOREWORD

This forceful restatement of the fundamental principles of troop leadership, supplemented by rules based on combat experience in the Solomon Islands Area was prepared by the Third Marine Division, Fleet Marine Force. It is worthy of careful study by every Marine who is or may be charged with the leadership of other Marines in battle. (Signed A.A. VANDERGRIFT)

INTRODUCTION

The senior commander of a force plans the battle in its broader sense and is responsible for ultimate success or failure. However, once a subordinate unity has been committed to action, he must, for the time being, limit his activities to providing the necessary support and insuring the coordination of all components. Regardless of how well conceived the Senior commander's plan may be, it can be nullified if his front line platoons are incapable of carrying out the mission assigned. The conduct of the front line rests with company commanders, and their platoon and squad leaders. The front line leader must plan and execute his own battle. He must know his enemy, his own men, and must aggressively employ all of his weapons in coordinated fire and movement. He must personally lead his unit to success. The paramount importance of front line leadership cannot be overestimated.

- 1. The prime factor in successful fighting unit is esprit de corps. This needs no explanation. It simply means that no Marine ever lets another Marine down. The expression, "A Squad of Marines," has for over a hundred years been synonymous with such other expressions as "coiled rattlesnake," "concentrated dynamite," "powder keg," etc. Its meaning has been well-earned.
- 2. Of almost equal importance to a fighting unit is discipline. This applies to all activities at all times. It must never be relaxed, particularly during times of hardship, discomfort, or danger. It spells the difference between a "mob" and a "unit." Discipline is obtained mainly through diligence of the judicious daily application of rewards and punishments. Justice, consistency, firmness, and respect are the roots of discipline. Men like to serve in a well-disciplined unit. Mob methods disgust them.
- 3. Be neat in your person; habitually wear your insignia of rank on all uniforms and have all your subordinates do the same. Insignia may be dulled or blended just before entering close combat--but not before.
- 4. Exercise and display absolute loyalty toward a superior, particularly when he is absent. This is not only morally correct, it is the only sure footing in any military organization. It also enhances your personal prestige among your subordinates.
- 5. Refrain from "blowing up" under stress or when irritated.
- 6. Always show enthusiasm- it is infectious.
- 7. Never allow yourself to be unduly rushed or stampeded. There is usually ample time for considered judgment, even during battle. Dignity and poise are invaluable assets to a leader.
- 8. In the field, practice the habit of making daily inspections (using the "sample" method) and insist on: (1) clean weapons, (2) presence of arms, ammunition, mess gear, helmets and other items of individual equipment, (3) care of the feet, (4) alertness while on watch. See that rewards and punishments are promptly awarded.
- 9. At the front, visit all of your men frequently talk to them be sure they know
- 10. what you want them to do at all times, and where you can be found.
- 11. Do not get your unit lost nothing destroys confidence quicker.

- 12. As a general rule do not call for volunteers to do a dangerous or distasteful job. Pick out the individuals yourself and assign them to the job clearly, and in the presence of others.
- 13. Give your orders positively and clearly at all times. Avoid vagueness.
- 14. Never allow cruelty, it undermines the natural courage and manliness of the perpetrator. Be respectful to the dead even the enemy dead. Bury the dead quickly.
- 15. Be prompt and accurate in making reports. Send back information at least once each hour during action. The commanding officer can't help you unless he knows your situation.
- 16. If anything goes wrong, do not be too quick to blame our artillery, aviation, engineers, supply services, or any other organization. They can be depended upon always to do all they can with the information and means at hand. They, too, have a job which requires courage and determination, and they are doing their best to back you up.
- 17. Take active charge of all activities in the front which lie within your sphere of responsibility.
- 18. A front-line Marine demands little from his leader, namely: (1) a clear conception of what he is expected to do, (2) ammunition, (3) drinking water, (4) rations, (5) medical service, and eventually (6) cigarettes and mail. These items must be your continuous concern.
- 19. Always arrange for the comfort of your men before you do your own.
- 20. Maintain your leadership. Nothing is more humiliating to a nominal leader than to see his men naturally turning to a subordinate for direction in times of danger.
- 21. Arrange continuously for your men to get as much rest as the situation will allow. Avoid unnecessary harassments, such as "standing by." Unless your unit is on the move or unless you or the enemy are actually attacking, you can usually arrange for at least two-thirds of your men to steep at night.
- 22. Do not tolerate any evidences of self-pity in your men. It makes any difficult situation worse.
- 23. Keep to yourself alone any concern you may have as to your general situation, and do not let it be reflected in your countenance or actions. Remember that all situations look critical at times.
- 24. Encourage common decency do not tolerate vulgarity or filthy language in your presence.
- 25. Insist on carrying out all rules for field sanitation, even in the front lines.
- 26. Do not encourage rumors they are usually disturbing -most of them are entirely without foundation. Find out for yourself and be the first to tell your men the truth.
- 27. Win a reputation for moving your outfit promptly. Depart and arrive on time.
- 28. Be "time and space" conscious. By practice, know the average time it takes: (1) to issue your orders, (2) to assemble your unit, (3) to move it a hundred yards over varied types of terrain, (4) to deploy it for battle. Always have your watch set at the correct time.
- 29. Keep your men informed as to the enemy situation and your plans. Devise and execute plans for taking prisoners.
- 30. Offensive tactics, briefly summarized, may be stated as follows: Hold the attention of your enemy with a minimum force, then quickly strike him suddenly and hard on his flank or rear with every weapon you have, then rush him when his fire slackens. Any plan that accomplishes this will usually win if it is driven home quickly. Be slow to change a plan the reason for the change should be obvious.

- 31. Remember that support arms seldom destroy they paralyze temporarily. Take quick advantage of their support before the enemy "comes to." Act suddenly.
- 32. In a surprise meeting of small forces, hit the enemy immediately while he is still startled; don't let him get set, be persistent, and "keep him rolling."
- 33. Be prepared always. Anticipate your action in case of an emergency. Ask yourself what you would do immediately in case the enemy should suddenly appear. If you have to hesitate in your answer, you are not sufficiently prepared. Keep thinking, and at all times be one jump ahead of the immediate situation.
- 34. Never permit men to remain inactive under machine gun fire. Give orders quickly.
- 35. Do not permit the slightest rearward movement of any individual while under heavy fire, except to get wounded out, or when openly directed by you. It is usually best to go forward, or dig in until the fire ceases.
- 36. Always endeavor to confront your enemy with superior volume of accurate fire. This may be accomplished at any given point by means of maneuver and coordination of the fire of all weapons. Use every weapon you have they are all especially effective if used together.
- 37. A great and successful troop leader said that there comes a point in every close battle when each commander concludes that he is defeated. The leader who carries on, wins.
- 38. It has been recently observed that an enemy often slackens or ceases his fire right at the time he appears to be getting the upper hand. He then simply crouches in his hole. This means that he cannot sustain a fire fight. Stick to your plan and hit him harder.
- 39. Positions are seldom lost because they have been destroyed, but almost invariably because the leader has decided in his own mind that the position cannot be held.
- 40. Beware of daylight withdrawals. They may appear logical in a classroom but they are always dangerous in practice. In a tight spot hold on, at least until nightfall.
- 41. Nothing on this earth is so uplifting to a human being as victory in battle; nothing so degrading as defeat.
- 42. "Battles are won during the training period."

Developing Great Leaders in Turbulent Times GENERAL DENNIS J. REIMER, US Army

The US Army is about winning. The mere thought of anything less is repugnant, because when the Army loses, America loses. I think this determination goes a long way toward explaining our success. The Army's history is a history of change, but no amount of change or adversity has ever dampened our quest for victory. The magnitude and speed of the Army's transformation over the last decade has been particularly challenging. Yet, throughout this difficult transition, we held on to the constants-the unshakable belief that America's Army can and must always be a winner. At the same time, we embraced change because it made us a better Army and because it best served the nation's needs.

Balancing change and continuity is the secret of our success. It is also the key to developing the leaders who will carry that winning tradition into the 21st century. We have the leader and soldier development programs to grow great 21st-century leaders-programs that preserve the constants while accounting for the human dimension of change in a changing world. Embracing and implementing these programs are critical tasks for America's Army, and it all starts with understanding the dynamic relationship between the constants and the changes that drive our Army.

Back to the Future-Leadership's Past and Potential

During a recent one-day trip, I experienced firsthand the feel of the great change and continuity that chart the course of America's Army. This journey took me to Camp Beauregard, Louisiana, and Fort Hood, Texas. At Camp Beauregard, I participated in the change of command of Louisiana Adjutant General Major General Ansel "Buddy" Stroud. As I landed at that small, beautiful post, I was reminded of what took place there over 50 years ago. The camp was a staging area for the Louisiana Maneuvers (LAM)-large-scale wargames used to get the first divisions ready for World War II.

The maneuvers' scope was vast. The exercises developed new tactics and techniques for combined arms warfare, integrated Active (AC) and Reserve Component (RC) forces, validated new weapon systems and organizations, established requirements for future developments and identified leaders with potential for promotion and those who were not suited for combat. While the tasks were great, resources were scarce. Units substituted drainpipes for mortars and beer cans for shells because they did not have the proper equipment. Although the results were not perfect, they were good enough to start the American Army on the road to victory. The enormous obstacles facing the Army in those difficult times made the maneuvers' success even more impressive. LAM succeeded, in large part, because they relied on the soldiering fundamentals-values, teamwork and discipline, the constants that always make the difference.

From Camp Beauregard I flew to Fort Hood for the 4th Infantry Division (Mechanized) [4th ID (M)] Advanced Warfighting Experiment (AWE). The experiment was the latest step in our Force XXI process and was designed to provide insights that will guide the Army's future. Upon arrival, I immediately felt the excitement and enthusiasm for what was taking place. Without seeing a single command post, I knew that something important was happening. You could see it in people's eyes. I could not help but be impressed with the teamwork I saw there-AC, Army Reserve and Army National Guard soldiers working side by side with Department of the Army civilians (DACs) and industry representatives. The 4th ID (M)-reorganized, reequipped and retrained, backed by great organizations from the 138th Field Artillery Brigade (Kentucky National Guard) and 493d Engineer Group (US Army Re-serve) from Texas-challenged the world-class opposing forces, outthinking, outmaneuvering and checkmating every attempt to adjust and react to the 4th ID's initiatives.

What I witnessed was more than just a technological change, it was a cultural change as well. Leaders at all levels were confident, because we had created the right leadership environment and given soldiers the opportunity and the tools to harness the potential of a lethal, information-age force. Consequently, I observed commanders willing to take prudent risks to achieve extraordinary gain. I imagine I witnessed the same basics at work that built an army of excellence during the LAM over 50 years ago, but I saw them operating in a new environment, a culture based on information-age warfare. I returned from this trip more confident than ever that the Army can and will be the master of its own future as long as we keep the dynamics of constants and change in balance.

First and always, we must remember that we are a profession of arms. Our profession is unique and, as General Douglas MacArthur once said, predicated on "the will to win. The sure knowledge that in war there is no substitute for victory. That if you fail, the nation will be destroyed." As a young observer/controller at Fort Polk's Joint Readiness Training Center put it, being a soldier is "more than just holding a job and going home for dinner." We are a profession committed to unlimited and unrestrained service to nation, wherever and whenever America calls.

Our profession's purpose says a great deal about our soldiers and what they do every day. Our mission is too great to be achieved by any one individual or any single task. There is a tremendous depth and breadth to our profession. The Army's purpose for being is to "win our nation's wars," but this means far more than just killing or the willingness to be killed. The American warrior has been and will always be more than the soldier fighting at the point of the spear. We deter and respond to aggression, but we also shape the international environment by building regional stability and reducing the possibility of conflict. The Army's responsibilities include everything from destroying targets to caring for and safeguarding civilians and dividing warring factions. Often these very different tasks have to be done by the same force, with precious little time and space dividing one mission from the next.

It takes the combined effort and sacrifice of the Total Army team to perform such extraordinary service. Every team member and mission contribute to the victories that secure America's place in a free and prosperous world. In the American profession of arms, even apparently mundane tasks take on extraordinary meaning. Throughout our proud history, these tasks have always been part of our mission and they always will be.

Another Army constant is the performance of our people. The soldiers who maneuvered across the forests and lowlands of Louisiana over 50 years ago were great Americans, patriotic and dedicated. Despite the difficulties and turbulence of our own time, the men and women of today's Army are no less exemplary. Of the 32 major post-Cold War deployments by US forces, the Army has participated in 28 of those operations, providing more than 60 percent of the personnel. In 1997, the Army averaged over 31,000 soldiers deployed away from their home station and families, in 70 countries around the world. All of this activity took place in tandem with one of the most significant force reductions in our nation's history. We have taken more than 600,000 AC and RC soldiers and DAC employees out of the force. We have closed over 700 bases. In Europe alone, we reduced the force from 232,000 soldiers to 65,000. The total drawdown in Europe would be equivalent to closing major installations in the United States.

While these reductions took place, Army operations tempo (OPTEMPO) increased approximately 300 percent. Despite the magnitude of our efforts and the everyday pressures and stresses on the force, our soldiers continue to perform magnificently. They have the same willingness to take prudent risk, boldness to seize the initiative and professionalism to do their absolute best-trademarks of successful armies from our past.

I recognize that the service of our soldiers has not come without cost. We are not perfect. Many are concerned whether the Army can maintain the tremendous progress we have made since the Vietnam War's end. Some worry that a "zero defects" mental-ity might resurrect itself and that opportunities for assignments and promotion will diminish. Others fear a return to a "hollow army," where requirements far outstrip resources. Some are concerned that the high OPTEMPO will detract from training to the point that units will lose their warfighting edge. These concerns are understandable and bear watching because they highlight another important constant we can never compromise-the Army's concern about taking care of people.

As I think back over my 35 years of military service, I have learned that the Army's waxing and waning has had less to do with the resources available than with our commitment to pull together. The Army is, at heart, a community of AC and RC soldiers, DAC employees and their families. Communities thrive when people care about one another, work with one another and trust one another. I believe today's Army carries within it this spirit and sense of community, the commitment to address our shortfalls and build upon our strengths. I am optimistic about the future and convinced that because we hold tight to a strong tradition of commitment to one another, we are and will remain the best army on Earth.

A Values-Based Army

Undergirding these constants is the most important constant of all-Army values. We must never be complacent about the role of values in our Army. That is why we have made a concerted effort to specify and define the Army values in the insert. Army values are thoroughly consistent with the values of American society, but it is a bad assumption to presuppose that everyone entering the Army understands and accepts the values that we emphasize.

The Army is a values-based organization that stresses the importance of the team over the individual. Values that emphasize only individual self-interest are cold comfort in times of hardship and danger. Rather, the Army emphasizes "shared" values, the values that make an individual reach beyond self. Army values build strong, cohesive organizations that, in turn, become the source of strength and solidarity for their members in difficult and turbulent times.

Values-based leadership means setting the example and then creating a command climate where soldiers can put values into practice. It is leadership best described by the simple principle "be, know, do." Leaders must not only exemplify Army values in their words and deeds, they must create the opportunity for every soldier in their command to live them as well. To do anything less is to be less than a leader.

General John M. Schofield described the link between a leader's thoughts and actions when he coined his definition of discipline. "The discipline which makes soldiers of a free country reliable in battle is not to be gained by harsh or tyrannical treatment. On the contrary, such action is far more likely to destroy than make an army. It is possible to impart instruction and give commands in such manner and tone of voice to inspire in the soldier no feeling but an intense desire to obey, while the opposite manner and tone of voice cannot fail to excite strong resentment and a desire to disobey. The one mode or the other of dealing with subordinates springs from a corresponding spirit in the breast of the commander. He who feels this respect which is due others cannot fail to inspire in them regard for himself, while he who feels disrespect for others, especially his inferiors, cannot fail to inspire hatred against himself."

Schofield framed these words in 1879, but they are as true today as they were then. The reality of leaders' performance must match the rhetoric of their words. Schofield's definition reminds us that values-based leadership is not about weakening standards or detracting from the Army's warrior spirit. There is nothing incompatible between the warrior spirit and treating all soldiers with dignity and respect. In fact, when we deny soldiers the opportunity to "be all they can be," the Army as an institution is immeasurably diminished. There is no better guarantee for maintaining our warrior spirit than preserving the constants of Army values and traditions, the bedrock of America's Army.

Changes We Must Accept

While change is itself another constant in Army history, the level of physical and cultural change in the past decade is almost without precedent. Developing great leaders depends as much on acknowledging what will change in the future as on a commitment to preserving past values and traditions.

We must start by recognizing the importance of balancing moral and physical courage. Physical bravery is without question an important part of being a soldier. There will always be a special place for the extraordinary heroism that is the legacy of American soldiers in battle. This courage was epitomized by Master Sergeant Gary I. Gordon and Sergeant First Class Randall D. Shughart, who were posthumously awarded the Medal of Honor for their actions during a firefight in Mogadishu, Somalia, on 3 and 4 October 1993. Without a moment's hesitation, both rushed to the aid of a downed helicopter crew despite the fact that they knew they were facing certain death. The courage of America's soldiers represents unparalleled commitment. As Stephanie Shughart said so eloquently at the award ceremony for her late husband, "It takes a special person to not only read a creed and memorize a creed, but to live a creed."

Living the creed is what Army courage is all about. However, it should not diminish the importance of unbound physical courage to recognize that bravery in battle is only part of what makes a successful soldier. Soldiering is also about the moral courage reflected in the discipline and mental toughness to handle both lethal and nonlethal engagements. Today's soldiers must be able to implement disciplined rules of engagement under stressful and demanding conditions. Our soldiers' performance in Bosnia is an outstanding example of the other "face" of courage. An effective team of AC and RC forces, they performed a complex range of daily tasks and did every one of them to standard. They are a living testament to the Army's capacity to accommodate a rapidly changing international environment.

Perhaps the greatest change we face today is becoming comfortable with using the technologies of an information force to enhance the execution of leadership. Leading in the information age requires new trust and confidence-trust in technology and the confidence to share information and decision making. What I witnessed at Fort Hood during

the 4th ID's AWE was the beginning of a fundamental cultural change in the Army. The 4th ID (M) is without a doubt a world-class "learning team." They discovered, like Peter Senge in his book The Fifth Discipline, that "the organizations that excel in the future will be organizations that discover how to tap people's commitment and capacity to learn at all levels in an organization."

Throughout the experiment, the 4th ID (M) demonstrated an extraordinary capacity for collaborative action, where teammates complement one another's strengths and compensate for one another's limitations. The result is a unit whose performance as a whole is greater than the sum of the individual efforts of its members. Learning teams have the ability to "suspend assumptions" and enter into a genuine "thinking together." This process allows organizations to discover solutions they might overlook if approaching problems merely as a collection of individuals.

New information systems have served as "enablers" for shared understanding and trust. They allow for rapid and accurate commander's intent dissemination and promote immediate group discussion and interaction to foster high-quality, effective battlefield performance. The 4th ID's results tell us that the key to winning future wars is learning how to use information systems to best advantage. Getting the most out of our future force will not happen without deliberate, disciplined effort. Technology can become a straitjacket for the military mind as easily as it can be used to unleash the power of our soldiers. During the Vietnam War, helicopters could whisk commanders to any battlefield at any time. Some used this technology to extend their control over subordinate leaders. We called them "squad leaders in the sky." We must be smarter than that!

Without discipline, accumulating masses of data through information technology can quickly lead to overcentralized decision making. We must have the trust and confidence to empower leaders at all levels with information, allowing them to exercise their good judgment and initiative.

Building Predictability

Today's Army must create an environment that teaches, nurtures and builds on the constants while embracing and leading necessary change. This effort begins with creating a positive, predictable and ethical command climate for our young leaders and soldiers.

In many respects we are not masters of our fate, controlling neither the missions nor budget allocated to the Army. We can, however, give our soldiers a powerful tool for the demands of Army life-predictability. *Predictability* in the force and the training schedule is the key to creating a positive environment. There are responsibilities leaders at every level share, as well as specific actions the senior leaders and field commanders must take to ensure predictability for the force.

We all have a role to play here. Creating a predictable environment begins with setting and enforcing standards. A sergeant major once told me that "the Army is an easy place in which to succeed. The Army has standards for everything, and all we have to do to get ahead is to meet those standards." He had it about right. Every time leaders waiver from a commitment to standards, trouble follows. We must ensure that all leaders understand standards and enforce them-leaders must set the example. In particular, I have charged our Noncommissioned Officer (NCO) Corps with being the keeper of Army standards. Standards are the "crown jewels of the Army." Without them, soldiers will never know what to expect from their leaders.

However, just setting and enforcing standards is not enough to create a predictable environment. Senior Army leaders have an obligation to give commanders and soldiers a reasonable expectation that they will have the time and resources they need. For starters, the Joint Chiefs of Staff are committed to reducing joint training and exercise requirements by 25 percent. This reduction is designed to eliminate the least effective training events and should help reduce the burden on commanders who all too frequently meet themselves coming and going, racing from one training exercise to the next.

Within the Army, we are working hard to give leaders the confidence that they will have the people they need to get the job done. This effort focuses on reducing the personnel shortages and staff vacancies many commanders see in their units. As the Army drew down, a significant gap grew between the number of "spaces" in the force structure and the number of soldiers to occupy those spaces. We are in the process of balancing "faces and spaces," as well as vigorously recruiting to fill chronically short, critical military occupational specialties.

Over the next 12 months these efforts will result in a more predictable and consistent level of manpower for our Army. We are also working hard at maintaining the quality of the force. I am satisfied with the adjustments we have made to recruiting efforts. As a result, the quality of the force today is every bit as high as the Army that fought in Operation Desert Storm. Our initiatives will not solve every unit's shortfalls, but they should give commanders confidence that they can expect to continue to have high-quality soldiers, in greater percentages, to fill their ranks.

Leaders in the field also need to do their part in building predictability. This starts with a commitment to stick to the principles of effective training management regardless of how much turbulence and changes pull on leaders to abandon their effort to take control of the schedule. They also have an important part to play in "slowing down the train." More training is not always better training. I do not believe we can do more with less. However, I do believe we must get the best out of what we get. Fewer but higher-quality training events are more important than ensuring every moment on the training schedule is chock full of activity. Sometimes less is better. In addition, leaders must set and monitor key indicators, such as borrowed military manpower, signs that will tell them if we are making the most efficient and appropriate use of our soldiers.

Creating Ethical Environments

The environment Total Army leaders create needs to be *ethical* as well as predictable. Ensuring an ethical command climate requires commitment to Army values and leadership, as well as a core of relevant, focused programs that build on those constants.

Creating ethical environments starts on the first day of initial entry training (IET). Leaders must recognize that individuals entering the Army have different values bases, and we must pay increased attention to inculcating and reinforcing our standards and values in these soldiers. To help energize the process, the US Army Training and Doctrine Command, in cooperation with the US Army Center of Military History, is developing a structured program that places greater emphasis on Total Army values and traditions during IET. Soldiers will leave for their first assignment enriched with the proud history, winning traditions and deeply held values that stand behind our Army.

But that is not enough. Building soldiers of character only starts in IET. Leaders must immerse their soldiers in Army values and traditions from the day they join up until the day they leave, ensuring that both leaders and led show respect and tolerance of others and unswerving commitment to doing what is morally and legally right. Once soldiers arrive in their units, leaders have a responsibility to reinforce and sustain the ethical foundation built in IET. One aid that has been provided to leaders is the *Ethical Climate Assessment Survey*, which affords commanders a quick self-assessment of their unit and indicators to guide sustaining or improving the ethical climate of command.

Another important tool is the *Consideration of Others* Program that provides commanders a systematic approach for training and sustaining an ethical work force. Modeled on an innovative program developed at the United States Military Academy at West Point, New York, Consideration of Others reinforces Army values through small groups that emphasize basic leadership and respect principles. We are institutionalizing use of the *Consideration of Others Program* and *Ethical Climate Assessment Survey* throughout the Army. They are important tools for building the positive, ethical command climate needed to grow great leaders.

Building for the Future

Creating the right environment to help leaders develop and mature is only part of the task of growing great leaders for the 21st century. Building future leaders also requires long-term, purposeful leader and soldier development programs. The Army is developing these programs under an umbrella concept called *Character Development XXI*.

The Character Development XXI centerpiece effort is the revision of US Army Field Manual (FM) 22-100, Army Leadership. The manual's objective is to provide concise and understandable doctrine that demonstrates the important linkages between the intent and actions of soldiers and junior and senior leaders. The FM puts the "mystery" of leadership into clear, plain language, reaffirming the Army's tested and proven approach to leading. The manual admonishes that there are no easy answers, no substitutes for competent, caring and courageous leaders. FM 22-100 also provides special focus on the character-development process, the importance of teaching values, evaluating an organization's ethical climate and creating a positive, productive leadership environment.

The Officer Personnel Management System (OPMS) XXI and the new Officer Evaluation Report (OER) are also important components of Character Development XXI. Although these are officer programs, they have relevance to the Total Army. They are intended as a start point for institutionalizing Army leader programs for the 21st century. Not only do we expect them to produce officer leaders with the "right stuff" to teach, coach and counsel NCOs, soldiers and DAC employees, we believe these programs will serve as a blueprint for other personnel development initiatives.

OPMS XXI restructures how active duty officers will be managed, developed and promoted over a career of service. The changes it introduces are significant. There were clear signs that the old system was struggling to answer concerns about career security, opportunities to get the right assignment and the stress of high personnel turnover. *OPMS XXI* addresses these concerns by establishing a new career field framework. The career fields are designed to enhance the Army's warfighting capability, shape the structure of the future officer corps and provide every officer with a reasonable opportunity for success. The new system will not only open new opportunities for advancement, command and education, but will better serve the Army's demanding and diverse needs for officer leadership in the 21st century.

We developed *OPMS XXI* hand-in-hand with the revision of the OER system. The new OER will apply to all AC and RC officers. The OER's intent is to create an effective tool for teaching, coaching and counseling, not just rating officers. The new report places special emphasis on ethical attributes and the ability to share and instill those qualities in subordinates. The OER changes, along with OPMS XXI, are important steps in building a personnel development system for the future, one that builds better leaders at all ranks and at all times.

Measuring Future Success

For the last 222 years, we have been an Army prepared for turbulent times, an Army that never relinquished its zest for victory or unshakable dedication to serve the nation-an Army postured to win. I believe that we are still that Army today and that we will remain a relevant, powerful force as the Army continues to change. We will keep the winning edge by holding fast to the constants that make a difference while never losing the confidence that we can adapt to the challenges ahead.

If we are successful at developing great leaders, what will soldiering in our Army look like in the next century? We will see a Total Army team-a seamless team-of AC and RC soldiers, backed by a contingent of dedicated DAC employees and proud partners in industry. We will also see a team of dedicated, enthusiastic and adaptable professionals. They will be prudent risk takers who are unafraid to share information and unleash initiative. Their potential will manifest in powerful organizations built on trust, teamwork, cohesion and discipline.

I am confident we are on the right path to the future and that we have the tools to develop great leaders in turbulent times. During the 4th ID (M) AWE, I watched the young men and women who will lead tomorrow's Army. As I watched them, I asked myself whether I could envision them in battle. Do they have the right stuff to secure America's interests around the world? Can they be entrusted with leading our nation's sons and daughters?

The answer is a resounding "Yes! We have the right leaders." What we need now is the courage and commitment to follow through on the programs that will take those leaders and the Army into the 21st century. **MR**

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A Legacy of Esprit and Leadership

MAJOR GENERAL JOHN A. LEJUNE, USMC

"Combat leader, scholar, thinker, educator, innovator all these describe the man ho became the thirteenth Commandant of the Marine Corps and served as such for nine years during the 1920's" With these words General Lemuel C. Sheperd Jr., 20th Commandant describes MGen John A. Lejeune in the preface to the new edition of Reminiscences of a Marine, Lejeune's memoirs, republished this month by the Marine Corps Association.

Over the years John A. Lejeune has become almost a legend in the Marine Corps. "Besides the many 'firsts' of his distinguished thirty-nine year career," Gen Sheperd goes on to say, "Lejeune can perhaps best be described as the man who charted the course of the Corps in the 20th century. And indeed he did, when he directed a study of amphibious warfare at Marine Corps Schools, Quantico from which the Corps' modern amphibious doctrine evolved. But above all else Gen Lejeune's legacy come down strongest for his model of leadership. He set forth the "teacher-pupil" approach in the relationship between officer and enlisted which still provides the hallmark for Marine Corps leadership.

On 18 January 1921 he spoke to the Army General Staff College (forerunner of the Army War College), Washington, D.C. about esprit and leadership. He found the two inseparable. His message is timeless and proves that in leading men, leadership doesn't change much, only men do. On the 59th anniversary of Gen Lejeune's appointment as Commandant of the Marine Corps, we publish his talk on leadership as he gave it 58 years ago."

When General Smith wrote to me and asked me to come down to the General Staff College and make a talk on the subject of esprit and leadership, I was very loathe to accept. In the first place, I had been at the school here for 14 months and I felt like a fleet officer going back to the Naval Academy, getting up on the platform and talking to the staff and students of the school. In the second place, I have been very busy. I could see ahead that I would be busy with that kind of work which is very distracting; there are so many questions coming up all the time that it is very hard to concentrate on anyone subject. In the third place, I did not think, and I do not know, that I have any very important message which would be of great value to the persons who were going to hear it. However, I wrote out a talk. Ordinarily I talk without note, but I put them down because I might get a case of buck-fever.

Esprit de corps and morale are kindred subjects; in fact. some writers consider them as synonymous. This, however, is not the case, as esprit de corps is only one of the factors which goes to constitute morale.

Morale is three-fold --physical, mental or professional and spiritual. The physical condition of troops has a great influence on their morale. Men whose bodies are untrained physically, who are soft from leading sedentary lives, are unable to stand the strain and stress of long marches and active campaigning. Their morale is rapidly lowered, and they soon become demoralized.

The effect of physical training is exemplified in the case of Stonewall Jackson's division. In the fall campaign of '62, they made such long marches with so few stragglers that they were call the "Foot Cavalry." General Dick Taylor, who commanded one of the Brigades, writes very interestingly in his book entitled "Destruction and Reconstruction," telling how he trained his brigade to march. He said in '61 Jackson's division marched very poorly. It was composed largely of men who were brought up in the country and who were accustomed to ride on horseback, or were city men who were accustomed to riding in carriages. Taylor took his brigade and practiced it in marching during the winter of '61 and '62, so in the spring of '63 his brigade marched so well that it was adopted by Jackson as an example for the whole division. The whole division was practiced in marching with the wonderful results that history tells us about. The morale of that division as we know was very high; perhaps the physical condition of the men had a great effect on it.

Similarly, Troops whose professional or Military training has been neglected, and who are unskilled in the profession of arms, finding themselves unable to cope on equal terms with a highly trained enemy force of equal numbers, have their morale lowered, and it becomes increasingly difficult to obtain results with such troops until and unless they shall have received the careful training and instruction which all troops should have before being thrown into battle.

There are many instances in history of the failure of untrained troops. They are particularly liable to panic. I think in

our own history the most notable example is the Battle of Bull Run, where the Union Army became panic-stricken in the afternoon of the battle and broke and fled to Washington, General Grant tells us in his memoirs of a regiment in Illinois which was badly officered. Reports came into the governor's officer of the depredations of the troops. They seem to have committed atrocities all around southern Illinois, murders, robberies, drunkenness, everything of that kind. The Governor turned to General Grant, then Captain Grant, and said, "What are we going to do?" Grant said, "Give me command of the regiment and I can train them." He was appointed colonel and took command of this regiment, instructed the officers, trained the men, worked them about eight hours a day, and in a few months it was the best regiment of the Illinois troops.

Esprit de corps is the third factor in morale, affecting, as it does, the spirit of the troops. Like everything pertaining to the spirit, it is intangible, imponderable, and invisible, Esprit itself cannot be perceived by any of the five senses, but nevertheless, every leader of men knows that it does exist and that it is the most potent of the forces which hit is necessary to utilize in order to achieve victory.

Napoleon has said that, of all the elements that go to make up battle efficiency, morale constitutes 75 per cent, or that morale is to the material as three to one. Marshal Foch, I have read, has increased the value of morale of the material to four to one.

When we consider the meaning of these statements, we are at first amazed to find that these great masters of the art of war I have apparently gone on record as believing that the element of morale in any organization or army is three of four times greater than the combination of all the material factors, such as the weapons of the infantry, artillery, and cavalry, and, in the case of Marshal Foch, of the air service as well. It is beyond the power of the average man's comprehension to fully visualize this. The version of their statements is, of course, an exaggeration, in that unarmed troops, no matter how high their spirit, could not overcome troops fully armed and equipped with modem weapons, unless they were absolutely lacking in morale, which is practically inconceivable, as even the most inferior troops have some spark of martial spirit, and are not altogether cowards.

What I think was intended to be conveyed by the statement of Napoleon was, that an army with high morale, and necessarily high spirit, could defeat an army of low morale, and necessarily low spirit, which was three times as strong in numbers. A study of history shows that this has happened over and over again. In fact, small forces have defeated armies much greater than three times their size. The Battles of the Greeks with the Asiatic armies alone are sufficient to establish the truth of this statement. For instance, Alexander's conquest of Asia; Xenophon's successful retreat with 10,000 men through the heart of Asia Minor although surrounded by hundreds of thousands of the enemy; the battles of Marathon, Thermopalae; and many others.

The Roman armies also overcame forces many times greater than they in numbers through their superiority in morale. A handful of Roman citizens ruled the world until the Roman Empire broke down through the loss of morale on the part of its people, when it then became an easy prey to hordes of barbarians who had continually pressed against its outer circumference for centuries.

Napoleon verified the truth of his belief by winning many battles with forces inferior in numbers to those of his opponents.

If it be accepted then as true that the esprit de corps of any body of troops is of such tremendous value, evidently it is a most important subject for a military officer to study. To be able to create and maintain this living thing which we call "esprit" in the hearts of his troops is to be a great leader. Whatever he be a platoon, a company, battalion, regimental, division, or army commander, the subject is worthy of his careful attention, and no officer should rest satisfied until he feels that he possesses that greatest of all assets the ability to play upon the emotions of his men in such a manner as to produce that most wonderful of all harmonies -the music of the human heart attuned to great deeds and great achievements.

To be practical, then, how can we produce and cultivate morale, and particularly that important element of morale - esprit in our troops? the physical and mental, or professional phases of morale are well known to all of us. To acquire them it is simply a matter of applying practically and intelligently the rules laid down for physical training and military instruction. No proper excuse can be made for failure on the part of officers to bring their troops to the very finest physical condition and to so instruct them as to make them as skillful as the best in the profession of

arms. These things are the manifest duty of every officer, including the subaltern, and any officer who fails in the performance of his duty in these respects is unworthy to hold a commission. They are the very "ABC" of his profession.

The third factor -the spirit- is a more or less unknown field to all of us and a field which it is very difficult for us to comprehend by the exercise of our mental faculties. Logic and reasoning play by a small part of it. Education assists but little. It is a matter of dealing with the emotions, the spirit, the souls of the troops. A man successful in this realm is a great leader, and qualities necessary to make him successful are known as the qualities of leadership. How, then, shall we inculcate and cultivate these qualities and become creators of esprit and therefore, successful leaders of men?

Perhaps we can learn more on this subject, as on all military subjects, by the study of history than by any other method. By consulting history, let us determine who were some of the great leaders and then ascertain, if possible, the methods used by them.

All of us are familiar with the great Hebrew leader called Moses. All of us know, in a general way, that he reorganized his people and gave them a system of government, a body of laws, and a religion, but I do not believe that the average person quite comprehends the tremendous power of his leadership and the causes of his success.

Let us recall to our minds the old Bible story describing the history of the Jews in Egypt, their wanderings in the desert, and their entry into the Promised Land. These people, after several centuries devoted to carrying out the decree of Heaven to be fruitful and multiply, had become a numerous people, so numerous, in fact, as to make their masters, the Egyptians, fear that they might rise and overthrow them. In consequence, the ruler of the Egyptians enslaved them. He forced them to live in a crowded ghettos, deprived them from the use of weapons, compelled them to do treadmill work, make bricks without straw, and did everything else in his power to abuse them physically, mentally, morally, and spiritually, In spite of this, the ruler of the Egyptians still feared these people, and in order to prevent their rapid increase in numbers, he issued an edict that the first born male of each family must be slain at birth. The mother of Moses, in order to save his life, hid him in the bullrushes, and he was found and adopted by the daughter of Pharaoh. He was given the high degree of physical and mental training reserved for the ruling classes of Egypt.

Moses, upon attaining manhood, brooded over the condition of his people, and finally left the court of Egypt and went out into the desert, where he spent several years preparing himself for the mission which he had personally assumed that of freeing his people and leading them into Palestine. During this time, he had opportunity to study the lore of the desert, to train himself in the profession of arms, and to sanctify his spirit to the unselfish service of his people and of his God.

This great leader, upon his return to Egypt, finally after many vicissitudes, secured the permission of Pharaoh to remove the Hebrews and their belongings from Egypt, and actually succeeded in doing so. We know, at the present time, that the march from Egypt to Palestine is one of only a few weeks, although the Bible tells us that the Israelites were lost in the wilderness and wandered about, apparently in an aimless manner, for 40 years.

It is inconceivable that Moses could have allowed this to be done without purpose. He had lived in the desert for several years; he knew where guides could be found; and he knew the routes across the desert himself. A careful study of the Biblical account shows clearly that the wanderings of the Israelites in the desert were carefully planned by Moses himself, and that he took advantage of this opportunity and of the time to build up the morale of his people. These poor and feeble ghetto dwellers either died from exposure or became hardy by their continued wanderings, their open-air-life, and by the very difficulties which they had to surmount. They were compelled to learn the use of weapons and the lore of the desert in order to live. Moses taught them how to get food by the chase, how to find water springs, and how to utilize the fruits of the ground which they found from time to time. All of these things were so marvelous to them that they were called miracles.

Moses combined with this perfection of the physical instruction and training, the cultivation of the spirit of his people, He did everything in his power to cause them to lead virtuous and clean lives; he gave them the Ten Commandments, under circumstances which powerfully impressed the imagination of the ignorant Israelites, and these Commandments have come down to us unchanged and still constitute guides in the lives of all civilized people. He drew up and enforced a body of wise and salutary laws. He organized them by tribes into 12 fighting

units. He insisted upon their adoption of the worship of the only true God.

Finally, after they had lived for 40 years in the wilderness, during which time every man, woman, and child who had left Egypt -with the exception of Moses, the civil ruler, and Joshua, the military leader -had died, Moses was able to look upon his people and see, in place of the weak and feeble race he had led from Egypt, a warlike host of 600,000, every member of which had been born, raised and developed in the desert, who were injured to hardship, were vigorous physically and alert mentally, trained in the use of warlike weapons, organized into a fighting force, filled with a religious enthusiasm which amounted to controlled fanaticism, and determined to reconquer the land which they had been constantly taught had been promised their forefather Abraham by God himself. Moses and Joshua therefore concluded that the time to enter Palestine had come. Moses himself, having completed his work, turned over the control of this warlike host to Joshua, and climbing to the top of a mountain, saw the Promised Land in the distance and was gathered to his Fathers.

Joshua led the troops into the Promised Land, easily overran the country, conquered and destroyed the tribes occupying it, and his people took it for their own.

This constitutes, I believe, the greatest example in history of the upbuilding of the morale of a whole people, and the changing of a race of slaves into a nation of mighty warriors.

There are other similar examples in history, although not quite so striking. Hannibal after the First Punic War prepared himself and the Carthagenians, a commercial trades-people, for the great war with Rome which he saw could not be avoided. The history of the early years of the Second Punic War tells us of his marvelous success. Cromwell led a religious rebellion against the king, carrying the Puritans to victory. George Washington for eight years led the revolutionary armies of our own country and kept up the spirit of his faltering compatriots. Napoleon seized the opportunity of a regenerated France, whose people were fired with an enthusiasm for liberty and freedom, to lead her armies into the path of military glory and conquest. Finally, in the World War [1) we have the example of our own country -a peaceful nation -suddenly becoming filled with military ardor and the fighting spirit.

In nearly all of these great historical examples, we find a great leader who, in his own character, was the incarnation of the aspirations of his people and who, in his turn, built up their morale and esprit and led them to their goal

Human nature is much the same as it has always been, although it has evolved with its environment, and the first essential of a successful military leader is to be able to understand and comprehend the emotions and the spirit which lives in the hearts and souls of the men he commands.

The study of leadership involves, therefore, first of all a study of human nature, One must put himself in the place of those whom he would lead; he must have a full understanding of their thoughts, their attitude, their emotions, their aspirations, and their ideals; and he must embody in his own character the virtues which he would instill into the hearts of his followers. True esprit de corps is founded on the great military virtues such as unselfishness, self control, energy honor and courage.

In time of peace, the cultivation of esprit is much more difficult than in time of war. The men have no great mission before them and it is hard to convince them that it is necessary to train arduously and to prepare themselves for an eventuality which does not appear to be imminent. Careful instruction in the history and traditions of their organization is of the utmost importance.

The United States Marine Corps has always been noted for its esprit de corps. This has been largely due to the fact that it has always been in competition with some other arm of the service. It habitually serves side by side with the Navy, and every officer who is worth his salt feels impelled to have his detachment, company, or other organization, win out in every competition, whether it be baseball, football, or other athletic activities, target practice, drills, discipline, appearance, conduct, military etiquette, or any of the other many things which go to make for efficiency. This competitive spirit is constantly drilled into the men, and as a result, every good Marine is ever on the *qui vive* to find some way to "put it over" the Navy. The same spirit exists when the Marines are detached for service with the Army, and an appeal to it always receives a response. The esprit of the Marines is that of the Corps, and while there is always a regimental and company esprit, the esprit of the Corps predominates.

In peace times too, creature comforts have a great effect in keeping up the morale of the men. The officers must see to it that the men are properly housed, clothed, and fed and that their time is taken up in useful and interesting instruction and entertainment, Idleness is the curse of the military life, but any treadmill instruction is a poor substitute, Officers must use ingenuity and initiative and must have their own minds trained and developed so that they can properly train their men. Discipline, in its true sense, should never be neglected. The men should be made to realize its great importance, but in enforcing it, officers should never be harsh or arrogant in their dealings with their men, but always kind, humane, and just.

In time of war, the leader must keep in touch with the current of thought of his men. He must find out what their grievances are, if any, and not only endeavor to correct the faulty conditions, but also to eradicate any feeling of discontent from their minds. He should mingle freely with his men and let them understand that he takes a personal interest in the welfare of every one of them. It is not necessary for him to isolate himself in order to retrain their respect. On the contrary, he should go among them frequently so that every man in his organization may know him and feel that he knows them. This should be especially the case before battle.

He should watch carefully the training and instruction of the troops, and let them see that he is determined that they shall be fully prepared for battle. And if there be no liability of the information reaching the enemy, he should take his entire organization into his confidence and inform them of the great events that are taking place in other theaters of operations, the part being played by other units, and by their allies, if any; and give them full information of the eve of battle as to the plan of operations and the part to be played by each unit of the organization. Of course, that depends entirely whether or not the information can be kept from the enemy, if you are in reserve position, for instance.

It is especially advisable, whenever it can be done, for the commander to assemble his troops by battalions and address them, telling them of the great traditions and history of their organization and appealing to their patriotism and their esprit de corps. No stone should be left unturned to fill their hearts and minds with a determination to conquer, no matter what difficulties are to be overcome, and what losses they may be called on to suffer. The commander himself should be the symbol of the fighting spirit which he endeavors to foster and should show in himself a good example of patriotism, honor, and courage.

The first words of the Article of Government of the Navy, which correspond to the Articles of War, require that the commander of every vessel should show in himself an example of virtue, honor, patriotism, and subordination. That is the preamble for the Article of Government of the Navy.

In the larger units, it is frequently impossible for the commander to address all of the men or to come in personal contact with them. In this case, battle orders should be issued. These orders should be based on a careful study of the problems involved and an intimate knowledge of the thoughts of his men. Following the battle, it is well, too, to issue an order recounting the exploits of the troops and telling them of the effects of their efforts. At this time the men are exhausted in mind and body, and even though they may have been victorious, they are depressed in spirit on account of the many losses they have suffered; their comrades have been killed and wounded, they have witnessed many terrible scenes, and every effort should be made to cheer and raise their spirits. Praise and commendation should be given freely; decorations should be promptly awarded and delivered immediately after withdrawal from the front lines. Addresses to organizations which have distinguished themselves should be made. Replacements should be furnished promptly, if practicable, and the thoughts of the men immediately turned to building up their shattered organizations and preparing again to strike the enemy. Skulkers and cowards should be promptly and publicly punished so that all may see the great gulf which separates them from the gallant men who have served faithfully and courageously.

One is just as important as the other. The way it appealed to me overseas is that there were three classes of men. The first class, [were] the gallant, courageous fellows who did not require any urging or any leadership practically, but who from a sense of duty, loyalty, and patriotism would stay up in the front lines and fight until all hell froze over. And the third class, [were] the skulkers, the white-livered fellows whom you could not expect anything of at all. Then there was a great middle class who could be swayed either way, and that was the class you had to deal with. If the services of the men who fought bravely were not promptly and properly recognized on the one hand, and if the skulkers and cowards were not punished on the other, the sentiment might grow that it was just as well to skulk. You got nothing for doing your duty and you got nothing for not doing your duty. The two go hand in hand, and

punishments should be prompt and merciless to a real coward. On the other hand, praise, commendation, and rewards should be freely given and promptly given. The French, I think, understood the psychology of their troops and decorated them immediately after they came out of the fight.

Finally, the most vital thing is to make the men feel that they are invincible, that no power can defeat them, and that the success of their country's cause depends on the victory of their organization.

I mentioned in reading this about informing the men beforehand what they were going to do. That policy was exemplified before the Second Division went into the battle of the Meuse-Argonne. We moved up in the reserve of the Fifth Corps. We had the general officers and the chief of staff, who was Colonel Ray, at several conferences at Fifth Corps headquarters, in which General Summerall explained in the greatest detail just what each division of the corps and the whole army was to do on November 1st. I took this back to division headquarters and had the senior officers of the division together, and Colonel Ray and myself explained everything to them. We were then in reserve with no opportunity for information to seep through the lines, It was directed that every officer and every man in the division be informed of the part we were going to play and what the object of the battle was, and what would be accomplished if victory was achieved. A map was drawn and given to every platoon, and each platoon leader had his men up and instructed every one down to and including the privates of just what his platoon was going to do in the battle. There was plenty of time and opportunity to have it all worked out in advance and the consequence was that the whole division felt absolutely certain what it was going through on that day and it did go through.

The Fourteen Basic Traits of Effective Leadership GENERAL CHARLES C. KRULAK

Do we really know what leadership is? A general in the Marines gives their definition.

About Campus, October 1998

Leaders in education and leaders of Marines have more than a few things in common. We share the rewarding experience of shaping the lives of many young people. We face the challenges of communicating with them about new *ideas* and exploring the meaning of *ideals*. We serve as role models. Some of us lead the institutions which enable our programs to succeed. Some of us lead "down in the trenches" with the students and individual Marines. Whether preparing young men and women for the defense of our nation or, in contributing to their moral, intellectual, and professional development, our ability to make a lasting impact on the future leaders of our nation is, in many cases, directly proportional to the quality of *our* leadership.

Leadership is a core competency in the Marine Corps. We devote a great deal of effort studying and practicing the art of leading ... of influencing. As a result of this ongoing process, we have defined a list of fourteen basic traits of effective leadership. These traits are applicable to all leaders, not just those who must take men into the cauldron of combat. They are equally applicable to the successful businessman, corporate executive or volunteer worker. They are just as important to an educator or administrator. Some of the traits may appear to have more application to the military than to academia, but, if you will look closely, you will find all of them to be relevant.

The first trait is **bearing**. This is a trait easily associated with military leaders, but for many, the importance of this trait to others may not seem clear. Your bearing determines how you are seen by those you would influence. Do not confuse bearing with some preconceived idea of proper dress. This is not about the quality of your clothes, it's about the person inside. It is about how your present yourself. It is about self-confidence. Are you worthy of attention? It's hard to give a leader a full measure of credence if you can't get past a careless appearance, or the way in which a timid deportment denigrates confidence in their message. Speaking directly, with confidence, and with a carriage which says, "I know what I'm talking about" is an important trait for successful leadership.

The next trait is **courage**. Courage comes in two forms; physical and moral. While we certainly hope that there is no need for physical courage on our campuses, moral courage is a fundamental requirement of all effective leaders. Moral courage is a commitment to doing what is right. A leader must commit to inviolate principles ... there is no room for situational ethics. Leaders worthy of respect do the right thing, in the right way, for the right reasons. Young people, still struggling with the development of such qualities within their own character, respect honesty, trustworthiness, equity, and honor. They respect leaders who stand up for what is right.

Decisiveness is easy to understand, but sometimes difficult to achieve. Some of us are inherently decisive. Some are not. But regardless of your personality, decisiveness is an important part of leadership. Do not, however, confuse decisiveness with inflexibility. There is a difference between changing a course of action based on developing conditions, and just failing to be consistent. Whether personnel policies, combat decisions, or staying to timelines for the submission of class projects, the ability to be decisive has a direct impact on how the leader is accepted.

Another basic tenent of leadership is **dependability**. Can you be depended upon? The meaning seems clear enough. Students must be able to depend on the faculty to manage the institution, to be on time for class, and to perform the perfunctory duties associated with their positions. But leadership requires more. Those being led need leaders who are genuinely concerned for their welfare. They need role models. Leaders do not have jobs to which they come, and then leave. Leaders must be dependable people ... all the time.

Endurance is a trait easily associated with the rigors of combat. It conjures images of physical stamina and sustained hardship. But endurance can also mean patience. It can mean going the distance with a student who is struggling. It can also mean taking the long view to see to the greater good of an institution. Endurance, as the word implies, means staying with things, even when the going gets rough.

Enthusiasm is a trait easily identifiable with successful leaders of all walks of life. It's easy to infuse energy when you exude energy. Enthusiasm is more than just attitude though. It permeates the work at hand. Routine lectures

become interesting presentations and tedious projects become intriguing endeavors. Enthusiasm is contagious ... doubly so, when it originates from the front.

A leader who simply does that which they have been tasked, will not be seen as much of a leader. But, anyone who displays a high degree of **initiative** is instantly recognized as a leader. Are you satisfied with the status quo or can you think and act out of the box? Throughout our history, those who offer vision, who have acted insightfully, have been our greatest leaders. Initiative is often one of the most recognizable traits in a leader ... it sets you apart.

Integrity is closely related to moral courage. But where moral courage is centered around the willingness to take action, integrity is a spotlight into your soul. Integrity is more than the manifestation of your honesty. It is the litmus test of respect ... it determines whether you will be taken seriously or not. Fail the integrity test in a young person's eyes and you will fail to be a positive influence for them.

Leaders exercise sound **judgment.** This is particularly important on those occasions when you are out in front, taking the initiative. It is critical that a leader's decisions be based on all the facts available. It is important that rational and comprehensive thought be included in the decision making process. For all this, decisions boil down to a matter of judgment. Sometimes the key to sound judgment is making the time to duly consider the issue at hand. This is not at odds with being decisive. It is at odds with acting hastily.

Justice is all important. There are few quicker ways to lose a following than to appear arbitrary, partial or unfair. Standards are critical. Set them, articulate them, model them, and hold everyone to the same measure equally. Young people will respond. They are comfortable in an environment where they know the boundaries. We all like to know what's expected of us and the consequences of failing.

To lead others, you must know your business. Whether, a platoon commander, an instructor, or an administrator, leaders must have a degree of resident **knowledge** in their respective field. We, who are leaders, know that one of the keys to our effectiveness is staying current in our profession. We accomplish this through continuous self-improvement. We read. We attend seminars and take courses. We listen. Knowledge is perishable. But, the building of knowledge is also easy. Unlike bearing, decisiveness, or even enthusiasm, knowledge is equally acquired by introverts and extroverts alike. All it takes is commitment

Loyalty is an interesting leadership trait. You cannot build or gather loyalty. It must be given to you freely by those you lead. You can ask much from them, but you cannot tell them to be loyal. You earn loyalty in two ways. First, you exhibit character worthy of loyalty. Your reputation is important. We follow those we admire and respect. Second, to be worthy of allegiance you must exhibit loyalty yourself. Loyalty flows two ways. If you are not sincere in caring about those who you have authority over, how can you expect them to care about you or what you are trying to accomplish?

Leaders must use **tact**. This is simple enough in concept, but often, not so simple in execution. Good people skills go a long way in the art of leadership. There are many ways to convey a message. No one appreciates an uncaring dismissal or a careless evaluation. Often the meaning of our message can be overpowered by its poor presentation. Where and how you communicate can be as important as the words themselves. The old adage of "praise in public and reprimand in private" is an axiom of effective leadership

Finally, leaders must be unselfish. **Unselfishness** is instantly recognized and appreciated. It manifests itself in many forms, from taking the time to properly prepare for class, to being accessible after hours. Subordinates and followers need to know that their leader has their best interests at heart. This should be an especially easy trait for those who have committed themselves to education. Yet, remember that in leadership, perception is nearly as important as reality. You know you have their best interests at heart ... but that is not enough. They must know it too.

These fourteen traits form the foundation for successful leadership. Think about it and then ask yourself, "aren't these the kind of traits I find in the leaders I respect?"

We who work with the young people of this country, have a great responsibility. It is not enough for us to harness their energy and guide them in their endeavors. We must provide capable leadership and demonstrate strength of character in our daily lives. We are the examples from which they will pattern their lives. Opportunity lies at our

| feet. We have the chance not to just teach, but to influence the character of our young people and hence the future of our society. We have the chance to lead! |
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Leadership: A Return to Basics

GENERAL EDWARD C. MEYER, US Army

The late 1970s and early 1980s were trying times for the US Army as it struggled to recover from Vietnam and establish a credible All-Volunteer Force. During these years, Army senior leaders tried various leadership theories and slogans. By 1980, however, they returned to more traditional leadership methods. In this July 1980 lead article, then Army Chief of Staff General Edward C. "Shy" Meyer reflects this shift as he distinguishes between leadership and management. While acknowledging a place for management in the Army, Meyer clearly stipulates the primacy of leadership in soldiering.

WHEN I BECAME CHIEF OF STAFF, I set two personal goals for myself. The first was to ensure that the Army was continually prepared to go to war, and the second was to create a climate in which each individual member could find personal meaning and fulfillment. It is my belief that only by attainment of the second goal will we ensure the first.

The most modern equipment in the world is useless without motivated individuals, willingly drilled into cohesive unit organizations by sound leadership at all levels. Expert planning, Department of the Army pamphlets, regulations and field manuals will not of themselves rescue the disaffected soldier from apathetic performance of his or her duty. Neither the soldier nor his comrades will survive the first challenge of either the modern world or of the battlefield outside a climate of active and concerned leadership. Because we are a community, a way of life, we cannot isolate our concern to only one of these environments. Our commitment must be complete if we expect dedication returned in kind.

The clear linkage is that our ability to go to war hinges critically on the quality of leadership within the US Army; leadership, what James MacGregor Burns called "one of the most observed and least understood phenomena on earth." 1

Napoleon listed 115 contributing qualities in trying to define the essentials of leadership. We have no way of knowing if his description was complete at number 115 or if he was otherwise distracted. Some authorities focus on three, five or 10 aspects, while others, perhaps more wisely, begin and end their list with only one, or describe broad theories about leadership. None of these efforts is complete, yet none of them is useless either, if they assist the professional who already has a firm grasp on fundamentals to better understand and practice leadership.

Need for a Renaissance

Is there a need for a renaissance in the art of military leadership today? I think so. Not because I sense an Army starved for adequate example, but because the circumstances have been such over the past several decades that confusing models vie for attention. Some are woefully deficient and totally inappropriate for tomorrow's battlefield. We need to discuss openly the fact that we have been lavish in our rewards to those who have demonstrated excellence in sophisticated business and management techniques. These talents are worthwhile to a leader, but, of themselves, they are not leadership. We need to discuss openly the impact that six-month command tours in Vietnam may have had on the perception of a commander's commitment. Under the circumstances of that war, it may have been unavoidable. In the process, have we eroded essential values?

We need to recognize that we have lived through an era in which this country enjoyed massive nuclear superiority. Previously, it was possible to accept less than optimal decisions in the certainty that very few things relating to land forces could be of critical consequence. That is, given our massive, nuclear advantage, only a madman would have challenged us directly. That is no longer the case. Today, we need sensitivity and backbone beyond that which the past several decades have demanded.

We need a renaissance in the art and practice of leadership because this country cannot suffer through the same agonies in a future mobilization which time permitted us to correct the last time around.

The early maneuvers of 1940 turned a harsh spotlight on the then current "training weaknesses of the Army: lack of equipment, poor minor tactics, lack of basic leadership in many units, and some inept command leadership by officers of high rank." This despite the pre-1940 emphasis of the Regular Army on leadership, administration and

technical skills. What was uncovered was a proficient relationship between the leader and the led, rooted in peacetime administration-but insufficiently developed to withstand the rigor of combat.

General George Marshall's strategy was to correct the weakness "by arduous training and by the more drastic solution of eliminating the unfit." We are precisely on that track today. But the climate is somehow different. The leader of the 1940s was training to go to war with his unit for the duration. There was no certainty that at some point he would be plucked out of his situation in adherence to a rigid career development pattern. His career extended only to the bounds of developing his unit so it could survive in combat. He would likely see it through there or at an echelon or two above that unit, still dependent upon its continued excellence.

We would be wrong today to invoke a "for the duration" mentality which excluded preparing the force for its future. That is an essential. But we need to root out those situations where such progression denies full loyalty and devotion to the soldier and the unit.

Despite some of its narrowness, for there was only one way, "the Army way," the Army of World War II was a professional force of immense energy whose traditions were strong and whose values were clear. Service parochialism and narrowness helped to spawn a revolution under Robert McNamara in the early 1960s which sought to rationalize interservice resource demands by the adoption and adaptation of business-oriented management techniques. The intent was that the Department of Defense could and should operate as effectively and efficiently as private enterprise.

Ironically, some of the techniques were ones developed by the military during World War II to achieve high-priority goals in specific sectors of our war machine (strategic bombing, weapons development, antisubmarine warfare).

At no time did anyone say, "Let's have an Army of managers-leaders are passé." However, once the system became firmly entrenched, its power and grasp implied to many that the newly arrived technocrat was an attractive alternative career model. Imperceptibly at first, then with a rush, the traditional focus of leadership slipped for many into the abyss as increasing emphasis was placed on management and specialization. Excellence in its theories and principles became for many an alternative to leadership. Unfortunately forgotten was the fact that employees of Sears Roebuck and Company or General Motors Corporation were not asked to give up their lives for corporate cost-effectiveness!

Leadership and management are neither synonymous nor interchangeable. Clearly, good civilian managers must lead, and good military leaders must manage. Both qualities are essential to success. The size and complexity of today's Army, given no overabundance of resources, requires the use of managerial techniques. Their use is essential if we are to maintain and improve our posture.

Accordingly, such training and practice are important. But the leader must know when and how to apply them, never forgetting that the purpose of an Army is to fight. And, to fight effectively, it must be led. Managers can put the most modern and well-equipped force into the field. They cannot, however, manage an infantry unit through training or manage it up a hill into enemy fire to seize an objective.

Two Lessons

In this context, two lessons are important-first, techniques which work well for the management of resources may prove disastrous when substituted for leadership on the battlefield. Conversely, techniques which work well for the battlefield may prove disastrous when substituted for management. Management and leadership are coequally important-not substitutes for one another.

Strong personal leadership is as necessary today as at anytime in our history. That which soldiers are willing to sacrifice their lives for-loyalty, team spirit, morale, trust and confidence-cannot be infused by managing. The attention we need to invest in our soldiers far exceeds that which is possible through any centralized management system. To the degree that such systems assist efficient operation, they are good. To the degree that they interfere with essential relationships between the unit and its leader, they are disruptive. Management techniques have limitations which leaders need to identify and curb to preclude destructive side effects.

Just as overmanagement can be the death of an Army, so can undermanagement, which deprives units of essential resources. Leaders need to be active to identify either extreme, for either can impact on the ultimate success of committed forces.

The kind of leadership we need is founded upon consideration and respect for the soldier. That thought is not new. Over 400 years ago, Machiavelli's prince was taught that "... in order to retain his fidelity [he] ought to think of his minister, honoring and enriching him, doing him kindness, and conferring upon him honors and giving him responsible tasks...."4

Repeated through the ages by others, the message-like an overworked popular recording-may have lost its freshness. Societally accustomed as we are to discarding the old for the cleverness of the new, we weary of redundancy and look for the new buzz word, the new turn of phrase: VOLAR (Volunteer Army), DIMES (Defense Integrated Management Engineering Systems), Zero Defects, Management by Objective, Organizational Effectiveness, and so forth. Again, let me remind you, these are all good management-related programs, but not if they replace the essence of leadership essential to an effective Army.

There are no tricks or gimmicks in the watchwords of General John M. Schofield, and I commend them to you: "The one mode or the other of dealing with subordinates springs from a corresponding spirit in the breast of the commander. He who feels the respect which is due to others cannot fail to inspire in them regard for himself, while he who feels, and hence manifests, disrespect toward others, especially his inferiors, cannot fail to inspire hatred against himself."5

The summation of leadership leaves the reader to supply his personal "tag line." The premise involves a cultivated feeling by the leader for the attitudes, needs, desires, ambitions and disappointments of the soldier-without which no real communication can exist.

Leaders cannot, must not, blind themselves to a one-answer, one-method scientology. They must discover the method best suited to motivate and employ each soldier. Time and one's earnest interest are necessary regardless of method. The end result is an organization which is ready and willing to follow despite hardship or adversity.

In our business, these are much more prevalent than elsewhere in our society. There are obvious hardships associated with battle; there are also the hardships of peacetime duty-coping economically in a foreign land, coping with old and run-down facilities, coping with constraints on training resources, to name a few. All these will be accepted and creatively overcome by units whose members sense their leader's genuine interest and commitment to their welfare. Abraham Lincoln said that "You can't fool all the people all of the time." 6 To that, I would add that you cannot fool a soldier anytime! The leader who tries chooses a hazardous path.

Types of Leadership

How concern and respect are manifested by each of us is the essence of leadership. Just as there are two types of diamonds-gem and industrial quality-there are two types of leadership. The first type, the gem quality, is functional if we only desire our leadership to appear beautiful. The second, or industrial quality, though not cleaved, faceted and polished, is the more functional because it uses are creative. The Army's need is for the industrial quality, the creative quality of leadership.

Just as the diamond requires three properties for its formation-carbon, heat and pressure-successful leaders require the interaction of three properties-character, knowledge and application.

Like carbon to the diamond, character is the basic quality of the leader. It is embodied in the one who, in General [Omar] Bradley's words, "has high ideals, who stands by them, and who can be trusted absolutely."7

Character is an ingrained principle expressed consciously and unconsciously to subordinates, superiors and peers alike-honesty, loyalty, courage, self-confidence, humility and self-sacrifice. Its expression to all audiences must ring with authenticity.

But as carbon alone does not create a diamond, neither can character alone create a leader. The diamond needs heat. Man needs knowledge, study and preparation. The novice leader may possess the honesty and decisiveness of a

General Marshall or Patton, but, if he or she lacks the requisite knowledge, there is no benchmark from which that character can take form. A leader must be able to choose the harder right instead of the easier wrong, as it says in the Cadet Prayer [US Military Academy, West Point, New York], but the distinction cannot be made in practice unless the leader possesses knowledge equal to the situation.

General George Patton, once accused of making snap decisions, replied: "I've been studying the art of war for forty-odd years. When a surgeon decides in the course of an operation to change its objective . . . he is not making a snap decision but one based on knowledge, experience and training. So am I."8

To lead, you must know your soldiers, yourself and your profession. The third property, pressure-acting in conjunction with carbon and heat-forms the diamond. Similarly, one's character, attended by knowledge, blooms through application to produce a leader.

Generally, this is expressed through teaching or training-grooming and shaping people and things into smoothly functioning units. It takes many forms. It begins by setting the example and the day-to-day development of subordinates by giving distinct, challenging tasks and allowing free exercise of responsibility to accomplish the task. It extends through tactical drill, weapons operation and maintenance, operational planning, resource management, and so forth. Finally, it is the imparting of knowledge to superiors, for they must digest the whole of their organizations and rely increasingly on judgments from below.

Individual Growth

These three properties, brought together, form, like the industrial diamond, a hard, durable creative leader. As the industrial stone is used to cut glass, drill for petroleum products and even for creation of the brilliant gem diamond, leadership works to create cohesive, ready, viable units through a climate which expresses itself in its concern for the growth of the individual.

Growth in a single dimension, that limited to excellence in applied military skills, is only part of the challenge to today's leadership. Alone, it runs the risk of buying single-dimensioned commitment. Full dedication comes by providing a basis for rounded individual development pertinent to survival in life in its broadest aspects.

Today's soldiers seek to become capable citizens across the four critical dimensions of man. The Army, through its leaders, can assist their development mentally, physically, spiritually and socially, equipping them for survival in and out of uniform. Each soldier meaningfully assisted toward development as a whole man, a whole person, is more likely to respond with his or her full commitment.

The leader who chooses to ignore the soldier's search for individual growth may reap a bitter fruit of disillusionment, discontent and listlessness. If we, instead, reach out to touch each soldier-to meet needs and assist in working toward the goal of becoming a "whole person"-we will have bridged the essential needs of the individual to find not only the means of coming together into an effective unit, but the means of holding together.

Then, we will have effected a tool capable of fulfilling the purpose for which we exist: our ability to go to war. We can then hopefully influence the decision of those who might be tempted to challenge our nation.

As with all scientific and artistic endeavors, one begins with basics. We must get back to the established basics of leadership. They provide the foundation from which our Army draws its inspiration, its capability and, ultimately, its effectiveness. *MR*

NOTES

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Notes on Leadership for the 1980s MAJOR GENERAL WALTER F. ULMER, US Army

In this July 1980 article, then Major General Walter F. Ulmer Jr., 3d Armored Division commander, expresses concern about the Army's organizational climate and its impact on leadership effectiveness. He calls for a return to basics-discipline, rewards for excellence, strong physical training-at a time when Operation Desert One, the US attempt to rescue the hostages in Iran, failed, embarrassing the United States and its Armed Forces. In Ulmer's opinion, a healthy organization and sound leadership reinforce each other to the benefit of all.

Anecdotal materials on leadership in the US Army have not changed much over the past 40 years. In the general sense, there have been no "breakthroughs." We have seen the discussions of leader "traits" give way to a broader discussion of leader "behavior" and the leadership "processes" within different levels of the organization.

Such documents as the Leadership Monograph Series (Leadership for the 1970s) produced by the US Army War College (USAWC) and the US Army Administration Center, and the text A Study of Organizational Leadership, edited by the office of Military Leadership (now the Department of Behavioral Science and Leadership) at the US Military Academy, along with the current version of Field Manual 22-100, *Military Leadership*, seem to provide plenty of background material. However, these comprehensive explorations into theory and practice do not address in detail the impact of the organizational climate on the effectiveness of individual leadership.

Several ongoing excursions-such as the US Army Training and Doctrine Command's Task Force Delta-are exploring the complex relationships and processes within military organizations. Elements within the Office of the Deputy Chief of Staff for Personnel, the USAWC, the Army Research Institute for Behavioral and Social Sciences and others are probing the contemporary organizational climate. And well they should. We may have to spend more of our teaching efforts on the analysis of the climate in which we lead than on individual leadership methods-although all of us need continuing education in both of these subject areas.

We do not have any real options on whether or not we collectively upgrade our individual leadership skills and improve the climate within which we lead. Motivation, spirit, mutual trust and pride are the real force multipliers. They always have been. Basically, the essentials of good individual leadership have changed little over the ages. Good leadership still does great things. However, it is my contention that poor leadership today is much less tolerable-much more dysfunctional-than it was 30 years ago.

It may be that in studying deeply the mechanics of human motivation and the hierarchy of needs, we have not always remembered that leadership in troop units is accomplished within the context of a disciplined, mission-oriented organization. At least we want the unit to be disciplined and mission-oriented. And, for both pragmatic and moral reasons, we want leaders to be as sensitive as possible to the legitimate needs and expectations of each soldier. But leadership is first and primarily a means of getting the leader's mission done efficiently.

Units today are more complex than they were 20 years ago. Both machines, doctrine and groups of young people are more complicated. The ratio of important missions to materiel and human resources is high-perhaps at an all-time high. The 1980s will challenge leaders at all echelons, and these challenges will be substantially different in magnitude although often of fundamentally the same nature as in years gone by. In order for good leaders to function well for extended periods, the organizational climate must be routinely supportive. The "hostile training environment" and the "environmental alienation of leaders" mentioned in recent studies just will not suffice.

As we attempt to peel away the layers of superficial causality and dig down to the core of the organizational climate problem, there appear to be four basic elements of concern. These are relatively scarce material resources, an increasingly complex battlefield-even down to the rifle squad level, a growing percentage of soldiers who have difficulty learning and adjusting and some lingering doubts within the officer corps regarding its operative value system.

George Will wrote in a recent editorial: "Never before in this nation's experience have the values and expectations in society been more at variance with the values and expectations that are indispensable to a military establishment."

"Never" is a long time, but, in any case, the leader today cannot assume that the organizational goals are quickly understood and assimilated by all of his subordinates. The leader must earn a heavier percentage of the necessary respect than his predecessors of 30 years ago, and he must be supported by a credible organization.

Not only societal values, but the more mundane facts of life impact on the leaders' ability to create an atmosphere of mutual trust and confidence. For example, the spectacle of the world's richest nation not being able to fix the leaky plumbing in the mess hall simply raises soldier doubts regarding the credibility of the entire chain of command. In the same vein, I would guess that a clumsy, erratic class IX supply system as seen from the motor pool end of the pipe has caused almost as much discouragement among young soldiers in recent years as has some of the heavy-handed, callous leadership that pokes its head up here and there.

In a time of complexity and relative austerity, commanders must make definite, clear choices regarding priorities, and then they must support the priorities with more than words. We may be recognizing this need as an institution, with our senior leadership serious about stamping out the "Zero Defects" and "Can Do" syndromes that have delighted the bureaucrats and frustrated the commanders for years.

Part of repairing the organizational climate depends on all of our willingness to share the risks and tolerate selected managerial imperfections. There appear to be signs of growing organizational maturity such as neutralizing some of the itinerant inspectors whose terrorization tactics have upset training and discipline priorities for years and recognizing that the best echelon to do something is the lowest one that can handle it. Our efforts to unscramble the stresses and strains at battalion level should reap a great harvest in enhanced leadership effectiveness.

As we attempt to select, educate and then trust our leaders, we must provide them a disciplined environment in which to serve. Our young soldiers keep signaling that they expect an Army to be tough and fair. We are still not responding adequately to their expectations of a well-structured, challenging, no-nonsense environment.

Each time we strengthen the chain of command by dissolving another counsel, insisting that the tank commander inspect his soldiers every day and take necessary corrective action, reward excellence publicly, bar those soldiers from re-enlisting who cannot perform satisfactorily and conduct end-of-the-day remedial physical training, we provide a tonic for good leadership. Leadership and discipline go hand in hand.

Realizing in this day and age that even within a healthy organization the individual leader must establish somewhat independently his own credibility, the portrayal of competence has never been more important. Leaders have to know their job and show it. Although many of our soldiers have remarkably high expectations of what their leaders should be, most do not expect miracles. But they do not tolerate the careless or the vacillating leader very well.

On the other hand, a local leadership reputation of firm, competent and fair is the best (maybe the only) antidote for the pernicious "meltdown of trust" syndrome which is an unfortunate characteristic of contemporary Western civilization. So, in effect, a healthy organizational climate enhances the development of individual leadership, and successful leadership contributes to the robustness of the organizational climate.

A final note is that proper individual value systems within the officer corps are essential both to good leadership and to healthy organizations. The willingness to make sacrifices, to take risks in the interest of the mission and the soldiers, to look deeply inside and figure out what really motivates us are simply key to building a climate of special trust and confidence. In assessing our value systems, we need to address the operative relative priorities of self, superior, subordinate, unit and professional ethics-and try not to kid ourselves as we make the analysis and pledge to move ever closer to what we know is right. *MR*

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Combat Leadership

SLA MARSHAL

"There is no new thing under the sun. " - Ecclesiastes

From his vast experience acquired during military service which spanned three wars, Brig Gen S. L. A. Marshall (Ret) has written and spoken extensively, passing on his keen personal observations. Particularly significant was a paper which he read, in 1957, at the Social Psychiatry. Following is a condensation of that paper.

There is a modem tendency to believe that science may find a new and secret key to the strengthening of moral forces within military organization which may have eluded the most gifted captains in times past who found the right way through instinct.

I was at Pork Chop Hill in 1953 to determine how our troops had behaved. It was a tactical review of the meaning, method, and manner of leadership under the most exasperating of field conditions. The men were green; the young leaders hardly knew to character of their following; and many of the men, newly arrived replacements, were total strangers. Certainly here was an inviting laboratory. Yet when the seven weeks' work was concluded, I had found nothing new under the sun.

More recently, I was in the Middle East with the Israeli Army, in Sinai, studying the "100-Hour War" of November 1956. Never before in human history have troops been pushed as hard and moved as concertedly and recklessly to a dramatic and decisive goal in war. My job was to get at the nature of that Army by examining in detail its movements, motives and moral forces under the stress of battle. But again I found nothing new under the sun.

Every rule of action, every precept and example set for and by leadership, toward the end that an immediate following would be stimulated and the Army as a whole would respond if inspired, must have been old at the time of Gideon.

At the high tide of danger, leaders invariably went first. They counseled their men to audacity by being themselves audacious. Amid dilemma, they resolved three courses by taking the line of greatest daring, which they reckoned to be the line of main chance. Exercising tight control amid crisis, they still bubbled with good humor. Yet one other command attitude was even more conspicuous. While these young men - company, battalion, or brigade leaders - demanded an utmost performance from their troops and pushed them many times toward the fringe of exhaustion, they did not go beyond it. Right on the battlefield, with an attack pending, they would hold everything to order a rest or a sleep if they felt that the condition of the troops demanded it. Too often we tend to an opposite course, and we waste men and opportunity because of it.

I have heard many times, in explanation of the dynamism of Israel's Army that "Of course, these troops are highly motivated. They are pioneers. Their land is ever in danger and surrounded by enemies. No one would deny that these are factors which simplify Israel's basic training situation and enable Government to make a stern requirement of the individual. But for my own part, I reject the idea that the extraordinary spirit of that Army in combat comes from self-identification of the individual with the goals of his nation when his life is in danger. That is not the nature of man under battle stress; his thoughts are as local as his view of the nearest ground cover, and unless he feels a solidarity with the people immediately around him and is carried forward by their momentum, neither thoughts about the ideals of his country nor reflections on his love for his wife will keep him from diving toward the nearest protection.

When fire sweeps the field, nothing keeps a man from running except a sense of honor, of blunt obligation to the people right around him, of fear of failure in their sight, which might eternally disgrace him. Generate high motivation and the spirit of dedication if you can, but don't over-evaluate them as the begin-and-end-all of combat efficiency. Even an utterly unselfish patriotism (if there be such a motivation) will not of itself make inspired leading or generate its prerequisite - that personal magnetism which produces group unity.

I recall the words of General Dayan (Israeli Army Chief of Staff): "A leader should be moral. He shouldn't drink heavily, play around with women, be careless in his private affairs, neglect his work, fail to know his men intimately

as individuals. And you may have a moral paragon who observes all the rules and is still not a leader. In fact, if he is that perfect, combat leading may be the one thing at which he will certainly fail" To that, amen!

There is not point in repeating the platitude "nothing succeeds like success." But there is every reason to state again and again the almost disregarded corollary that within military organization, faith in ultimate success is the broad highway to success itself. I have been fortunate. Four times in my military service I have had the experience of taking over a demoralized, rundown unit in wartime, with the charge that I would get it up and going again. Were that to happen to me a fifth time, I would want nothing better than that, at the earliest moment, those under me would get the idea, right or wrong: "This name is born under a lucky star. He may be cantankerous, demanding, hard to live with, and idiosyncratic. Maybe his sense of right and wrong wobbles a bit. But, if we stay with him, this unit is coming out of the woods, and I personally will have a firmer hold on the future." Yes, that is what I would like them to say.

In this business of rebuilding I have never known any better therapy than to talk again and again about the importance of group success as a foundation for the personal life while taking actions which indicated new direction.

In combat or out of it, once an organization gets the conviction that it is moving to higher ground as some distinction will come of it, then all marginal problems begin to contract. Discipline and standards of courtesy tighten of themselves, because pride has been, restored. Malingering in the form of too many men on sick call, AWOLs, and failure to maintain proper inspection standards becomes minimal through a renewed confidence and an upgrading of interpersonal relationships at lower levels. When the group gets the feeling of new motion, it centrifugally influences anyone who tries to stand still. It can even make good soldiers out of potential bad actors. I remember a dying boy at the battle of Carentan. He had been an "eight ball" in the paratroop company. Just before death took him, he said, 'tell me at last, Captain, that I wasn't completely a foul-up" So saying, he expressed the natural longing in all mankind.

Just as motion and sense of direction rehabilitates the unit, so they tonic the leader by cutting pressure from higher command. What a wonderful thing is freedom of motion and how little you can get it with someone "riding your neck!" So I long learned that when your score sheet reads no VD, no courts-martial and no AWOLs, out of a mistaken impression up there in heaven that these things connote operational efficiency, you can win the right to be left along, sans inspection, sans interference; and what a blessed state it is!

There is one radical difference between training and combat conditions. In training, the commander may be arbitrary, demanding and a hard disciplinarian, working and sweating his troops more than any company along the line. But so long as his sense of fair play in his handling of his own men becomes evident to them, and provided they become aware that what he is doing is making them efficient than their competition, and better prepared for the rigor of combat, they will approve him if grudgingly, stay loyal to him, and even possibly come to believe in his lucky star.

In combat something new is added. Even if they have previously looked on him as a

father and believed absolutely that being with him was their best assurance of successful survival, should he then develop a dugout habit, show himself as fearful and too careful of his own safety, he will lose his hold on them no less absolutely. I witnessed these battlefield transformations in France in 1918. In the wars since then, all I have observed of our forces and others has served but to confirm that first powerful impression. In the field there is no substitute for courage, no other bonding influence toward unity of action. Troops will excuse almost any stupidity; excessive timidity is simply unforgivable.

Being a fundamentalist, I see man as a creature under daily challenge to prove to himself, by one means or another, the quality and character of his own manhood. And I am quite sure that in his working relations with all other men, as to whether he is to attain to firm ascendancy over them in a common activity, the hallmark of acknowledged superiority finally is the tested and proven masculine elements in his character. That implies the readiness to accept risk instead of putting ever uppermost the quest for security- and of this we hear too little in our time. It implies also a capacity for completing assigned or chosen work, without which no man may truly lead. Around two such fundamentals may be developed the aura, the manner, of leadership. If they be mission, there is no hope. All of this to be found in Ecclesiastes, along with the phrase: "There is no new thing under the sun."

Know Your Men, Know Your Business, Know Yourself

C. A. Bach

C. A. Bach enlisted in the Thirteenth Minnesota Infantry Regiment of the Army National Guard and served as a sergeant in the Philippines. Promoted to lieutenant in the Thirty-sixth U.S. Volunteer Infantry, he transferred to the regular Army as a first lieutenant in the Seventh Cavalry and advanced to the rank of major.

His analysis of how to be a leader--an address delivered to the graduating officers of the Second Training Camp at Fort Sheridan--so moved the reserve officers of his battalion that they besieged him for copies. The Waco (Texas) Daily Times Herald, learning of the great interest the speech had aroused, obtained a copy and printed it verbatim on Sunday, 27 January 1918.

In a short time each of you men will control the lives of a certain number of other men. You will have in your charge loyal but untrained citizens, who look to you for instruction and guidance.

Your word will be their law. Your most casual remark will be remembered. Your mannerisms will be aped. Your clothing, your carriage, your vocabulary, your manner of command will be imitated.

When you join your organization you will find there a willing body of men who ask from you nothing more than the qualities that will command their respect, their loyalty, and their obedience.

They are perfectly ready and eager to follow you so long as you can convince them that you have those qualities. When the time comes that they are satisfied you do not possess them you might as well kiss yourself goodbye. Your usefulness in that organization is at an end.

From the standpoint of society, the world may be divided into leaders and followers. The professions have their leaders, the financial world has its leaders. We have religious leaders, and political leaders, and society leaders. In all this leadership it is difficult, if not impossible, to separate from the element of pure leadership that selfish element of personal gain or advantage to the individual, without which such leadership would lose its value.

It is in the military service only, where men freely sacrifice their lives for a faith, where men are willing to suffer and die for the right or the prevention of a great wrong, that we can hope to realize leadership in its most exalted and disinterested sense. Therefore, when I say leadership, I mean military leadership.

In a few days the great mass of you men will receive commissions as officers. These commissions will not make you leaders; they will merely make you officers. They will place you in a position where you can become leaders if you possess the proper attributes. But you must make good--not so much with the men over you as with the men under you.

Men must and will follow into battle officers who are not leaders, but the driving power behind these men is not enthusiasm but discipline. They go with doubt and trembling, and with an awful fear tugging at their heartstrings that prompts the unspoken question, "What will he do next?"

Such men obey the letter of their orders but no more. Of devotion to their commander, of exalted enthusiasm which scorns personal risk, of their self sacrifice to ensure his personal safety, they know nothing. Their legs carry them forward because their brain and their training tell them they must go. Their spirit does not go with them.

Great results are not achieved by cold, passive, unresponsive soldiers. They don't go very far and they stop as soon as they can. Leadership not only demands but receives the willing, unhesitating, unfaltering obedience and loyalty of other men; and a devotion that will cause them, when the time comes, to follow their uncrowned king to hell and back again if necessary.

You will ask yourselves: "Of just what, then, does leadership consist? What must I do to become a leader? What are the attributes of leadership and how can I cultivate them?"

Leadership is a composite of a number of qualities. Among the most important I would list self-confidence, moral ascendancy, self-sacrifice, paternalism, fairness, initiative, decision, dignity, courage.

Let me discuss these with you in detail.

Self confidence results, first, from exact knowledge; second, the ability to impart that knowledge; and third, the feeling of superiority over others that naturally follows. All these give the officer poise.

To lead, you must know--you may bluff all your men some of the time, but you can't do it all the time. Men will not have confidence in an officer unless he knows his business, and he must know it from the ground up.

The officer should know more about paperwork than his first sergeant and company clerk put together; he should know more about messing than his mess sergeant; more about diseases of the horse than his troop farrier. He should be at least as good a shot as any man in his company.

If the officer does not know, and demonstrates the fact that he does not know, it is entirely human for the soldier to say to himself, "To hell with him. He doesn't know as much about this as I do," and calmly disregard the instructions received.

There is no substitute for accurate knowledge. Become so well informed that men will hunt you up to ask questions-that your brother officers will say to one another, "Ask Smith--he knows."

And not only should each officer know thoroughly the duties of his own grade, but he should study those of the two grades next above him. A twofold benefit attaches to this. He prepares himself for duties which may fall to his lot at any time during battle; he further gains a broader viewpoint which enables him to appreciate the necessity for the issuance of orders and join more intelligently in their execution.

Not only must the officer know, but he must be able to put what he knows into grammatical, interesting, forceful English. He must learn to stand on his feet and speak without embarrassment.

I am told that in British training camps student officers are required to deliver ten-minute talks on any subject they may choose. This is excellent practice. For to speak clearly one must think clearly, and clear, logical thinking expresses itself in definite, positive orders.

While self-confidence is the result of knowing more than your men, moral ascendance over them is based upon your belief that you are the better man. To gain and maintain this ascendance you must have self-control, physical vitality and endurance and moral force.

You must have yourself so well in hand that, even though in battle you be scared stiff, you will never show fear. For if you by so much as a hurried movement or a trembling of the hand, or change of expression, or a hasty order hastily revoked, indicate your mental condition it will be reflected in your men in a far greater degree.

In garrison or camp many instances will arise to try your temper and wreck the sweetness of your disposition. If at such times you "fly off the handle" you have no business to be in charge of men. For men in anger say and do things that they almost invariably regret afterward.

An officer should never apologize to his men; also an officer should never be guilty of an act for which his sense of justice tells him he should apologize.

An element in gaining moral ascendance lies in the possession of enough physical vitality and endurance to withstand the hardships to which you and your men are subjected, and a dauntless spirit that enables you not only to accept them cheerfully but to minimize their magnitude.

Make light of your troubles, belittle your trials, and you will help vitally to build up within your organization an esprit whose value in time of stress cannot be measured.

Moral force is the third element in gaining moral ascendance. To exert moral force you must live clean, you must have sufficient brain power to see the right and the will to do right.

Be an example to your men. An officer can be a power for good or a power for evil. Don't preach to them--that will be worse than useless. Live the kind of life you would have them lead, and you will be surprised to see the number that will imitate you.

A loud-mouthed, profane captain who is careless of his personal appearance will have a loud-mouthed, profane dirty company. Remember what I tell you. Your company will be the reflection of yourself. If you have a rotten company it will be because you are a rotten captain.

Self-sacrifice is essential to leadership. You will give, give all the time. You will give of yourself physically for the longest hours; the hardest work and the greatest responsibility is the lot of the captain. He is the first man up in the morning and the last man in at night. He works while others sleep.

You will give of yourself mentally, in sympathy and appreciation for the troubles of men in your charge. This one's mother has died, and that one has lost all his savings in a bank failure. They may desire help, but more than anything else they desire sympathy.

Don't make the mistake of turning such men down with the statement that you have troubles of your own, for every time that you do you move a stone out of the foundation of your house.

Your men are your foundation, and your house of leadership will tumble about your ears unless it rests securely upon them.

Finally, you will give of your own slender financial resources. You will frequently spend your money to conserve the health and well-being of your men or to assist them when in trouble. Generally you get your money back. Very infrequently you must charge it to profit and loss.

When I say that paternalism is essential to leadership I use the term in its better sense. I do not now refer to that form of paternalism which robs men of initiative, self-reliance and self-respect. I refer to the paternalism that manifests itself in a watchful care for the comfort and welfare of those in your charge.

Soldiers are like children. You must see that they have shelter, food, and clothing, the best that your utmost efforts can provide. You must be far more solicitous of their comfort than of your own. You must see that they have food to eat before you think of your own; that they each have a good a bed as can be provided before you consider where you will sleep. You must look after their health. You must conserve their strength by not demanding needless exertion or useless labor.

And by doing all these things you are breathing life into what would be otherwise a mere machine. You are creating a soul in your organization that will make the mass respond to you as though it were one man. And that is esprit.

And when your organization has this esprit you will wake up some morning and discover that the tables have been turned; that instead of your constantly looking out for them they have, without even a hint from you, taken up the task of looking out for you. You will find that a detail is always there to see that your tent, if you have one, is promptly pitched; that the most and the cleanest bedding is brought to your tent; that from some mysterious source two eggs have been added to your supper when no one else has any; that an extra man is helping your men give your horse a supergrooming; that your wishes are anticipated; that every man is Johnny-on-the-spot. And then you have arrived.

Fairness is another element without which leadership can neither be built up nor maintained. There must be first that fairness which treats all men justly. I do not say alike, for you cannot treat all men alike--that would be assuming that all men are cut from the same piece; that there is no such thing as individuality or a personal equation.

You cannot treat all men alike; a punishment that would be dismissed by one man with a shrug of the shoulders is mental anguish for another. A company commander, who for a given offense has a standard punishment that applies to all, is either too indolent or too stupid to study the personality of his men. In his case justice is certainly blind.

Study your men as carefully as a surgeon studies a difficult case. And when you are sure of your diagnosis apply the remedy. And remember that you apply the remedy to affect a cure, not merely to see the victim squirm. It may be necessary to cut deep, but when you are satisfied as to your diagnosis don't be divided from your purpose by any false sympathy for the patient.

Hand in hand with fairness in awarding punishment walks fairness in giving credit. Everybody hates a human hog.

When one of your men has accomplished an especially creditable piece of work, see that he gets the proper reward. Turn heaven and earth upside down to get it for him. Don't try to take it away from him and have it for yourself. You may do this and get away with it, but you have lost the respect and loyalty of your men. Sooner or later your brother officers will hear of it and shun you like a leper. In war there is glory enough for all. Give the man under you his due. The man who always takes and never gives is not a leader. He is a parasite.

There is another kind of fairness--that which will prevent an officer from abusing the privilege of his rank. When you exact respect from soldiers be sure you treat them with equal respect. Build up their manhood and self-respect. Don't try to pull it down.

For an officer to be overbearing and insulting in the treatment of enlisted men is the act of a coward. He ties the man to a tree with the ropes of discipline and then strikes him in the face, knowing full well that the man cannot strike back.

Consideration, courtesy, and respect from officers toward enlisted men are not compatible with discipline. They are parts of our discipline. Without initiative and decision no man can expect to lead.

In maneuvers you will frequently see when an emergency arises, certain men calmly give instant orders which later, on analysis, prove to be, if not exactly the right thing, very nearly the right thing to have done. You will see other men in emergency become badly rattled; their brains refuse to work, or they give a hasty order, revoke it, give another, revoke that; in short, show every indication of being in a blue funk.

Regarding the first man you may say: "That man is a genius. He hasn't had time to reason this thing out. He acts intuitively." Forget it. "Genius is merely the capacity for taking infinite pains." The man who was ready is the man who has prepared himself. He has studied before-hand the possible situations that might arise, he has made tentative plans covering such situations. When he is confronted by the emergency he is ready to meet it.

He must have sufficient mental alertness to appreciate the problem that confronts him and the power of quick reasoning to determine what changes are necessary in his already formulated plan. He must have also the decision to order the execution and stick to his orders.

Any reasonable order in an emergency is better than no order. The situation is there. Meet it. It is better to do something and do the wrong thing than to hesitate, hunt around for the right thing to do and wind up doing nothing at all. And, having decided on a line of action, stick to it. Don't vacillate. Men have no confidence in an officer who doesn't know his own mind.

Occasionally you will be called upon to meet a situation which no reasonable human being could anticipate. If you have prepared yourself to meet other emergencies which you could anticipate, the mental training you have thereby gained will enable you to act promptly and with calmness.

You must frequently act without order from higher authority. Time will not permit you to wait for them. Here again enters the importance of studying the work of officers above you. If you have a comprehensive grasp of the entire situation and can form an idea of the general plan of your superiors, that and your previous emergency training will enable you to determine that the responsibility is yours and to issue the necessary orders without delay.

The element of personal dignity is important in military leadership. Be the friend of your men, but do not become their intimate. Your men should stand in awe of you--not fear. If your men presume to become familiar it is your fault, not theirs. Your actions have encouraged them to do so.

And, above all things, don't cheapen yourself by courting their friendship or currying their favor. They will despise you for it. If you are worthy of their loyalty and respect and devotion they will surely give all these without asking. If you are not, nothing that you can do will win them.

And then I would mention courage. Moral courage you need as well as physical courage--that kind of moral courage which enables you to adhere without faltering to a determined course of action which your judgment has indicated as the one best suited to secure the desired results.

Every time you change your orders without obvious reason you weaken your authority and impair the confidence of your men. Have the moral courage to stand by your order and see it through.

Moral courage further demands that you assume the responsibility for your own acts. If your subordinates have loyally carried out your orders and the movement you directed is a failure, the failure is yours, not theirs. Yours would have been the honor had it been successful. Take the blame if it results in disaster. Don't try to shift it to a subordinate and make him the goat. That is a cowardly act.

Furthermore, you will need moral courage to determine the fate of those under you. You will frequently be called upon for recommendations for the promotion or demotion of officers and noncommissioned officers in your immediate command.

Keep clearly in mind your personal integrity and the duty you owe your country. Do not let yourself be deflected from a strict sense of justice by feelings of personal friendship. If your own brother is your second lieutenant, and you find him unfit to hold his commission, eliminate him. If you don't your lack of moral courage may result in the loss of valuable lives.

If on the other hand, you are called upon for a recommendation concerning a man whom, for personal reasons you thoroughly dislike, do not fail to do him full justice. Remember that your aim is the general good, not the satisfaction of an individual grudge.

I am taking it for granted that you have physical courage. I need not tell you how necessary that is. Courage is more than bravery. Bravery is fearlessness--the absence of fear. The merest dolt may be brave, because he lacks the mentality to appreciate his danger; he doesn't know enough to be afraid.

Courage, however, is that firmness of spirit, that moral backbone, which, while fully appreciating the danger involved, nevertheless goes on with the undertaking. Bravery is physical; courage is mental and moral. You may be cold all over; your hands may tremble; your legs may quake; your knees be ready to give away--that is fear. If, nevertheless, you go to lead your men against the enemy, you have courage. The physical manifestations of fear will pass away. You may never experience them but once. They are the "buck fever" of the hunter who tries to shoot his first deer. You must not give way to them.

A number of years ago, while taking a course in demolitions, the class of which I was a member was handling dynamite. The instructor said regarding its manipulation: "I must caution you gentlemen to be careful in the use of these explosives. One man has but one accident." And so I would caution you. If you give way to the fear that will doubtless beset you in your first action, if you show the white feather, if you let your men go forward while you hunt a shell crater, you will never again have the opportunity of leading those men.

Use judgment in calling on your men for display of physical courage or bravery. Don't ask any man to go where you would not go yourself. If your common sense tells you that the place is too dangerous for you to venture into, then it is too dangerous for him. You know his life is as valuable to him as yours is to you.

Occasionally some of your men must be exposed to danger which you cannot share. A message must be taken across a fire-swept zone. You call for volunteers. If your men know you and know that you are "right" you will

never lack volunteers, for they will know your heart is in your work, that you are giving your country the best you have, that you would willingly carry the message yourself if you could. Your example and enthusiasm will have inspired them.

And lastly, if you aspire to leadership, I would urge you to study men.

Get under their skins and find out what is inside. Some men are quite different from what they appear to be on the surface. Determine the workings of their minds.

Much of General Robert E. Lee's success as a leader may be ascribed to his ability as a psychologist. He knew most of his opponents from West Point days, knew the workings of their minds, and he believed that they would do certain things under certain circumstances. In nearly every case he was able to anticipate their movements and block the execution.

You do not know your opponent in the same way. But you can know your own men. You can study each to determine wherein lies his strength and his weakness; which men can be relied upon to the last grasp and which cannot.

Know your men, know your business, know yourself.

The Decline of American Military Leadership EDWARD LUTTWAK

In each issue, Parameters features "View from the Fourth Estate," consisting of a stimulating and often controversial article on military affairs previously appearing in the civilian printed media. Members of the military community mayor may not like what is said of them in the civilian press, but in a democratic society they must remain abreast of what the citizen is reading and thinking if they are to approach and execute their missions successfully. The appearance of this article in Parameters in no way implies agreement with its contents by the Army War College or Department of the Army.

One objection to increased military appropriations is not easily dismissed. Expressed in more or less identical terms by all manner of people from Ambassador Andrew Young to any number of retired colonels, this argument questions the professional capacity of the armed forces to make worthwhile use of the weapons and the manpower that a rearmament effort would provide. It is the military conduct of the Indochina war that is cited as evidence, as well as the lesser episodes thereafter—and most recently the Iran rescue debacle.

There is little doubt that in retrospect the American record in Vietnam has been largely vindicated, both in its political and humanitarian aspects. It is now a commonplace that Hanoi's policies were those of regional imperialism rather than nationalist unification; and it is equally evident that the totalitarian order which has descended on southern Vietnam is indeed very much more sinister than Saigon's authoritarianism ever was. As for Cambodia, those who held that a suspension of war would self-evidently improve the circumstances of the Cambodian people have now had full opportunity to appreciate the oceanic depth of their error. Even the corrupt logic and false evidence of a William Shawcross can only serve to attribute blame to some Americans for a genocide that undeniably followed upon the suspension of American intervention rather than its continuation.

But the return to reason that allows all but the outer fringe to see the nature of the antagonists as it always was does nothing to redeem the character of our own military conduct of the war.

Standing back from the details of single operations, discounting those lesser phenomena of error and evil that must attend all armed conflict (and which the critics of course wildly magnified), making full allowance for the persistent misdirection of war operations emanating from the White House, American warfare in Indochina still emerges in broad perspective as an essentially bureaucratic phenomenon, scarcely responsive to the real modalities of that conflict.

The artillery fired its ammunition, even if the enemy consistently refused to assemble in conveniently targetable mass formations; the armor maneuvered, even if there were no linear defenses to pierce and no flanks to turn; the Air Force bombed in close support, in interdiction, and in retaliation against North Vietnamese cities and infrastructures, even if only the last of these missions could find stable and worthwhile targets. Otherwise much of the air war was simply futile for reasons entirely fundamental: the tactical logic of close air support is to combine air strikes" with ground combat against enemy forces that will not or cannot disperse, and this was a condition rarely satisfied in Vietnam; the strategic logic of interdiction is to diminish the flow of supplies to an enemy who requires absolutely a certain quantum of supplies to sustain operations which cannot be deferred, and this too was a condition mostly absent. Nevertheless, thousands and thousands of missions were flown month after month, year after year.

As the war progressed, almost every component of the American armed forces-Coast Guard included-found a satisfactory role for itself in the war, a role, that is, which allowed funds to be claimed for expansion, without changes of structure or function disturbing to the hierarchical or organizational order of things.

Thus the Army retained its preferred style of warfare, based much more on the systematic application of firepower than on maneuver; it retained a structure of forces based on extra large and logistically heavy divisions; and it retained elaborate headquarters at battalion, brigade, and divisional echelons, these last under the command of officers of general rank-even if there were very few targets for the mass application of firepower, little need for the elaborate logistics, and hardly any valid operational functions for all those headquarters in a war of squad and platoon skirmishes. (It is notable that the one clear American victory, the utter defeat of the Vietcong in the Tet 1968 offensive, was won largely by scattered groups of men fighting with little central direction against an enemy that at last came out in force, thus presenting stable targets.)

The Navy similarly could have taken care of all opposition afloat with a small destroyer flotilla arid a few shore-based patrol aircraft, but instead found full employment for its aircraft carriers in flying attack missions of all kinds by day and by night. Only the submariners were left out in the cold.

As for the Air Force, every single type of squadron was seemingly needed: fighters; light and heavy bombers; tactical and strategic reconnaissance, both photographic and electronic; as well as transport squadrons, light, medium, and heavy.

In their hundreds of thousands, servicemen worked hard and a good many lost life or limb to operate all those forces. But unfortunately much of all this activity had little to do with the true phenomena of the war through most of its stages: the terrorism and propaganda that subverted the authority of the government in each small locality to extract recruits, food, and intelligence; the guerrilla that was thus manned, fed, and informed and whose own opportunistic attacks served to maintain the insecurity in which subversion could progress still further; and then the worldwide propaganda assault on American confidence and morale.

Even when, after Tet 1968, North Vietnamese regular forces largely took over the fighting, the fit between the combat actions performed by the American forces and the nature of the enemy was only very slightly improved. For North Vietnamese regulars still fought as irregulars, that is, elusively. It was only late in the war that the fighting assumed the conventional form of large-scale European-style warfare, complete with sustained artillery barrages and tank assaults by the North Vietnamese. But by then almost all American forces—structure precisely to prevail in tha kind of fighting—had been withdrawn (and, of course, the North Vietnamese went over to conventional war operations precisely because the American troops had been withdrawn.

Hence the peculiar nature of the American defeat. The United States was undone In a protracted political struggle waged all around the world, but most importantly in the United States itself, for the very soul of the policy and media elites, while all the action of the American armed forces themselves remained mostly quite tangential to the real phenomena of the war.

This absurd and tragic irrelevance was dictated by the simple fact that American military organizations structured, equipped, and trained for warfare on a large scale against regular forces did not adapt to entirely different circumstances by evolving appropriate small-unit structures. Nor did they develop operational methods related to the context, or tactics responsive to those of the enemy, of necessity radically different from traditional structured methods and tactics.

Those in charge at all levels can claim with full justification that there was continuous interference from Washington in the conduct of the war at the most detailed level, inevitably much of it ill-informed. They can claim with equal justification that the media were systematically ill-disposed, and indeed functionally structured to denigrate all that the South Vietnamese did and to criticize all that the Americans were trying to do. But responsibility for the utter failure to adapt structures, methods, and tactics to the terrain and to the nature of the enemy must rest squarely and exclusively upon the American officer corps. It was as if there were no body of staff and command officers willing and able to learn the facts of the conflict as it evolved and who could then tailor force structures to suit combat needs, evolve relevant methods, and develop suitable fighting assumed the conventional form of large scale European-style warfare, complete with sustained artillery barrages and tank assaults by the North Vietnamese. But by then almost all the American forces-structured precisely to prevail in that kind of fighting-had been withdrawn (and, of course, the North Vietnamese went over to conventional war operations precisely because the American troops had been withdrawn) tactics.

And indeed there was no such body of officers ready to perform the purely professional function of studying the war itself. All the hard work, all the undoubted technical and managerial expertise, were fully absorbed by operation of the military organizations themselves, which were shipped en bloc from the United States to Vietnam. Once there, all the highly complex weapons and ancillary equipment needed much maintenance, elaborate logistic systems had to be operated, and the whole intricate structure had to be supervised at each level, with a great deal of paperwork being involved.

With so many different branches and sub-branches all engaged in war operations in circumstances of luxuriant bureaucratic growth, just the coordination of the different organizational bits and pieces absorbed the work of thousands of officers, especially senior officers. With so much inner-regarding activity, it was all the easier to ignore the phenomena of the war, which were in any case elusive, given the evanescent nature of the guerrilla element and the natural secrecy of subversion.

But for the tactical and operational realities of war to be so largely ignored by tens of thousands of military officers supposedly educated and trained to understand war and fight it, there had to be further and deeper causes of inadvertence, and indeed there were.

First, officers posted to Vietnam commands were rotated in and out of the country at short intervals, of one year or less. This meant that officers arrived in the country and then left it again before being able to come to grips with its complex circumstances. Characteristically, the first few months of a posting were a period of acclimatization and adjustment. Then the newly arrived officer could start to gather in the reins of command, and could begin work to rectify the deficiencies he uncovered within his unit. Often he would find that his predecessor had swept problems under the rug in the last phase of his posting, since by then he was already preoccupied with his next assignment. And then, by the time the officer was finally ready to look beyond the limits of his unit and its routines to focus on the tactical and operational problems of the war itself, the moment would be at hand to prepare for the next posting, almost invariably a desk job back in the United States.

This fatal lack of continuity (which also did great damage inwardly, since fighting units had no opportunity to develop their esprit de corps under the impulse of sustained leadership) denied to the United States all the benefits of a cumulative learning experience in the overall conduct of the war. As the saying went among the cognoscenti, the United States was not in Vietnam for ten years but rather for only one year, ten times over. Of the Romans it has been said that they made all manner of mistakes but never made the same mistake twice. In Vietnam, by contrast, the same tactical mistakes were repeated over and over again. Since officers were promptly sent off outside the country as soon as they began to acquire some experience of war leadership and combat operations, the American forces in Vietnam had no collective memory and the systematic repetition of error was inevitable.

Why was such a devastatingly harmful bureaucratic procedure tolerated? Certainly this was not one of the malpractices imposed by the interference of civilian policy officials but entirely willed by the military services themselves. The motive, once again, was inner regarding and exquisitely bureaucratic. Since the leadership of combat operations and indeed any service at all in a war zone would confer a great career advantage, it would not have been "fair" to allow some officers to remain in Vietnam year after year, thus depriving others of critical careerenhancing opportunities.

That people who run bureaucracies are apt to use them in a self-serving fashion to some extent is a thing inevitable, understandable, and even reasonable within limits. But in the case of officer rotation as practiced in Vietnam, we encounter a gross deviation from efficacy, with enormously damaging consequences.

How could it be that the desiderata of career management were allowed to prevail over the most essential requirements of effective warfare? Though it is true that reserving troop command and staff posts for the few would have caused much resentment, it would also have resulted in a much better conduct of the war. After all, it is no secret that troops cannot coalesce into cohesive fighting units under leaders constantly changing; and it is only slightly less obvious that the cumulative learning yielded by trial and error can scarcely be achieved by staff officers and commanders coming and going on short duty tours. Since we must assume the good intentions of those involved, it is ignorance of the basics of the military art that we must look for, rather than a conscious, collective selfishness.

But the hypothesis of ignorance encounters an immediate and formidable objection. How is ignorance compatible with the high educational standards of the contemporary American officer corps? There are many Ph.D.'s while officers with M.A.'s are entirely common. The officer corps also contains many highly competent engineers and even scientists, not to speak of very large numbers of skilled managers of all kinds, and in all specialties.

As the list of qualification lengthens, we begin to glimpse the answer to the riddle, and the true source of the problem: only one subject of expertise is missing and that is warfare itself. There are plenty of engineers, economists, and political scientists in the officer corps but where are the tacticians? There are the many skilled

personnel managers, logistical managers, and technical managers but where are the students of the operational art of war? And at the top, there are many competent {and politically sensitive} bureaucrats-but where are the strategists?

And where would these tacticians and strategists come from? Certainly not from the military schools which teach all manner of subjects-except those essentially military. At West Point, at Annapolis, and at the Air Force Academy, future officers receive a fairly good all around education, but they do not study the specifically military subjects. Military history the only possible "data base" for those who seek to understand war-is treated in a perfunctory manner, as one subject among many.

At the opposite end of the hierarchy of military schools at the war colleges of each service and the National Defense University, which are meant to prepare mid-career officers for the most senior ranks-there too management, politics, and foreign policy are taught, but no tactics and little strategy. And in between, at the staff and command colleges, there also military history is treated as if it were a marginal embellishment instead of being recognized as the very core of military education, the record of trial and error on which today's methods can be based.

No wonder that the distinguishing characteristic of American officers is their lack of interest in the art of war. Instead of being the subject of running debate and the daily fare of discussion in messes and clubs, tactics and tactical problems are treated as procedural matters, of far lesser consequence than organizational questions. As for the operational level of military thought and action, the level where diverse tactics and the action of diverse forces are integrated into large scale schemes of warfare, its very existence is ignored by a good many Army officers. Hence for example the inability of armor officers to understand deep-penetration operational methods such as that of the classic Blitzkrieg, on the one hand, and the very different contemporary Soviet fluid-reinforcement method, on the other methods entirely different but which indeed appear very similar if viewed at the tactical level alone. But then what can one expect when the only possible key to understanding such matters, the close study of serious military history, is almost entirely evaded. No wonder then that there is loose and utterly misleading talk of a prospective Soviet Blitzkrieg against the NA TO front in Germany as if the Soviet Army had to fight as the Germans did, to conserve very small tank forces. No wonder that there is equally misleading talk of a Blitzkrieg by the North Koreans down the main invasion corridors-as if directional surprise were not the sine qua non of the classic Blitzkrieg. That these matters are not trivial and semantic but rather of the essence is sufficiently demonstrated by the fact that FM 100-5 is nowadays accepted as the official would-be operational doctrine of the US Army, whereas it is no more than a manual for tactical victory in conditions of firepower superiority. An officer corps cognizant of the fatal consequences of seeking tactical victories against an enemy practicing warfare at the operational level by means of great armor movements would treat FM 100-5 with the same contempt in which it is held by officers of the German and Israeli armies. As for "military strategy," that is a phrase that refers only to budgets and foreign policy in the discourse of senior officers-men who think that Clausewitz was a German who died a long time ago.

The proximate causes of this extraordinary drift from military professionalism into so many other professions are obvious. The low quality of many of the recruits absorbs a great effort of personnel management, and stimulates the promotion of officers who know how to recruit and retain scarce manpower, rather than officers seriously interested in warfare as such. Similarly, the development and absorption of a mass of highly complex and advanced equipment creates a great demand for officers who understand science and engineering. Equally, the need to coexist with civilian defense officials who impose economic criteria of efficiency, and who use mathematical techniques of "systems analysis," creates a demand for officers who understand fancy bookkeeping, and who can beat the rigged mathematical models of civilian budget-cutters with models of their own, also rigged. And so the list of distractions goes on and on.

From all these different streams of specialized expertise, officers are promoted stage by stage by way of "ticket punching" assignments to staff or command positions. But since duty tours are so short, the experience counts for little. In the present atmosphere of the officer corps, it is the desk jobs in the Pentagon, the assignments to high-prestige outside agencies {the National Security Council is a well-known launching pad to high rank), and high-visibility managerial positions that are most attractive. Staff posts, where war operations are planned, and unit commands, where there is no better company than junior officers, are seen largely as obligatory stages to better things.

If the ambitious officer becomes too interested in the essential military functions of studying the enemy, of inventing suitable tactics, of developing operational methods, and of inspiring and commanding men, a glance at the official

biographies of the service chiefs will soon show him the error of his ways. It was not by allowing themselves to become bogged down in such things that those men reached the top, but rather by being good managers and smooth bureaucrats.

And what of the deeper causes of this state of affairs? Was the "civilianization" of the officer corps driven by the desire to avoid accusations of militarism? Did education in civil subjects displace the study of war because science and corporate business have had more prestige in America than the military profession? Or is it perhaps that the "up or out" rule (where those not promoted are forced out of the career) induces officers to focus on expertise which is of value in the civilian marketplace? Quite other causes also suggest themselves, notably the great shift in the balance of control, which nowadays places civilian defense officials in charge of essentially military decisions. Certainly one specific consequence of this last factor is the systematic displacement of military effectiveness by economic efficiency; the two are not merely different but rather directly contradictory. As I have stated elsewhere, American forces in the Vietnam War were marvels of efficiency. Their communications were efficient, their logistics, their transportation, even their administration of firepower. Yes, our managers in uniform were very efficient-the only trouble is that they were not very combat effective.

When the objection is thus made to a serious rearmament effort that, the need not with standing, more resources should still be denied since they would be ill-used in any case, one cannot simply dismiss the argument on its merits. And if the more general facts and broader assessments are disputed, then a close scrutiny of the details of the Iran rescue debacle certainly reveals the workings of a managerial-bureaucratic approach to the planning and execution of a commando operation, with disastrous consequences.

Commando operations are like all other infantry operations, only more so. They do, however, have their own rules, which the rescue attempt seems to have violated in every respect. No doubt the planners involved were good managers, economists, engineers, or whatever. But they must also have been quite ignorant of the military history of 40 years of British, German, French, and Israeli commando operations. Otherwise they would not have sent such a small force into action. Here the rule is: "A man's force for a boy's job." Deep in enemy territory, in conditions of gross numerical inferiority, there must be a decisive superiority at the actual point of contact, since any opposition must be crushed before others can intervene, eventually submerging the commando force; there is no time for a fair fight. The 90 commandos were too few to do the job by this criterion.

If they had not been ignorant of the history of commando operations, they would not have had three co-equal commanders on the spot, and then a "task force" commander back in Egypt, not to speak of the Joint Chiefs, the Secretary of Defense, and the President-all connected by satellite. Here the rule is that there must be unity of command, under one man only, since in high tempo commando operations there is no time to consult anyway, while any attempt at remote control is bound to be highly dangerous given the impossibility of knowing the true facts of the situation deep within the enemy's territory.

If they had not been ignorant of the history of commando operations, they would not have relied on a few inherently fragile helicopters. Here the rule is that since the combat risks are, by definition, very high, all technical risk must be avoided. If helicopters must be used, let there be ten or more to carry the payload of six.

If they had not been ignorant of the history of, commando operations, they would not have assembled a raid force drawn from different formations and even different services. Here the rule is that commando operations, being by definition exceptionally demanding of morale, must be carried out by cohesive units, and not by ad hoc groups of specialists. That indeed is why standing units of commandos were established in the first place. If the suspicion is justified that the fatal accident was caused by a misunderstanding or worse between Marine helicopter pilots and Air Force C-130 pilots-and procedures, technical jargon, etc., are different-those involved carry a terrible responsibility. For there is much reason to believe that all four services were involved in the raid precisely because each wanted to insure a share of any eventual glory for its own bureaucracy

There can be no satisfactory equilibrium of power in world politics without strong American military forces placed in the balance. But how can American military strength be restored if the resources devoted to the national defense are apt to be misused?

In the first place, we must recognize the limits of the argument of military incompetence: it does not apply to the whole realm of strategic nuclear forces, where tactics and the operational art of war are very simple, and where the problems have a stable and known character by now well understood. This is of course a very important exception, essential to the highest level of deterrence. It is also one of the several areas where the engineering, scientific, and managerial expertise of the American officer corps is highly useful, while its lack of specifically military competence is of little consequence.

Secondly, there are healthy components within the military machine, even if its ailments are indeed systemic. At the tactical level, at least, the Marines are still reportedly pretty good, and so are a good many of the fighter forces of the Air Force, Navy, and Marine Corps. In the surface and submarine Navy also, high competence is still found in several components. Even in the Army, probably the most disadvantaged of the services, some exceptions survive, Moreover, the Rapid Deployment Force could become the focus of a revival of the military arts, if that is, it does develop as a responsive force, fit to do the job which has been assigned to it. Because of the need to act quickly a long way from home, the current US Army approach whereby all problems are to be solved by the orderly administration of superior firepower is ruled out. This in turn imposes a maneuver approach, where agile forces of simple structure with simple equipment must seek to exploit surprise, shock, momentum (all producing disorienting effects) in order to contend with theoretically superior local forces at the outset, thereafter surviving against these stronger forces by exploiting terrain advantages and agility. If the RDF develops as it should, its officers will have full opportunity to concentrate on tactics, combat leadership, operational methods, and theater strategies (low-echelon headquarters should be relieved of bureaucratic paperwork), while simple weapons (heavy mortars in lieu of howitzers, armored cars in lieu of battle tanks, etc.) will require no elaborate maintenance echelons.

It should be obvious enough that standard US Army divisions let alone armored divisions cannot possibly fit the RDF requirements: they would be much too heavy and thus too slow in deployment to intervene in time, and would in any case have excess firepower against any local forces-which no self-respecting European army would treat as serious opponents; if it is Soviet forces that must be fought, then there is no point in engaging in a resource-matching contest since it cannot be won. In this case, the twin factors of time and distance simply rule out both the FM 100-5 style of war and the standard Army formations for the RDF proper; both could of course be of use for a subsequent buildup to consolidate an intervention accomplished by other means. On the other hand, the refusal to develop truly "light" intervention formations would mean the exclusion of the Army from any really important RDF function-and in this respect even the 82d Airborne Division cannot be considered "light," burdened as it is by a mass of soft logistic vehicles while lacking both tactical mobility and readily deployable firepower; only the total reorganization of the 82d for commando-style combat could make it fit the primary RDF requirement. As in the case of Vietnam, there is here a time conflict between the ease of keeping traditional structures and the specific needs of a national mission.

But regardless of the bright spots among our military forces and the promise of the RDF, the fact remains that fundamental military reforms are required. The most important of the congressional advocates of stronger defenses (notably Senator Sam Nunn) have explicitly recognized the need for basic reforms of the military institutions, along with the major increases in funding which they advocate. Some who hold a middle position on the defense budget, most importantly Senator Gary Hart, have also become persuasive advocates of reform.

These reforms would range from measures of long-term effect, such as drastic changes in the curricula of the military academies and the war colleges (with lesser changes in the schools and courses in the middle), to immediate moves designed to change career incentives so as to encourage the selection of officers for the top positions who are fighters, leaders, tacticians, or strategists rather than engineers, managers, bureaucrats, or office politicians. The hope would be to encourage a general takeover of the key positions by those many middle-ranking officers now in the services who already have the qualities needed but who are systematically being excluded from the most senior positions precisely because of the ascendancy of the wrong type of officer.

It must always be the human factor that is most important, for war after all is decided to a far greater extent by the moral and intangible factors than the material. Nevertheless, the reform of education and officer selection would be undertaken in the presumption that the reformed military institutions would then move energetically to change a great deal of the material element as well. After all, officers whose minds are on the tactics, operations, and strategies of war are scarcely likely to be seduced by the unguided engineering and scientific ambition that yields the hyper-complex, expensive, and often fragile major weapons that are being developed and fielded nowadays; aside

from all else, the major weapons now developed could not possibly be mass produced, even in the event of protracted war. And officers so inclined would also reject the mechanical and heavy-handed attrition tactics so greatly favored by our managerial-minded officer corps.

In the present climate of the armed forces marked by acute financial stringency and pervasive shortages, one can neither innovate nor reform. On the other hand, if the nation does finally give the armed forces the better men and the additional money that they so badly need, then there will be both the opportunity and the obligation to carry out major reforms aimed at refocusing the military profession upon the military arts it has for so long neglected.

This article was adapted from one titled "A New Arms Race?" appearing in the September 1980 issue of Commentary, pp. 27-34. Mr. Luttwak, a Senior Fellow at the Georgetown Center for Strategic and International Studies, supplied a title for the excerpt and considerably amplified it for Parameters.

A Few Good Principles: What the Marines Can Teach Silicon Valley DAVID H. FREEDMAN

For many managers, business has become a nightmare of velocity and complexity. In the technology sector in particular, companies leap into existence and steal significant market share from established companies in a matter of weeks. As a result, companies are desperate to be nimbler.

One might suppose the military, with its legendarily hierarchical, command-and-control habits, would be the last place to look for nimbleness. The Marine Corps is sometimes perceived as the most hidebound military branch of all, with Marines imagined to be mindlessly aggressive soldiers ready to hurl themselves at the enemy under the orders of abusive officers.

But in spite of the boot-camp images of snarling drill instructors and compliant, shaved-head recruits that are so deeply ingrained in the popular culture, my research on the Marine Corps showed it to be an extraordinarily innovative, almost freewheeling organization. In fact, the Corps' ability to react quickly and effectively in environments seething with complex, unpredictable, and fast-changing threats could make many Silicon Valley startups seem hidebound. It's the Marines' specialty. With their survival as an institution and as individual human beings at stake, the Marines have had to ruthlessly and endlessly examine, discard, define, refine, and redefine their approaches to achieve the ultimate in rapid, effective response to dynamic challenges.

Based on my recently published book, *Corps Business: The 30 Management Principles of the U.S. Marines*, here are four principles that the Marines employ to face fierce challenges in short time frames. Though I describe these principles based on the Marines' experiences, it's not hard to recognize how they apply to the New Economy's dynamic business climate.

FAST IS BETTER THAN PERFECT--THE 70% SOLUTION

In environments where conditions can quickly flip, and where the opposition can regroup and take the advantage in a heartbeat, the Marines consider indecisiveness a fatal flaw--worse than making a mediocre decision, because a mediocre decision, if swiftly rendered and executed, at least stands a chance. When it comes to planning missions, it is constantly hit home to Marines that fast and bold is where it's at. Driven by the notion that there is a cost to every minute spent mulling over decisions, the Marines have worked to push as much inefficiency as possible out of the mission-planning process. "If your decision-making loop is more streamlined than your enemy's, then you set the pace and course of the battle," says a general who commands an infantry division at Camp Pendleton.

The drawback to fast decision making, of course, is that the decision may have to be rendered while information is still sketchy or not yet filtered and analyzed. This fact leads to a sort of organizational uncertainty principle: The faster your decision-making cycle, the less assurance you can have that you're making the best possible decision. "If you're going to have a higher tempo than the enemy, you have to accept a higher degree of uncertainty," says one colonel, adding that there can be a benefit to the uncertainty: It leads to breaking challenges down into manageable chunks. "If you strive for low uncertainty, you'll have a longer decision-making process that is more likely to be driven to big, win-or-lose decisions," he explains" Small, frequent, rapid decisions will save you from having to come up with a big decision at the 11th hour."

For all these reasons, Marines speak of the "70% solution," by which they mean an imperfect decision whose saving grace is that it can be made right now.

To see how Marines keep their decision-making cycles short, consider one planning session, which takes place in the bowels of the USS *Tarawa*. The *Tarawa* is currently home to the heart of the 11th MEU, or Marine Expeditionary Unit. An MEU generally consists of about three ships' worth of Marines, jets, helicopters, artillery, tanks, amphibious and ground vehicles, weapons, and supplies--it is a floating invasion party.

The MEU is at the end of a training cycle. Before it is allowed to deploy to the Persian Gulf or elsewhere, it has to get through two days of evaluation exercises, during which it will have to carry out a seemingly overwhelming 27 missions, ranging from assaults to airlifts to humanitarian assistance. As many as four missions will be under way simultaneously at any one time.

It is 8 p.m., and the first three mission orders have just been radioed to the *Tarawa*. This meeting of a 12-person "crisis reaction team" has been convened by Colonel Thomas Moore, the MEU commander, to deal with the first order: set up an aid operation in a poor country that has been devastated by floods, leading to starvation and disease. The group has one hour to come up with a mission plan. If they're lucky, they'll get a few hours of sleep before they have to execute it.

An unlit cigar bobs and jerks in Moore's mouth as he surveys the cramped and visibly rocking room. "The fight's on," he rumbles heartily. "How'r y'all doin'?" The responses, and Moore's responses to the responses, vary from sounds that approximate, variously, a seal bark, a warthog growl, a foghorn, and, most frequently, an "oo-rah." Apparently, the meeting is in order.

Moore promptly moves the meeting through a standard series of questions designed to lead a team to a quick decision:

What's the essence of the challenge? One of the Marines' greatest tools is that of simplicity: taking complex, confusing, or ambiguous situations and concepts and then boiling them down in their minds to their "essences"-easily graspable and actionable representations of a situation or order. In this case, the group decides that the essence of the order is to provide food and medical aid to a starving and sick population.

What assumptions can we make? In high-speed planning there is almost always a shortage of clear, complete, certain information about threats and opportunities. Having to think about and prepare for every possible contingency would be paralyzing. The Marines like to spell out those conditions that seem highly unlikely so that they can be put out of mind, and state as a given those conditions that seem highly probable and thus must be addressed. Moore's group, for example, makes explicit the assumption that the mission will not be threatened with nuclear, biological, or chemical weapons, or by land mines.

What must we not do? Decision makers who are perfectly clear on what they need to accomplish sometimes fail to consider the unintended consequences of their actions. Determining what actions must be avoided can sometimes be at least as important as deciding on the actions that must be taken. Tonight, Moore's team decides that damaging property would be unacceptable, since it could lead to a loss of popular support for the Marines' efforts and make it difficult to safely distribute food.

What's being overlooked? The Marines hold as an article of faith that there are always angles they aren't anticipating. Later, Moore tells me that one mission nearly failed in the last MEU full-scale exercise because the execution team didn't take along enough spare batteries to keep special communications equipment powered up. Tonight, one officer points out that the somewhat rich prepacked meals the Marines carry could easily overwhelm the digestive system of a person suffering from severe malnutrition. Another notes that the meals may be incompatible with some of the population's ethnic and religious dietary restrictions.

MAKE EVERY TEAM MEMBER A PROBLEM SOLVER

The Marines' organizational structure is the classic military-style pyramid: A corporal has a squad of three men; a sergeant and second lieutenant have a platoon of three squads; a captain has a company of three platoons; and so on, up to the general.

This arrangement leads to an organizational hierarchy that might seem to some businesses appallingly narrow and tall--there are typically eight full layers of management between an infantry private and the colonel commanding the unit. That sounds like exactly the sort of stovepipe structure that businesses have been moving away from because of how slowly information and decisions filter up and down. The Marines have resisted flattening their organization because they've discovered by extensive experimentation that giving a manager direct responsibility for more than three people in a time of crisis is overwhelming, and it degrades decision making. But at the same time, the Marines have made a critical modification in this arrangement that allows it to become faster and more effective than a flattened organizational structure, pushing as much decision-making authority down to lower levels as the situation demands.

To understand how this twist works, first consider how it evolved. Up until the 1960s, the Marine Corps relied on the same basic style of fighting as most modern infantries: a "linear warfare" approach, typically in which two

companies rushed at the enemy, while one hung back to support them. A battalion commander with a good vantage point and daylight could often visually track the progress of all his troops, enabling him to precisely control their movements. But there is a price to be paid. In the intense Pacific island fighting of World War II, linear warfare was effective but also resulted in devastating losses for the frontally advancing Marines. In the 90-day battle for Okinawa, nearly every single Marine present for the initial weeks of the fighting was either killed, wounded, or missing in action.

Over the past four decades, the Marines have reinvented the logic of combat. The result, now known as "maneuver warfare," shifts the emphasis from throwing swarms of Marines directly at the enemy to surprising and confusing the enemy by attacking quickly and repeatedly in smaller groups from multiple directions and at unpredictable times, spontaneously exploiting opportunities as they arise. But maneuver warfare poses a new problem: the enormous difficulty involved in coordinating, or even tracking, the movements of groups of Marines who are constantly shifting their positions and plans. The urban combat environment in which Marines are increasingly likely to find themselves adds a number of additional complications: The area may be densely packed with enormous populations of noncombatants on all sides, snipers can be hiding in any window, and buildings often block radio communications.

Maneuver warfare and urban fighting have made it increasingly doubtful that the conventional chain of command can at all times effectively control the actions of Marines who are on the front lines. If the chain of command can't hand down effective decisions quickly enough, there's only one solution: The lower links of the chain have to make their own decisions.

The answer, in other words, is empowerment carried to an extreme: allowing someone at the lowest level of the organization to make decisions that can impact the success of the organization's most important missions. This Marine-style empowerment allows lower-level officers and enlisted personnel out of touch with the chain of command to jettison preestablished plans, make up new ones as the situation demands, and commandeer the resources they need to carry them out.

One general recalls how, during the Gulf War, part of a platoon found itself pinned down by fire from an Iraqi machine gunner, and separated from the platoon's lieutenant and sergeant. A corporal from East Los Angeles decided to take action. He divided his squad in half, sent one of the groups to dig in at a relatively safe distance in front of the gunner, and then took the other half skirting around the gunner's side, where they surprised him. "It was a drive-by shooting," the corporal later explained to his lieutenant.

Marines guarding embassies, or stores of food and supplies during a mission, are authorized to make their own decisions on the spot about whether or not to fire on charging, hostile crowds that may be armed. The Marines give them this responsibility knowing that the decision these young people make will likely reverberate in headlines around the world the next day.

REWARD FAILURE

While Marine officers can be hard on willful or negligent screw-ups, they tend to be extraordinarily tolerant of most other types of mistakes. For starters, when a subordinate slips up, Marine officers usually look to themselves for blame. One sergeant describes how a corporal under his command forgot to process the paperwork for a training course the corporal needed to take. "I went to my lieutenant and told him I had failed to impress on the corporal the importance of getting those papers in," the sergeant recounts.

But no matter who is seen to be at fault, failure is not the worst thing that can happen to a Marine in many situations. It's not even necessarily treated as a bad thing. The Marines practice failure tolerance to a degree that would raise most managers' hair. To a certain extent, they demand failure: A Marine who rarely fails is a Marine who isn't pushing the envelope enough.

Marines see the occasional failure not only as a sign that a Marine is taking chances, as he or she should, but also as the best possible learning experience. As one captain puts it: "It's hard to keep quiet when you see someone making a mistake in training, but you have to. When that corporal makes the decision and sees it not work, that's how it becomes internalized."

One Marine told me how, shortly after being promoted to corporal, he took a squad out on a live-fire drill, where he decided on the spur of the moment to let a relatively inexperienced private run one of the teams. But the private promptly missed a cease-fire signal, and in the few horrifying moments before the corporal realized the slipup, the private's group continued to fire while other Marines had put down their weapons and were preparing to come out from their cover. Few mistakes have more serious potential repercussions in training; Marines are killed every year in such accidents. The corporal quickly found himself explaining to his lieutenant what had happened, even while picturing his career going down the drain. "But the lieutenant said that since no one was hurt, it was a good learning experience," he recalls.

Marine officers like to see their subordinates skirt the edge of failure, under the belief that people thrive under adversity and challenge. "The Marine Corps will definitely get you out of your comfort zone," explains one sergeant. But at the same time, officers don't go as far as purposely pushing their people over the line into failure (except at boot camp). No matter how difficult the mission, Marines are drilled to claw out success through planning, training, information, and resources. "I set my troops up for success," says another sergeant, "so that even when everything goes wrong it's problems we've already hit, and they can handle it. That takes them up to a higher level."

Marines' failure tolerance is not constant across all situations. Failures in training missions, for example, are obviously regarded as far more benign than failures in actual missions. In addition, failure tolerance is adjusted downward as the level of the mission climbs. That is, the failure of a high-level mission is regarded with a great deal more angst than the failure of a small task. And when it comes to the big mission for which the Marines have been called in, failure is truly regarded as unthinkable. "Mission accomplishment is what it's all about," says one colonel. "There may be setbacks along the way, but in the end you win."

In the same spirit, failure tolerance also decreases with higher rank. Officers don't blink twice when a private not long out of boot camp screws up; it would be miraculous if he or she didn't make mistakes with some regularity. The opposite is true of generals. "A general can't look like a mortal," says a former officer. "One failure and he's through." There's a sliding scale for the ranks in between.

As one colonel points out, the boldness that the Corps' tolerance of failure is meant to nurture is supposed to be an aggressiveness of action, not an aggressiveness of personality. "Being willing to step forward in action has to be seen as a good thing," he says. "Getting in everyone's face doesn't. People sometimes confuse the two."

SEEK OUTSIDE PERSPECTIVES

The Marine Corps is constantly on guard against becoming stagnant, or constrained by an inbred point of view. "Today's solutions are tomorrow's problems," says one captain. One key to keeping up the pace of change and a flow of creative thinking, say Marines, is to get good input from outside experts and thus to avoid becoming insulated. By "outside," the Marines don't simply mean other military services, with which the Corps is constantly exchanging information. They mean a variety of institutions in the government, academic, and commercial sectors.

Take, for example, the Corps' relationship with psychologist Gary Klein. It offers an example of the Marine thirst for the sort of fresh, offbeat points of view from which the most influential new thinking often emerges.

A group of Marines, one of them a sergeant, is hiking up a long, steep hill under a scorching sun. The sergeant's mission in this exercise is to have his squad take out a mortar pit that he was told is at the top of the hill and that has been firing on a nearby helicopter landing zone. Two-thirds of the way up the hill the sergeant is informed his squad is under machine gun fire from the top of the hill; the mortar is in fact on the next hill over. After directing the squad to take cover, the sergeant mulls over his options. His first inclination is to have his squad continue up to take out the machine gun, before heading over to the next hill to get to the mortar. But then he considers the mission, which was to protect the landing zone. This suggests the appropriate move is to go directly to the mortar, since the machine gun can't shoot far enough to threaten the landing zone. On the other hand, reflects the sergeant, leaving the machine gun in place could result in casualties to his squad when they try to head back down, which would also jeopardize the mission.

As the sergeant thinks out loud, a man stands nearby listening and taking notes on a clipboard. Though he has been trying to keep in the background, he couldn't stand out more from the Marines with whom he has been tagging

along. He is slight, bearded, bookish looking, and dressed in shorts, white shirt, and running shoes. This is Klein, who has been hired by the Marines to design for them entirely new approaches to battlefield decision-making training.

If there is something incongruous about the idea of an academic psychologist helping to run a combat exercise, it is exactly the sort of incongruity that the Marine Corps seeks out. Klein had been researching decision making, in hopes of coming up with a better way of teaching people to make decisions, and had come to the conclusion that the conventional model of a rational chain of reasoning did not in fact reflect how decisions are usually made in most lines of work. "The rational model worked well in some cases, like when it came to deciding about whether a bank should approve a mortgage," he explains. "But for most situations the model seemed wrong." To confirm his suspicions, Klein spent months interviewing firefighters and observing them in action. His conclusion: Firefighters, and apparently most crisis decision makers, seemed to employ a sort of intuition to arrive at a course of action. Unfortunately, decided Klein, this intuitive decision making couldn't be taught; it could only be learned through years of experience.

A Marine colonel who read Klein's work believed that Klein was right about everything except the part about not being able to teach intuitive decision making, and he managed to convince a dubious Klein to try to create a course for Marine squad leaders. The result has been so successful that Klein has since gone on to teach decision making to businesses, aviators, and army officers.

The goal of Klein's teaching process is to turn decision-making trainees into what he calls "reflective practitioners"-that is, people who can think about and articulate the elements that contribute to their decisions. He prescribes that one-third of all exercise time be spent in debriefing. At Camp Pendleton near San Diego, Klein gives an example from a simulated exercise earlier in the day. "A squad is hit by artillery," he recalls. "The leader tells them to run for cover, and one of them steps on a mine, so two people are killed, and it's like ringing on the enemy's doorbell. Afterward, I asked the squad leader, Was he aware there was an artillery spotter? Was he aware of other assets? Was he aware of the risks? What information does he wish he had? Does he know how he'd do it if he were in that situation again?"

To gain yet another perspective, the Marines sent officers to Wall Street to hang out with financial traders. The goal: to learn how to make fast decisions based on information flowing in through banks of monitors--which may be exactly the way colonels operate in future conflicts. The experience proved helpful; the traders taught the officers, for example, to make better use of split-screen displays.

The Marines are even considering bringing civilian business managers into the Marines as instant colonels or at other high ranks. After all, notes one general, the Marines and the business world have at least one thing in common. "Whether you're pursuing peace or profit," he says, "there's a lot of tough competition out there."

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Some Thoughts on Leadership

ALEXANDER M. PATCH, MAJOR GENERAL, US Army

Major General Alexander M. Patch wrote this December 1943 article primarily to educate junior officers about leadership. Fancy equipment won't win wars, Patch says, but strong leadership-which is based on character-and disciplined soldiers will. When Patch penned this piece, the United States was building its Armed Forces to fight a well-disciplined German army whose morale was high. Here, Patch gives emerging leaders some basic and timeless tips on how to handle troops and, ultimately, march toward victory.

A NATION COMMITTED to combat must have materiel with which to fight and the men to use such equipment. It is unnecessary to discuss the relative merits of these two essentials, for one without the other is valueless.

The equipment of war seems to equalize itself between combatting nations. Let one develop a mortar of new caliber or a field piece of different muzzle velocity and it is only a brief time until his opponent has a similar weapon. Likewise there is a continual race between offensive and defensive weapons. The rocket launcher will stop the tank and the AA is rapidly improving as are the antibomber planes. There is only a temporary advantage in any new effective weapon; the advantage lasting until the opponent has built the same weapon or a defensive one to neutralize it. Our troops are proud of the materiel which the highly ingenious and industrialized forces of the nation have given to them. They feel, with confidence, that the weapons with which they fight will always equal if not exceed those of their enemy.

What has been said of the equalization of equipment is likewise true of tactics. The movements of the armies of Napoleon startled the world until an equal in Wellington appeared. In Africa, Rommel was most successful until Alexander and Montgomery displayed their talents. The strategy of von Schlieffen, Lee, von Moltke and all the rest are thoroughly known. There may be a temporary advantage in the application of one form of maneuver over that of another, and should that move come when the opponent is almost prostrate it may well be decisive. But nations cannot afford to risk their very existence on the hope of evolving a new or more effective form of maneuver.

To what, then, may the nation look for success in this and other wars if it is not to equipment and tactics? The answer can be found in a reply made by a general to Peter the Great: "Success in war does not depend upon the number and size of armament; nor upon movement, least of all upon movement. It does depend upon these and these and these," at which he pointed to the men in the ranks. Modern equipment and knowledge of the tactics of by-gone years has not lessened one iota the importance of the role of the individual soldier. He is still the supreme factor of success. Without sterling soldiers, the finest equipment is valueless and the best general in the world is helpless. With individual soldiers well led by zealous officers and fortified with a martial ardor, physical stamina, and a mental determination to fight to the end, a mediocre general and equipment of lesser value will win over a superior force.

The task of converting citizens of a free nation to soldiers for the battlefield is the biggest job of the United States Army. Our people, blessed with the bounties of nature to an unequalled degree, have never adopted a philosophy of aggression which is conducive to a strong military program. In fact, these resources with unbounded facilities for commerce and an absence of nearby geographical belligerents have created an anti-war complex which is overcome only when free intercourse and the American way of life is endangered. Thus from an easy-going life of peaceful pursuits we are now required to undergo a quick transition to the tempo of war; a transition which calls for physical hardening, mental readjustment and the building of morale that will fortify individual soldiers upon the field of battle.

"The inherent worth of the soldier is everything," said Hindenburg. Into his very fiber must be woven the principles for which he fights. No one will deny the ferocity with which the German and Japanese soldier have fought. Their spirit in battle is traceable to the teachings of their leaders. When the Ecole Militaire Supérieure in 1877 undertook a study of the German military plan and the causes of their success, they were surprised to learn that it was not a uniform method or a centralized intellectual administration of the German Army, but a philosophy which was a folk possession. On the west were the Dutch, the Belgians, and the French; to the south the Italians and the Balkans; to the east were the Russians and on the north the Scandinavian countries-all of whom were restricting the economic growth and free expansions of the German people. Since the time of von Moltke, the elder, such have been the teachings of the German leaders. It is, therefore, no surprise that twice within one generation the determination to

expand the empire has flared in the turmoil of war. The morale, the will to fight-the power that drives the machinery of war-is present in every German and Japanese soldier and it is that which makes them such formidable enemies.

So the events since December 7, 1941, have aligned upon the one side highly disciplined, well-trained, organized, experienced armies, indoctrinated with the necessity of expansion for their survival, against a people on the other hand who desire peace, no territorial expansion, and whose very life revolts against regimentation and compulsion. Having been compelled to commit ourselves to combat, it devolves upon us to develop in the shortest period of time an army well organized, superior in discipline, morale and training to that of our enemies. This in short is the problem of the Army of the United States. It is a challenge of the highest order, and upon the officers of our military forces it places an extremely grave responsibility. Our success over our enemies will depend upon the degree of development of certain essentials of military personnel:

- 1. Skillful and resolute leadership.
- 2. A high morale.
- 3. Well-organized and disciplined troops.

If we have the first of these three we are bound to have the last two and it is for the development of those qualities of leadership that I have the temerity to offer my opinions for whatever they are worth. These remarks are addressed particularly to officers of junior grade.

Many times junior officers feel that they have been handicapped by lack of economic position and educational foundation. But upon neither of these two is real leadership dependent. Men of great academic accomplishment are often inclined to vacillate while those of lesser degree are much more aggressive and possess a high degree of initiative. I recall recently having observed the workings of a platoon leader who came from a very wealthy family. It was natural to suppose that he, having enjoyed the luxury of wealth, would expect great difficulty in adjusting himself to a soldier's life. Probably he did, but when I saw him he was sharing with his men every known form of hardship. The finest reports were received from his superior officers, and the soldiers of his platoon would follow him anywhere under any conditions. As contrasted with this man of means, I witnessed a corporal, an Italian boy from the eastern shores of the United States. He had known only the barest of necessity and possessed very little education, but he was a leader of the higher order, respected by men and officers alike.

The foundation of leadership is character. Any young officer who possesses the virtues of character or who is willing to cultivate them will have no trouble in acquiring effective leadership. If he does not possess them and is unwilling to develop them, then the quicker he is removed from command the better will the interests of the military be served. I have observed too long to believe that any man can fail to develop these attributes of character which develop leadership if he will only make his mind so to do.

The characteristic which higher command looks for in any officer is honesty. Honesty in thought, word, and deed. No man can dream of becoming a military leader who gives lip service to one God and by action serves another. The officer who will agree with his battalion commander on a certain course of action and quickly thereafter complain to his men and otherwise berates his superior has lost the foundation of leadership. It is true that he will find some officers and some men who will join with him in belittling his commander, but even with these and certainly with the greater majority of his command he has lost respect. Cheerful compliance with the orders of a superior, whether they are to your liking or not, will pay dividends from senior and junior officers and among all of the men of the command.

There is a mistaken idea of many junior officers that being a good scout and sympathizing with the hardships their men must undergo is an indication of leadership. An officer who asks his men to drink with him will find that they are quick to respond, but the next day on the drill field or in garrison, he will learn that they are equally quick to take advantage of that proffered friendship. Discipline is vital for a well-trained unit and it cannot be developed through undue familiarly. Furthermore, an officer who has been unduly friendly may find himself embarrassed when he meets a situation where punishment must be applied. It is most difficult to rebuke a man with whom you have been familiar. The other men of the unit will be quick to sense a degree of partiality, and this will lessen the esteem in which they hold the officer. In dealing with men, a junior officer should bear in mind (1) that he must always be courteous but businesslike in his dealing with men; (2) that when they make mistakes, he must correct their fault, but let them know in no uncertain terms that repetition will not be tolerated, and (3) if they are repeated that firm and

immediate action will be taken and that there will be no resort to compromise. Such procedures will command respect among the men of any unit whether they like you or not and there is no substitute.

Every officer should realize that in dealing with the men of his command he is dealing with men who have been schooled in the same general philosophy of life as he; therefore, he can expect the same treatment from his men which he, in turn, gives to those who are superior to him. This implies that there must be sincere honesty in every act, tangible and intangible, by the officer if he expects response in kind. He may be able to fool his commanding officer, but he will never be able to fool the men of his unit, and when the men observe an officer displaying a front to a senior and then acting counterwise, they will indeed lose all respect for that individual. As he reacts towards his superior, so may he expect his men to react to him.

There is no standard treatment for all of the men of a unit. The American soldier is indeed an individualist and each must be handled as such. To one man you may make an appeal; to another, firm discipline must be applied. This requires a thorough study of the attributes and qualities of each, and diligent attention to their individual problems. Such treatment will be readily understood by the men and recognized as generally fair.

An attitude of superiority detracts from the effectiveness of an officer. The insignia which he wears upon his blouse is not a recognition of accomplishment, but rather an indication of responsibility and of the faith that his country has in him. It will be through his examples to his men, his unselfish concern for those under him, that he will be fulfilling the obligation which he should feel.

Second to honesty and courage of purpose, I would place an unselfish attitude as the greatest attribute of a leader. An officer who thinks of his own bedding-roll and the regularity of his meals before the comfort of his men is indeed losing a valuable point in the development of leadership. Place the care and the protection of the men first; share their hardships without complaint and when the real test comes you will find that they possess genuine respect and admiration for you. To do otherwise means failure at the crucial moment when the support of your men is essential to the success of battle, or maybe to the preservation of your own life. I recall once visiting a hospital on Guadalcanal where lay the wounded and sick from jungle fever. I came to the cot of a soldier who had been wounded several days before so badly that you could hardly recognize him as a human being. Before I could ask him how he felt, he raised on his elbows and asked me if his commanding officer was still alive and if he had been wounded. He told me the men of that company would go through anything for that officer. For he never commanded any of them to do anything which he himself would not do. This, indeed, to me was a true tribute to real leadership.

By virtue of the insignia which he wears, the men have a right to expect of an officer more than they themselves possess. An officer loses quality when he addresses his unit upon some subject about which he knows very little. The War Department has provided a system of Service Manuals in which all the answers to military procedures and problems can be found. In the instruction of men of a unit, officers are directed to follow the procedures of these Field Manuals and to tell them what they have learned therefrom. The men have the right to expect, when you are consuming their time and engaging their attention on these subjects, not only to know what the Field Manuals state, but what contemporary publications may emphasize. Do not fail them! Every officer must study incessantly that he might give to his men in the few short hours which are permitted for their training the very utmost that his ability will permit.

I am unalterably opposed to the use of profanity by officers in their official relations with soldiers. While it is trite to say it is lack of vocabulary, it is also indicative of lack of self-control and it is usually used to cover deficiencies. I would like here to quote a maxim from which I think every officer could learn a valuable lesson: "Be more than you appear to be; do much-say little; let your work speak for you."

Another characteristic of a good leader is always to have a plan. This is true upon the training grounds as well as upon the field of battle. Design the program for the day's work with meticulous care so that each minute challenges both officers and men of the unit. Every officer should have a plan devised for any emergency which might arise. This will tend to create confidence in himself and his men. When an outdoor program is suddenly interrupted by inclement weather, a quick transition to indoor training without loss of time and poise by instructor will breed confidence in the men. When the unit arrives upon the field of battle, have a plan by which any expedient will be met. It may be that the plan which was formulated is not the best under the particular circumstances, but the fact that there was a plan, any plan, will develop great confidence. Men who come under enemy fire for the first time are

frightened and frozen into inaction. To say otherwise would be dishonest, but if the officer has explained to his noncommissioned officers a plan which they will follow once the enemy bullets begin to fly, and you carry out this plan, you will find that it may be the difference between panic or command control. A prior plan tends to develop self-control under excitement, and a calm exterior with a matter of fact voice will indeed inspire confidence.

Great military leaders have always possessed undaunted courage. History abounds with stories of leaders who have dared to do those things which their opponents never would dream they would. All young officers should dream of those events which would demand of them courage, fortitude and personal sacrifice and thereby prepare themselves against the day when they will put into practice that of which they dream.

Strong and resolute leadership will result in a well-disciplined Army of the United States. The time to apply it is now, and not after we get on the battlefield. It is not difficult to attain, but can be acquired by all who have the determination to be honest in thoughts, words, and deeds; who have vowed to be impartial in their dealings with men; who possess or have developed self-control; and who have a full appreciation of the responsibilities of their rank. *MR*

Alexander McCarrell Patch Jr. (1889-1945) was born at Fort Huachuca, Arizona, the son of then Captain Alexander M. Patch Sr. He grew up in Pennsylvania and attended Lehigh University for a year before transferring to the US Military Academy, where he graduated in 1913. Patch was the distinguished graduate of the 1925 US Army Command and General Staff School class and served in both World Wars I and II. He has the distinction of forming the Americal Division, the only US division in World War II to have a name, not a number. After forming the division in New Caledonia, Patch took the unit to Guadalcanal in December 1942, where they relieved the 1st Marine Division. Named commander of XIV Corps, which included the Americal and 2d Marine Divisions, Patch led the final offensive against the Japanese on the island. In 1944, Patch became Seventh Army commander, leading the Allied landings in southern France on 15 August-Operation Anvil/Dragoon. In 1945, he became Fourth US Army commander and was appointed to a group to study the US Army's postwar situation. He died of pneumonia within days of completing the study in November 1945.

Fear and Loathing in the Barracks And the Heart of Leadership

COLONEL LARRY H. INGRAHAM, US Army

Parameters December 1988

The smart guys have taken the United States Army about as far as we can go with respect to weapon systems that bust up things and hurt people. The next advance in creating a more effective army will be done with people. People require leadership. That's what worries me, and lots of others.

The Army is now in the throes of a blizzard of memos, manuals, and pamphlets on leadership. But they miss the point. What gets left out is the heart of leadership, which cannot be taught from the platform. To make you understand what I'm talking about, I have to tell you a story told to me by some wise old NCOs who understood the heart of leadership, and how we lost it.1

Once upon a time, long ago, there was an army. It was a pretty good army, too, by world standards. One day it got committed to the jungles of Southeast Asia. It was committed with an unclear mission by a commander-in-chief who hoped to wage a major war without pain to his people. He therefore refused to call up the reserves. To further reduce pain he agreed to a 12-month rotation and increasingly heavy draft calls. Within five years the Army was bloated on rapid promotions. Repeated tours wore down the NCO corps, adding the burned-out to the killed and the wounded. But the war continued. Draft standards were lowered to spare the sons of the middle class. Project 100,000 scraped the bottom of the nation's poor and disadvantaged to man that once-magnificent army.

Many dedicated NCOs and officers tried to carryon, but the task became increasingly difficult. War protests eroded essential civilian support for the war, and soldiers became "pigs" to their fellow citizens. Racial violence flared throughout the country and spilled over into the Army. Drug use permeated both civilian and military sectors. And, on top of all of this, the legal system of the country took a sharp turn in support of individual rights over collective obligations. Charlie Company refused to move out when ordered. Discipline broke. The army and the nation trembled in disgust and frustration at revelations of atrocities symbolized by My Lai. Senior officers looked the other way. The war continued.

The 12-month rotation cycle worked reasonably well, except for one small problem-the Army quickly ran out of junior NCOs. Developing sergeants takes time, more time than 12 months. The Army tried to solve the problem by school-training junior NCOs, who were derisively called "shake and bakes." The scorn was not altogether deserved. They were well-trained at school, and got a few months jump on learning to be a sergeant in the jungle. Unfortunately, while they knew how to lay a Claymore, they often had trouble getting others to follow their example. Telling somebody elsewhere to go and what to do (and having them respect you for it)-that's something you don't learn in any school. You have to learn by watching somebody with the knack and then trying to copy. Well you can imagine the time those NCOs had when all hell broke loose in the Army, when discipline collapsed, and when nobody could tell anybody anything.

Those were times when many NCOs and officers were more afraid of their own troops than the enemy. Those were days of fraggings, and of racial protests on the commanding general's front lawn. Those were days when in some units in Germany no officer or NCO dared go above the first floor of the barracks. Those were days of hassling over haircuts, of confiscating drugs only to be told the seizure was illegal, and of being verbally assaulted as a "lifer" for giving a legitimate order.

When the war finally ended, the Army was in damn sorry shape. It was combat ineffective throughout the world. It was morally rotten. The jungle massacres were bad enough, but on top of that the Sergeant Major of the Army and the Provost Marshal General so much as admitted to being crooks. Oh, it looked like an army on the outside, but inside it was hollow. All the depots had been picked clean, operations and maintenance funds diverted, and serious unit training eliminated. What was left of the Army sat in ratty facilities maintaining worn out equipment, with no funds to practice being an army with.

Many experienced senior NCOs quit in disgust at what had become of the Army they had grown up in. The Army they loved lay in shambles around them, a paper model of its former self. They quit for many reasons. The end of the draft reduced the pay differentials between privates and sergeants. The "New Volunteer Army" marched to the

tune, "The Army Wants to Join You." It seemed like the privates got every benefit, everything but standards and discipline.

Others quit because their work had been contracted out to civilians during the war. Others found the MOS reclassifications difficult to swallow, while still others found it more profitable to retire than to continue to serve. They left with heavy hearts. The spirit of their army was gone. And with them went not man-years, but mancenturies of experience.

These centuries of experience included an understanding of the difference between recruit billets and the barracks of real soldiers; how to inspect a mess hall; drill ceremonies for fun; full field layouts; little pocket books with personal data on each soldier; how to housebreak lieutenants so you could show them off in company as captains; how to teach and how to train; when to joke and when to growl; and, most important, how to love soldiers and the Army.

The NCOs who stayed to put the Army back together again had a hell of a job on their hands. Remember, too, that they were comparatively inexperienced. They had gone to the jungle, done well, been promoted fast, and returned home. But they didn't know all the tricks of the old sergeants. Why, some of them couldn't march a squad to the motor pool when the formation was directly outside the gate! Sure, they could lay down indirect fires in the jungle, but nobody had shown them how to keep floor buffers operational in garrison ("You gotta teach 'em not to snap that long cord or it'll rip the socket right outta the wall and ruin the plug, too").

To make matters worse, the officer corps lost confidence in the NCO corps, and blamed it directly for all the trouble. It didn't seem like things could possibly get any more confusing and discouraging. But they did. The Army in its wisdom put male and female soldiers in the same barracks. Sometimes with only a week's notice and no guidance other than "do it," the NCOs had to sort out latrine and shower facilities, kitchens and sewing machines, visitation and inspection policies. It was bad enough getting the men to make their beds and keep the place looking like an army barracks, but allowing teddy bears and bedspreads was going too far!

So the Army up and did something smart. If NCOs could be school trained for the jungle, then they ought to be school trained for garrison, too. From that little insight grew a whole new concept in developing noncommissioned officers, the Noncommissioned Officers Education System. Slowly, painfully over the years, with the help of the remaining senior NCOs who remembered how a good army was put together, the young pups learned the technical skills required. Schools are good for teaching technical how-to's, and the young sergeants took the opportunity and ran with it.

There was one important thing, however, that the schools either didn't or couldn't teach. That was the heart of leadership. Caring for soldiers was an aspect of leadership the schools weren't very good at teaching. They taught sergeants to record birthdays, but they didn't teach them why. The old sergeants knew the value of greeting a private, "So, Smitty, how does it feel to be 19 today?" And they knew how to arrange for a steak at the mess hall. They knew this because these things happened to them when they were 19. The schools taught how to inspect a wall locker, but not how to sit on a footlocker and get a soldier to pour out his heartache. The schools taught about caring for soldiers, but nobody said that meant caring for their wives and kids, too. And the schools never mentioned a sergeant getting his goof-offs out of jail in the middle of the night, for no other reason than that he was responsible for them. Good or bad, for better or for worse, they were their sergeant's responsibility. These things are not learned from the platform; they must be learned from example in the school of hard knocks, with demonstration, imitation, practice, and critique being the key ingredients. The old sergeants knew there was no limit to what they could ask of soldiers when there were no limits to NCO concern for their troops. But too many old sergeants were gone.

There was all that rah-rah stuff about teamwork, morale, and esprit that was taught in school. The words were right, but the rhythm was wrong. Again, these things had to be experienced coming up before they could be practiced going down. Oh sure, some of the old timers remembered how competition could make even the most disagreeable work seem tolerable. Those old first shirts could set one platoon against another until it looked like they'd destroy each other, but just in the nick of time they'd set them all against the company next door. The old-timers also knew they were players on the team, not just coaches on the sidelines. They could manage a drink with the guys, or even a poker game, without compromising their authority. They too could have fun at unit socials, because both work and play were just different aspects of family life. The youngsters who grew up in the jungle, especially after 1969, seemed to forget, or not to have understood to begin with. The only lesson they seemed to bring home was to be an adversary of their own soldiers. They weren't dumb. They were inexperienced. And the times were against them.

Remember the difference between laying the Claymore yourself and insuring somebody else did it right? The same thing happened in garrison. The senior sergeants didn't have much time to teach their juniors a patient, caring, coaching leadership style. They had to act fast. They taught the shortcut, the "Poor Protoplasm Theory of Leadership." The troops were just no damn good; the only solution was to kick ass and take names, yell and holler, be strict and arbitrary, even capricious, if necessary-whatever it took to maintain authority and discipline.

Back in the early '70s, when the Army was flat on its back, sergeants had a real enemy, all right: their own soldiers. The difference between an army and a mob is discipline. The first order of business amid the racial incidents, drug use, and thuggery was to reestablish good order and discipline. They succeeded, too, with the tried and true ways that scared leaders always use: social distance and the whip. NCOs despised privates as dirtballs and scumbags because they feared them. They whipped them with chickenshit inspections, extra duties, expeditious discharges, and both judicial and nonjudicial punishments. They sought additional administrative ways to get rid of the riffraff. And, by golly, they got their soldiers' attention. They surely did, and the Army knew discipline once more.

Those who brought the Army back from chaos have a lot to be proud of, and their country owes them a debt that will never be acknowledged. But the Army paid dearly for the restoration of discipline. In the process, something happened to the noncommissioned officer corps and the officer corps, something that grew more worrisome the more healthy the Army appeared.

Previously the NCOs had always prided themselves in making the Army work, despite their officers. Now they started picking up all the bad habits of the officer corps. They weren't sure enough of their own authority to talk to either their soldiers or their officers. They talked only to each other, mostly about their insecurities (but of course they didn't use that term). They said they were "professionals" (which nobody who ever knew the Army ever doubted for a minute), but they confused professionalism with status symbols like office furniture and having a tactical vehicle. They equated school learning with professional competence, but sometimes a little learning is a dangerous thing. They became obsessed with whistle-clean efficiency reports required by centralized promotion boards.

Saddest of all, when they stopped talking to their soldiers, unwritten rules got set, Rules like, "professionals" don't drink a beer with the unit after work. And "professionals" don't have the unit over to the house for a cookout, because that's fraternization. "Professionals" attend to the barracks, because that's where the rater looks, but pay no mind to where married soldiers live. "Professionals" leave work at a reasonable hour, but the junior NCOs and privates stay until the work is finished. Scheming to give soldiers time off just isn't "professional." Since a "professional" tells other people what to do, he has to maintain a sharp image; "professionals" don't have to get their hands dirty any more. A "professional" is loyal and never laughs at the turkeys at headquarters (especially if he hopes to be a turkey himself, someday!). A "professional" doesn't laugh much at all; soldiering is serious business. If "professionals" laugh at all, it's at the expense of the troops, not the officers or the crazy Army bureaucracy.

It's not the fault of the NCOs, really. It's not the fault of the officer corps. It's not the system's fault, either. It's nobody's fault, at least nobody who's identifiable and still around. Things just turned out that way. Not all NCOs turned "professional." The Sergeant Morales Club represents NCOs who were nurtured in the old ways.2 Many of the other sergeants we see now weren't so fortunate, for whatever reasons, to have had superb role models. They are good products considering their times and circumstances. But they may not be good enough for war.

They grew up fearing their troops; in war they must trust them. They grew up despising their soldiers; in war they must love them. They grew up whipping the unit into shape; in war they must lead it. They grew up commanding respect; in war they must command devotion. They grew up keeping their distance and maintaining their proper place; in war they must hold the hands of the uncertain, cradle the anguished, and change the underwear of the scared, all without a second thought, because they're all family.

In the long march back from the days of the mutinous mob, the Army got confused about intimacy and authority, maybe for good reasons at the time. Leaders saw intimacy and authority as opposites and incompatible. They confused camaraderie with fraternization, equal opportunity with coed living, training-by-example with instruction from the podium, and soldierly irreverence with insubordination. They assumed social relations with their soldiers should be different in garrison than in combat. Maybe they're right. Maybe everything will be different in combat. Maybe the troops will come together when the fighting starts, just like they were supposed to in the jungle, before Charlie Company said, "We won't go." Maybe it's all bull that as an army practices in peace so will it perform in

war. Maybe. I hope so for the sake of the Army and the Republic. But, maybe it's not all bull.

I wish this story had a happy ending, but it has no ending at all. The story is still being written, unfortunately by NCOs and officers who grew up in an army that lacked heart. If you doubt me, look at the way we act in our leader training schools, not at what we say. We fail to teach the heart of leadership as the old-timers understood it, in terms of the four Cs: Competence, Candor, Compassion, and Commitment. That is the heart of leadership. I send my young NCOs to school. They learn to buff floors, but not to build cohesion. They learn to file counseling statements, but not to console a troop in the face of a "Dear John" or a dead buddy. They learn to instill fear, but not to inspire affection.

The head learns from the platform, but the heart learns from practice. We have forgotten the heart in our leadership training. The Army once knew how to teach that kind of leadership, and how to grow sergeants and officers who could practice it. Maybe the Army could teach that kind of leadership again, while there 's still time, before it's too late.

Notes:

- 1. This article is based on the NCO Career Histories Project: funded by the US Army Medical Research and Development Command. The project included some 500 hours of interviewing 20 senior noncommissioned officers.
- 2. The Sergeant Morales Club, open only to NCOs who demonstrate exemplary professionalism, originated in Europe several years ago. Each club nominee goes before a board of five to seven command sergeants major, who examine the nominee's record. appearance, and conformity to the Morales ideal, epitomized by an NCO's dedicated attention to the needs of his soldiers throughout the 24-hour day ("Focus on People,.' Soldiers, 41 [October 1986], 26).

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Command

Battle Command: Vision for Success

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THE INFORMATION REVOLUTION in Military Affairs (RMA) promises much, but will it deliver? The author observes that information technology and precision weaponry will not necessarily guarantee success on future battlefields. He contends that leaders wielding a firm understanding of battle command principles-leaders with the ability to see and understand battlefield events before they happen-will be the key to future success. He cautions that overreliance on the decision, rather than the vision that guides the decision, can lead to failure. His proposed definitions make essential distinctions between command and battle command, offering logical methods for commanders to employ in the battle command process to take full advantage of the technology the information RMA has to offer.

Believers in the information revolution in Military Affairs (RMA) are promising much to the US Army: success in war with outnumbered forces, low casualties and a lower defense budget. But the information RMA will be unable to deliver on these promises. While information technology will allow the rapid movement and better management of data on and off the battlefield, it ignores how information will be used. That issue is at the heart of winning wars. The assumption implied in the RMA promises is that given "quality" data, individuals will make correct decisions. Yet, history provides numerous examples of commanders making poor decisions or refusing to change poor decisions in light of "quality" data. I believe our Army is focused on the decision itself rather than on the vision that gives the decision value. Further, this focus is embedded in our battle command definition. But is this definition correct, and is our current understanding of battle command creating chaos in our Army?

Challenging Current Concepts

The 1993 version of US Army Field Manual (FM) 100-5, Operations, formally introduced the idea of battle command.1 Battle command is defined as "the art of battle decision making, leading and motivating soldiers and their organizations into action to accomplish missions. [It] includes visualizing current state and future state, then formulating concepts of operations to get from one to the other at least cost." Battle command also includes "assigning missions; prioritizing and allocating resources; selecting the critical time and place to act; and knowing how and when to make adjustments during the fight."2 Does this definition provide insight to battle command or confuse the practitioner? In my opinion, this definition has several flaws. The most critical is its absence of vision. To decide, one must be able to see and understand battlefield events before they happen. The need to see is the critical task. Once everything on the battlefield is understood, decisions are easy. The FM definition, however, highlights the decision's importance, not the vision that creates the need for it.

The problem with this definition is that it is identical to the definition of command-"Command is the art of battle decision making, leading and motivating soldiers and their organizations into action to accomplish missions at least cost to soldiers." Why are there two terms to describe the same concept or collection of skills? This alone can cause confusion to anyone trying to apply the terms. Additionally, what is meant by "battle decision making?" Does this imply that battle command is practiced only on the battlefield during the execution of the plan and ignored at other times? If battle command includes vision, how can it be limited to the time of actual contact? What are the other types of decisions? Finally, what is leadership's role in battle command? Must a commander be charismatic to be a successful battle commander? Is motivation a subset of leadership? These issues indicate that there is a definite problem with our understanding, definition and application of battle command.

The effect of these problems is obvious when one tries to integrate battle command with the other combat functions. FM 100-5 gives battle command equal weight with the combat functions of intelligence, maneuver, fires support, air defense, mobility and survivability and logistics.4 Yet, how can a concept that encompasses vision, that critical component which drives all that happens on the battlefield, be merely equal to these functions? Doesn't vision give these functions form and purpose? Doesn't "decision" determine what each of these other functions will do on the battlefield? Without decision and the vision that gives it substance, one cannot determine what to do with these combat functions. Should battle command be placed on a level above these concepts? All this is clear evidence that our Army does not understand the nature of the doctrinal concept we created.

After examining these issues, the first question that must be answered is, "Is there a need for the term battle command?" I believe there is. General Frederick M. Franks Jr. states in his Military Review article "Battle Command: A Commander's Perspective," "We saw that leaders must master a set of battle command principles. . . .

thus, battle command demands more art than science."5 Franks points out that there are skills leaders must master. Carl von Clausewitz also addresses this in On War by discussing leaders' talents, abilities and characteristics.6 Initial draft FM 22-102, Command, states that "A successful commander will, of necessity, demonstrate the characteristics of a good leader."7 This statement points to a difference between the position of command and the qualities of the commander. All these sources indicate an individual's makeup has a direct bearing on combat success. Because the seeds of success reside principally in the individual, individual qualities cannot be defined by command. Command is merely a position to be filled by individuals with specific qualities. Thus, the term battle command is needed to describe the individual who possesses the qualities we desire in a commander.

A New Definition

Battle command should be defined as "the ability to create a vision for success and see it applied on the battlefield." This entails visualizing the current and future battlefield and enemy and friendly forces with all possible interactions and results. It requires the individual to identify an end state so the operation has purpose. Identifying an end state means the individual can visualize the conditions necessary for success and can select the correct mechanism for victory. If a commander can see all this on a battlefield yet to be filled with friendly and enemy forces, then he understands the art of war. When he actually makes his vision happen, he has mastered the ability to apply the art of war on the battlefield-he has mastered battle command.

As a concept, battle command demands a broad scope. The application of battle command is the ability to know and do, as shown in Figure 1. This is not a new understanding of what soldiers must master to become successful leaders. Clausewitz discusses these concepts and their relationships in On War.8 As an army, we are attempting to rediscover what is already known but perhaps not widely taught or broadly understood.

To Know. The ability to know is the ability to visualize. A commander must be able to build a mental battlefield view and be able to see the friendly and enemy forces in time and space, as well as the results of their contacts. He must perceive when and where the enemy's weaknesses reside, or better yet, determine how to create and exploit these weaknesses, and he must know what those weakness look like on the battlefield.

The ability to know requires integrating intuition and imagination with the mission and reality, as depicted in Figure 2. *Intuition* allows the leader to see the battlefield without knowing all there is to know. Clausewitz states that uncertainty in war can never be completely eliminated, and this will always be true.9 For the foreseeable future, the information RMA will probably remove some uncertainties but will likely create new ones. Leaders must continue to rely on intuition for a complete understanding of battlefield events. The battle commander interprets what he knows by using intuition to complete his understanding of the battlefield. This creates certainty, which will only exist at the time of the decision. After the decision is made, the battle commander must accept that his intuition could be wrong. He must challenge his understanding with every new piece of data. If the new data supports his understanding, he has made correct assumptions. If the data conflicts with his understanding, he must resolve the conflict. Once established, his understanding is not sacred but is subject to change based on reality or operational necessity.

The other battle command quality, imagination, is the ability to consider possibilities that intuition does not see. It allows boldness and enterprise in war. Both imagination and intuition must operate within the bounds set by the mission and reality. Mission sets the parameters that the end state must achieve, while reality is the limit of "doability" understood from mastering our craft. Reality must be challenged by imagination, for what is possible resides in the leader's mind.

To Do. The ability to do means taking our understanding of success-vision-and making it happen on the battlefield. The commander must be able to impart his vision to subordinates; construct a plan that seamlessly puts all the parts together to achieve success; train his forces to execute to standard; and then provide the leadership necessary to carry the operation to its end state.

Consider a symphony. The composer hears the music in his head-his vision-but he must set the notes down on paper so the musicians can play. The musicians must master their instruments, because one wrong note can destroy the harmony of the whole. The score is the plan. The composer must pass his vision to the conductor for interpretation of the plan. When everything is done correctly-the score, the interpretation, the musicians playing the right notes at the right time and place-something is created that only the composer initially heard.

The ability "to do" has several components: leadership, training and professional knowledge, as shown in Figure 2. Leadership is the ability to motivate soldiers and organizations to do what needs to be done. Good leaders have the moral courage to do what is right in the face of adversity and the physical courage to inspire-leadership by example. Training allows soldiers to master basic skills as well as their equipment. Obtaining professional knowledge means learning the myriad of details necessary to make decisions and understanding soldier and unit standards and capabilities.

Drive is a factor of knowing and doing. While a talented individual can be successful, only one who has drive will be great. Drive pushes an individual to accomplishment or personal improvement, thus expanding professional knowledge and experience.

The model just described is a generalized picture of battle command. While it separates intuition and imagination into neat areas, the reality is more complex. Doing requires the ability to know, because a subordinate must decide how to implement an envisioned action. Knowing requires the ability to do, because one must be able to separate the realistic from the unrealistic within the vision. What this means is that each command level requires some degree of both battle command components. However, the ratio between the two varies based on the command level, which is tempered by the battlefield situation.

Leaders at battalion level and below must focus on the doing part of battle command. If our soldiers cannot kill the enemy at 200 meters with M16 rifles, not even a General George S. Patton Jr. or a General Field Marshal Erwin Rommel can win the battle. Units must be able to execute to standard. Battalions are typically told what to do and when to do it and are usually given some guidance on how to do it. Their focus is on the single battle facing them, not the next battle. This is a difference between the operational and tactical levels of war and separates knowing and doing. In executing its part of the plan, a battalion will commit all its forces to win the current battle. Failure to execute becomes failure for all. At the tactical level, battle command is the ability to do-to make the commander's vision happen.

The rules, however, change at brigade level. Brigades must know and do. A brigade commander must not only plan the current fight, he must also anticipate and win the next. Because he faces a minimum of two battles, he cannot expend all his resources in the first. He must make operational-level decisions on how much he must commit to win the first, while maintaining enough combat power to win the second. For example, examine the role of battalion and brigade reserves. Battalions can commit reserves to the current battle and be successful. Brigades that commit reserves to the current battle normally fail. Because a brigade also must do, its collection of battalions must be trained to work as a team.

Division and above battle commanders are heavily involved in knowing. They must anticipate future situations and conditions and make resource decisions based on where, when and how future fights will be won. Commanders at division level and above have little impact on the current fight beyond providing additional resources, unless they opt to become personally involved. The ability to do at this level relates to professional knowledge and setting standards for subordinate training. These standards become the planning factors or assumptions that are part of knowing.

Understanding this simple definition and its components-to know and to do-allows us to examine the human dimension in the art of war. It allows students to explore the relationships among various battle command components. How do we reconcile the definitions of command and battle command?

Battle Command, Command and Control

If battle command is to be redefined, then what exactly is command? Command is the legal basis that allows a commander to control specified resources-normally personnel and equipment-and to make decisions involving those resources. Formally, command has no other definition or components. Command places an individual in a position to lead but does not bestow leadership qualities or mastery of the art of war. These are traits an individual develops and earns. The position of command only temporarily gives the illusion of these traits until the individual proves through performance that he truly has earned them. History is full of individuals who commanded but were failures as battle commanders and leaders.

Major General George McClellan was clearly in command of the Army of the Potomac. Although he created an excellent, well-trained and well-equipped army, it failed in combat during the Peninsular Campaign. This was not a command or a control failure, because his forces executed everything he told them to do. McClellan had charisma, and his soldiers loved and admired him. His plan was excellent. However, he lacked the ability to do-to put his vision into operation. He failed at battle command, not at command itself. Napoleon understood this relationship clearly when he observed Bavarian General Karl Philipp Wrede's position at Hanau. "Poor Wrede, I made him a count, but I could never make him a general." 10

Control should be defined as "using command authority to organize, train and establish procedures and standards to create and execute plans that will allow the organization to do what the commander wants it to do." This is very similar to the current definition in FM 22-102.11 While FM 22-102 states that the commander is assisted by the staff, I believe the staff is part of control. The bottom line is that control is simply an enabler or inhibitor of action. With these new "working" definitions, the relationship among battle command, command and control becomes clear-battle command tells command what to do with control.

From my perspective, this highlights an important point in understanding battle command. While only one individual can be the commander, anyone within the organization can be a battle commander if he has the ability. Many commanders in history were masters of battle command, but they are outnumbered by commanders who only possessed some battle command ability. Some of these leaders were successful; others were not. Why?

The successful ones understood that if they could not master battle command, they must have an individual nearby who could and whom they would willingly listen to. Field Marshal Gebhard Leberecht von Blücher and Field Marshal August Niethardt von Gniesnau, Marshal Michel Ney and his aide-de-camp Henri Jomini and President Franklin D. Roosevelt and General George C. Marshall are only a few examples. You need only look at the debate surrounding the relationships among General Robert E. Lee, Major General Thomas "Stonewall" Jackson and Lieutenant General James Longstreet to appreciate this issue. There is no discussion about who commanded the Army of Northern Virginia. The discussion revolves around who was the army's battle commander. Who won at Chancellorsville? Who lost Gettysburg? Who created the guiding vision?

Vision

Accepting and understanding this battle command definition is critical for our Army, because it stipulates what the commander and his staff must do to succeed in war. A vision that is understood by all is essential, because the vision becomes the plan. Vision allows everyone to make decisions, because it provides the structure within which decisions can be made.

Relevant Common Picture (RCP). Examine the RCP principle. To most, RCP is a shared common map, updated periodically, that allows subordinates to "see into the mind of the commander." This is a promise made by the RMA. But if two individuals examine the same map at the same time, they are likely to develop two different understandings of the situation. Thus, there is more to RCP than a common map.

To attain RCP is to achieve a common understanding of the current situation, the actions necessary to effect the situation and the results of those actions on the end state. RCP is a concept, not a thing, that allows subordinates to make decisions. It is the centerpiece that enables command by influence.12 While the common map presents the same data to everyone, that data must be interpreted the same way or chaos will result.

RCP consists of three components: the common map; a common background and understanding of theory, doctrine, tactics, training, equipment and soldiers; and the ability to communicate within vision's framework, as shown in Figure 3. The vision tells how success can be achieved. The map provides the common data set everyone will use to examine the situation. This common background and understanding provide the ability for participants to similarly analyze the situation, assess options and reach similar conclusions, which are tempered only by imagination. Communications permit adjustment required by friction. Communication allows a commander and subordinate to verify data and vision and quickly "harmonize" to reach a high level of certainty.13

Vision is the critical part of RCP, because it gives meaning to the picture. The best example is British Admiral Horatio Nelson and his "band of brothers." Every captain in Nelson's fleet knew what to do as soon as they saw the Franco-Spanish Fleet (the common map), because Nelson had schooled them in how he planned to fight (common training and doctrine) based on his vision. His training was so successful that he only made two signals during the

entire battle, the first being purely inspirational. That is RCP. Yet, our doctrine never addresses RCP in light of the vision. Without this understanding of vision's role, RCP is only another method that could lead us to defeat. What was Major General Lloyd R. Fredenall's vision for the fight at Kasserine? Did his units understand it and follow it? Did Major General Charles Lee understand General George Washington's vision for the Battle of Monmouth, or when he retreated instead of attacked, was he imposing his own vision, changing his understanding of the RCP?

Critical information requirements. Our understanding and use of the commander's critical information requirements (CCIR) is key. CCIR is currently defined as "unknown but needed information of such critical importance to a commander's decision-making process that they directly affect the successful execution of operations."14 The reasoning behind CCIR is that an army has finite resources and all information is not equal. Seeking all information is desirable but could result in passing on irrelevant information to the commander. How does one determine what information is critical? The CCIR definition lacks a concept to make it a useful tool for the commander and his staff. Examine some CCIR examples in our manuals. "What is the enemy doing? What are friendly forces doing? What are the enemy's problems?"15 What is the value of such questions, and how can they be answered? Our definition of CCIR lacks connection to vision.

Consider the following model: Our plan can defeat all the enemy's courses of action; the enemy acts as we predict; and our forces execute our plan to standard. If these three assumptions are true, the last decision the commander makes is approving the plan, because once he does this, all decisions have been made and discussion is over. This is the ideal situation all armies strive to achieve-applying vision to the battlefield.

Because war is not a science, commanders never know with certainty if they have "read" the battlefield correctly.16 Given this, what does the commander need to know before and during the battle? He needs to know if any of his assumptions are false. Through his vision, he can identify events that indicate the unfolding battle is not matching his vision and assess whether these events will cause failure. Thus, he identifies what these failure-producing events will look like on the battlefield. These events then become his CCIR.

For example, the commander is attacking a defending enemy. Given that he has identified the correct decisive point and method for victory, does he need to know the enemy is counterattacking somewhere other than at the decisive point? No. He would like to know this, but it is not critical because it will not cause him to lose the battle. He must know if the enemy is counterattacking in a certain direction with a certain size force if his vision identified that potential action as a cause of defeat.

Look at the symphony analogy again. Is it critical for the conductor to know if one of the 15 flute players is having problems with a note? Although he would like to know, it is unnecessary, because the sound of one flute is covered by the other 14, and it is unlikely the audience will hear the error. However, does he need to know if the flute soloist is having problems with a note? Yes, because that soloist can destroy the wonderful mood the music has created for the audience. Vision allows a commander to see what constitutes failure and thus, establish his critical information needs accordingly.

Intent

Intent is defined as "a concise statement of what the force must do to succeed with respect to the enemy and the terrain and the desired end state."17 But how does intent achieve this? The mission statement normally contains the operation's purpose and end state. In this case, the concept provides the method.18 In practice, the intent statement merely echoes the concept of operations or offers doctrine. So what does intent add to understanding? Again, the definition lacks a connection to vision.

The commander must convey his understanding of the battlefield to his staff and subordinates. While he wants subordinates to use initiative when necessary, he also must ensure that when it is used, it supports his vision. Too often, subordinates see the battlefield through their own eyes and not the commander's and make decisions based on their own unit's needs rather than the needs of the higher element. When a second vision is injected into the battle, unity of command is destroyed and the operation is out of sync or "deharmonized." Thus, intent must be addressed in terms of the vision and must provide what is not given in other parts of the order.

Intent can be considered to be one part of the commander's vision articulation. The mission statement provides information about the mission, time, place, forces, end state and purpose. The concept provides the method and

means to harmonize the operation to leverage doctrine, equipment, training and procedures. By adding intent, these three statements give subordinates the commander's vision of the battle. A statement of intent is where the commander provides his insights about possible problems during the battle and what actions subordinates should take. Intent should be geared to specific situations rather than general doctrine. For example, the commander might tell a subordinate to bypass a hill he would normally secure, because the commander sees that enemy possession of the hill will not cause failure. Would Washington have won the Battle of Germantown if his intent statement had included "bypass houses because they won't affect the battle"? With intent, the commander presents his thoughts on how he sees the battle unfolding and how subordinates should react to battle situations. This helps maintain vision unity.

War is so simple in concept, yet so difficult in application. To study and master war, a student needs tools to bring its vast complexity into focus. As he learns about the art of war, the student might discard old tools and develop new ones. I do not expect everyone to agree with my thoughts on battle command. In fact, I hope this article raises enough "red flags" to regenerate much-needed debate and continued dialogue on the subject of battle command and battlefield leadership. Please challenge me! The new definitions I have proposed are a tool for studying and discussing the human dimension of war. Using the battle command model presented here, examine the roles of Lee, Jackson and Longstreet in their army. More important, examine the information RMA using this same model. What can it do? What can't it do? How best can you use what it offers? These are questions battle commanders must answer before they cross the line of departure. *MR*

NOTES

- 1. US Army Field Manual (FM) 100-5, Operations (Washington, DC: US Government Printing Office [GPO], 14 June 1993), 2-14 and 2-15.
- 2. Ibid., Glossary-1. Why the battle command definition is buried in the glossary of FM 100-5 instead of being presented and discussed within the body of the manual is puzzling.
- 3. FM 22-102, Command, initial draft (Washington, DC: GPO, undated), 1-1.
- 4. FM 100-5, 2-14.
- 5. GEN Frederick M. Franks Jr., "Battle Command: A Commander's Perspective," Military Review (May-June 1996), 4-5.
- 6. Carl von Clausewitz, On War, edited and translated by Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), chapter 3.
- 7. Draft FM 22-102, 1-5.
- 8. In chapters 2 and 3 of Book II, Clausewitz discusses knowledge, capability and ability. His "capability" and "ability" clearly refer to making events happen on the battlefield. For clarity, I have substituted the word "do," because its current use within our Army has the same meaning as capability and ability.
- 9. Ibid., 102-103.
- 10. Vincent Esposito and John Elting, A Military History of the Napoleonic Wars (Westport, CT: Praeger Publishers, 1964), biographical sketches.
- 11. Draft FM 22-102, 1-6.
- 12. For a discussion of command by influence, command by plan and command by direction, see Martin Van Creveld, Command in War (Cambridge, MA: Harvard University Press, 1987).
- 13. I prefer the term "harmonize" to "synchronize" to describe what we want to achieve on the battlefield. Synchronization implies all parts mirror one (as in "synchronize your watches"), usually in a set, predetermined order. Harmony, on the other hand, is the combining of parts into a pleasing whole. Like a symphony, battlefield actions should be combined into a whole that feels or looks right but which may not always follow the plan. Leaders should be able to have a battlefield "jam" session with the vision supplying the beat. Harmony is the essence of command by influence, because it allows individuals to judge and act based on a common understanding of the required results.
- 14. Battle Command Battle Laboratory (Leavenworth) [BCBL(L)], Battle Command Techniques and Procedures (Fort Leavenworth, KS: BCBL(L), undated), 2-32.
- 15. Ibid., 2-37 and 2-38.
- 16. Clausewitz, 84-86.
- 17. FM 101-5, Commander's Intent, final draft (Washington, DC: GPO, undated), 5-17.
- 18. BCBL(L), 2-17 to 2-18 and 2-27 to 2-29.

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Battle Command: Bradley and Ridgway in the Battle of the Bulge THOMAS M. JORDAN, LIEUTENAT COLONEL, US Army

In recognizing that the operational level of war provides the vital linkage between national and theater strategic direction and the tactical employment of forces, current Army doctrine identifies several key planning tasks for operational-level commanders:

- 1. Shape the military environment.
- 2. Set the conditions for decisive results or victory.
- 3. Identify the military operations that will achieve the desired military end state.
- 4. Support the campaign with operational intents, concepts and objectives.
- 5. Respond to continually changing conditions.¹

These tasks constitute "the art of motivating and directing soldiers and their leaders into action to accomplish missions." 2

Aside from planning responsibilities, how do corps or higher commanders affect the tactical level? What role do they play, and how much difference do they make in tactical battles?

In late 1944, US Army General Omar Bradley, commander of the largest Army Group in the European Theater, noticed a weakening of the vaunted German war machine. US Army General Dwight D. Eisen-hower's broad-front ground and strategic air campaign was working. Despite devastating Allied losses during the bitter Huertgen Forest fighting, Bradley and other senior commanders believed the Germans were reeling from the repeated Allied Russian hammering. In losing the equivalent manpower of five divisions a week, German defenses were stretched to the breaking point. By late fall, the intelligence community and Bradley, Eisenhower and English General Bernard Montgomery believed the Germans lacked the capabilities to conduct anything beyond local counterattacks. In the Allies' view, the German breaking point was imminent.³

As winter approached, Bradley agreed with Eisenhower's decision to maintain pressure on Adolph Hitler's beleaguered *Wehrmacht*. However, the iron laws of logistics combined with limited infantry replacements forced Bradley's planners to economize in order to build up sufficient combat power to sustain an offensive. With Eisenhower's concurrence, Bradley made the "calculated risk" to use the 88-mile Ardennes Forest sector as a reconstitution and training ground for First Army's tired, green divisions.

Bradley relied heavily on British ULTRA intelligence intercepts to confirm his predisposed attitude regarding the German offensive threat. He believed the combat power he would gain through the disposition of forces in the Ardennes was worth the risk. Reasoning that nothing of strategic value lay in the region, Bradley convinced US Army Lieutenant General Troy Middleton, VIII Corps commander, that even if the Germans did attack, the Allies' mobility advantage would enable a rapid defeat of any penetration.

At a 7 December 1944 strategic planning conference with Eisenhower in Maastricht, Netherlands, Bradley received permission to conduct limited offensives using the First and Third Armies. Designed to set the conditions for a major offensive aimed at the heart of Germany by early 1945, these operations fulfilled Eisenhower's desire to destroy the German Army and bring the war to an end. 10

In early December, Lieutenant General Matthew Ridgway, XVIII Airborne Corps commander, was not thinking about a possible German offensive through the Ardennes. With his headquarters split between England and France, Ridgway's first concern was to refit and train soldiers to replace the high number of casualties his two crack divisions, the 82d and 101st, had sustained in the ill-fated Arnhem Campaign.¹¹

The Assault

On 16 December 1944, the German Army for the third time in 30 years launched a major ground assault through the Ardennes' forested trails. Focusing on Antwerp as his strategic objective, Hitler planned to encircle and destroy Allied forces north of the line of Bastogne-Brussels and Antwerp. Beginning with a thunderous 30-minute artillery preparation along the attack zone, three German armies began the attack against unsuspecting Allied forces. 13

Although initially shocked, US troops fought back stubbornly to check the massive German assault. All along the front, German units failed to meet their initial assault objectives and time lines. Major exceptions were multiple penetrations along the US VIII Corps front, the most serious occurring between V and VIII Corps in the Losheim Gap. 14

Bradley was slow to grasp the enormity of the German attack. For almost a day, he believed that German Field Marshal Karl Rudolf Gerd von Rundstedt, the senior German commander in the West, had merely launched a spoiling attack to throw off US Army General George S. Patton's offensive in the Saar region. Bradley later commented: "The other fellow knows that if he's to hold out much longer he must lighten the pressure that Patton has built up against him in the Saar. If by coming through the Ardennes he can force us to pull Patton's troops out of the Saar and throw them against his counteroffensive, he will get what he's after. And that's just a little more time." ¹⁶

The Defense

Eisenhower did not agree with Bradley's assessment.¹⁷ After a tense night sifting through confusing situation reports, the two officers decided on the immediate defensive strategy—hold the north and south shoulders of the penetration, block the rush west by holding the road hubs of St. Vith and Bastogne and prepare strong defenses along the Meuse River.¹⁸

Eisenhower instructed Bradley to send the 10th Armored Division from the south and the 7th Armored Division from the north toward the flanks of the attack. Bradley was to alert his commanders to free up any reserves for use in the Ardennes area. Finally, Eisenhower decided to commit the Supreme Headquarters Allied Expeditionary Force (SHAEF) reserve, Ridgway's XVIII Airborne Corps, minus the 17th Airborne Division, to bolster the critical points at St. Vith and Bastogne. ²⁰

By dawn the next morning Ridg-way was on his way to link up with the 82d and 101st, establishing his forward command post at Werbo-mont. He coordinated with US Army Major General James Gavin, commander of the 82d Airborne Division, met with US Army General Courtney Hodges, commander of First Army, then began directing units to the front lines.²¹

Ridgway's actions were primarily limited to moving troops to penetration points, sizing up the tactical situation and establishing a cohesive defense. By 20 December, his force had grown considerably. Elements included the 30th Infantry Division, major elements of the 3d Armored Division and all the forces in St. Vith, including remnants of several other divisions.²²

Command Styles

Although he was a corps commander, Ridgway believed a leader's place on the battlefield was forward. Unconcerned that his XVIII Airborne Corps headquarters staff had never before been in combat, Ridg-way immediately delegated many duties to his chief of staff and spent most of his time moving around the battlefield. He believed being forward with the troops enabled unit commanders to know him and his thinking. He felt this helped him listen to problems, sense what the troops were up against and interact with small-unit leaders. Finally, and perhaps more significant, he felt he could better assess his subordinate leaders' actions while under extreme conditions.

While Ridgway was involved from the onset in shaping the battle, Bradley took a standoff approach. At a critical planning conference at Verdun on 19 December, he "mostly observed . . . saying little and offering nothing." His stubborn refusal to relocate his forward command post from Luxembourg to a more central location limited him to telephone communication. Despite the situation's seriousness, he did not visit front-line units and commanders. ²⁵

Bradley's puzzling behavior did not go unnoticed by Eisenhower. With German penetrations threatening to sever key communication nodes, Eisenhower and the SHAEF staff began to have reservations about Bradley's capacity to command and control the actions of the First, Third and Ninth Armies. A day after the Verdun conference, Eisenhower acted on his misgivings. He counterattacked with the Third Army while continuing the defense. He gave Montgomery command of the First and Ninth Armies. Bradley was reduced to being an interested spectator at the battle's most critical time. Patton's Third Army required little assistance from Bradley, and Montgomery and the 12th Army Group staff were responsible for coordinating the defense against the German attack.

After deploying the 82d Division, the newly attached 30th Infantry Division and major elements of the 3d Armored Division, by the evening of 20 December, Ridgway was able to establish a thin but viable defense along the northern shoulder and in front of the Sixth Panzer Army as it aimed for the Meuse River. With their sector spanning from 25 to 85 miles, Ridgway's forces engaged three German Corps. 1

At St. Vith, the situation was worsening as thrown-together, outnumbered US forces desperately battled the Germans. By 21-22 December, the situation in St. Vith had become critical.³² Despite the troops' gallant efforts, the Germans were prevailing. Concluding that a continued defense was hopeless and realizing the difficulty of executing a withdrawal under pressure, Ridgway made his way forward for a personal assessment.³³

He was not pleased. Major General Alan Jones, commander of the 106th Division, was located to the rear and largely had relinquished his role. Ridgway immediately relieved Jones and put the troops under the 7th Armored Division's command.³⁴

Over the next few days, Ridgway continued to deal with critical situations through up-front leadership. Ridgway's forces repeatedly repulsed the attackers despite their advantages in numbers of troops and superior equipment. On Christmas Day, even as he reassured Montgomery and Hodges his lines would hold, the Germans achieved a penetration.³⁵ Ridgway quickly convinced the Army commander to release his reserve. Within 24 hours he counterattacked and regained the lost ground.³⁶ By 26 December, Ridgway's efforts paid off. The German attack in his sector came to a halt.

Lessons Learned

What can we learn about the operational commander's impact at the tactical level? As the 12th Army Group commander of 31 divisions, Bradley was in a far better position to influence operations and maneuver than was Ridgway, who was a new corps commander trying to refit and train a force in theater reserve. However, Bradley played a minor role and actually contributed little to the battle's outcome; Ridg-way contributed a great deal.

In their book *Military Misfortunes: The Anatomy of Failure in War*, Eliot Cohen and John Gooch identify three basic sorts of military-operations failures: failure to anticipate, failure to learn and failure to adapt.³⁷ Failure to anticipate is the inability to foresee and take appropriate measures to deal with a problem. Failure to learn suggests an inability to gain understanding and experience. Failure to adapt is the inability to react or cope with unfolding events. Given the far-reaching impact of mistakes at the operational level, one can easily see how consequences can be amplified.

Bradley's 12th Army Group's inability to correctly assess German preparations, intentions and capabilities before the Ardennes offensive illustrates a failure to anticipate. While Bradley was not the only senior commander surprised by the strength of the German attack, he was clueless as to the enemy's true intentions. In a brutally candid personal assessment, Bradley later wrote: "In the face of this astonishing German buildup, I had greatly underestimated the enemy's offensive capabilities. . . . We could not believe he possessed sufficient resources for a strategic offensive." ³⁹

Bradley's failure to anticipate German intentions undermined his decision-making apparatus. This led to his risky disposition of forces in the Ardennes, contributed to his reluctance to form an uncommitted Army Group reserve and was why he did not publish and distribute contingency plans.⁴⁰ Convinced that the Ardennes had no strategic value, Bradley believed the Germans would not use the route as an operational avenue of approach. He also believed a major offensive would exceed German capabilities. By design, he limited his own flexibility.

In retrospect, Bradley was more right than wrong in regard to German capabilities. However, his decision to take risks without developing adequate contingency plans tremendously strained the rickety scaffolding of his decision-making structure and set conditions the Germans could exploit.

Bradley was also slow to adapt. Once the attack began, he failed to recognize the signs of a major offensive. Had Eisenhower not committed the 7th and 10th Armored Divisions, the defenders of St. Vith or Bastogne hardly could have contained the German push.

As the battle progressed, Bradley's influence increasingly waned. The record is silent about his contributions at the critical 19 December Verdun meeting. It seems he relied on Patton and Eisenhower to determine the Third Army's

role. Following the similar pattern of battle command he demonstrated in the disastrous Huertgen Campaign, Bradley did not visit his commanders or view the fighting from a more forward location. However peculiar it might seem in light of his otherwise impeccable military credentials, Bradley's battle command before and during the Battle of the Bulge is wanting. The Bulge was not Bradley's finest hour.

In contrast, Ridgway's practice of battle command helped him play a significant role during the bulge. He organized what became an extremely successful defense against the German Sixth Panzer Army's main effort. Throughout the XVIII Airborne Corps sector, Ridgway's tough command style and forward presence helped stiffen the resolve of unsteady troops and commanders. His uncompromising, aggressive defense not only prevented a rout, it also provided the fulcrum for Patton's counterattack and the following counteroffensive. In retrospect, Eisenhower's decision to deploy his strategic reserve early in the struggle was correct. One can only wonder what the outcome would have been had Ridgway and the soldiers of the XVIII Airborne Corps not been committed to the struggle.

While campaigns are primarily won or lost at the tactical level, operational-level leaders' plans and decisions create the conditions for tactical success or failure. Operational commanders exert considerable influence on the moral domain of combat through personal example, leadership and more significant, by making correct decisions based on a realistic view of the battlefield.

Bradley's acceptance of projected enemy capabilities and his failure to develop flexible reserves and contingency plans established conditions for disaster. His reluctance to adapt could have resulted in collapse had Eisenhower not stepped in. By overruling Bradley's desire to continue with the planned offensive, Eisen-hower narrowly averted a debacle. He sent two armored divisions to shore up the penetration and committed Ridgway's XVIII Airborne Corps to the theater. Once the defense was established, Eisenhower counterattacked with Patton's Third Army. Ridgway's personal influence and tactical skill helped galvanize US response and stiffened a disintegrating situation. Although the overall victory in the Bulge was because of the fighting spirit of thousands of gallant soldiers, clearly Eisenhower and Ridgway played their parts superbly.

Implications

This study suggests at least three implications for leaders. Although emerging technologies hold great promise, they cannot completely lift the fog of war to reveal everything we need to know about a potential enemy. Despite the Allies' overwhelming advantage from ULTRA intelligence, the Germans' ability to limit electronic signal traffic and their excellent deception effort proved to be low-tech combat multipliers that helped them conduct successfully a major attack that many believed exceeded their capabilities.

Despite technological improvements, strategic surprise is and always will be possible. Future antagonists will find countermeasures and asymmetric means to circumvent conventional and technological superiority. Skillful staff planning helped the Germans conduct an offensive during a weather pattern that grounded the US forces' tremendous air capability. By keenly studying the Allied order of battle and force dispositions, the Germans selected the weakest point along a front hundreds of miles long. Failing to expect no less from future opponents invites disaster.

The allure of emerging technology increasingly entices commanders at all levels to remain in headquarters that offer sophisticated intelligence and communications links. Over time, this practice could degrade the time-honored forward battle command style Ridgway exemplified. We ignore this rudimentary lesson at our own peril. 43

Commanders who tether themselves to a command post run the risk of developing a distorted view of the battlefield and of disrupting the dialogue and interaction that allow subordinate commanders' perspectives to surface. ⁴⁴ This loss could lead senior commanders to resurrect the dangerous practice of bypassing echelons of command and issuing instructions directly to subordinates several echelons below. While the convenience of a rearward command post might offer a commander greater communication capabilities, it precludes his capacity to influence soldiers and officers in the most important aspect of all—the moral domain.

While technology might provide a clearer battle picture than ever before, it cannot convey a soldier's feelings of battle. Future leaders will be well served to recall Patton's admonishment that "wars may be fought with weapons, but they are won by men. . . . It is the spirit of the men who follow and the man who leads that gains the victory."

As long as warfare continues, effective battle command must include a perspective from the front.

- 1. See US Army Field Manual (FM) Army, 100-7, Decisive Force: The Army in Theater Operations (Washington DC: US Government Printing Office (GPO), May 1995), chapters 1-4, for a discussion of operational-level planning responsibilities.
- FM 100-5, Operations (Washington, DC: GPO, June 1993), 2-14.
- 3. Omar N. Bradley and Clay Blair, A General's Life: An Autobiography (New York: Simon and Schuster, 1983), 349-53; see also Omar N. Bradley, A Soldier's Story (New York: Holt, Rinehart and Winston, 1951), 434; Hugh M. Cole, The Ardennes: Battle of the Bulge (Washington, DC: Office of the Chief of Military History, 1993), 57-63; Assistant Chief of Staff BG Edwin Sibert, G2 Headquarters, XII Army Group, Weekly Intelligence Summary N18, 12 December 1944, US Army Military History Institute, Carlisle Barracks, PA.
- Bradley, 434; see also Dwight D. Eisenhower, Crusade in Europe (New York: Doubleday, 1948), 340.
- Bradley, 447.
- Stephen E. Ambrose, The Supreme Commander: The War Years of General Dwight D. Eisenhower (Garden City, NY: Doubleday, 1970), 552; Bradley, 437-38.
- Bradley and Blair, 352-53; see also F.W. Winter-botham, The ULTRA Secret (New York: Harper and Row, 1974), 178-79; Dwight D. Eisenhower, 340-41. To Eisenhower's credit, he took responsibility for maintaining only divisions on the Ardennes front in spite of the risk of a large German penetration.
- Bradley, 454-55.
- Cole, 53.
- 10. Dwight D. Eisenhower, 338; Bradley, 434.
- 11. Matthew B. Ridgway, Soldier: The Memoirs of Matthew B. Ridgway (New York: Harper, 1956), 111.
- 13. Danny S. Parker, Battle of the Bulge: Hitler's Ardennes Offensive, 1944-1945 (Conshohocken, PA: Combined Books, 1991), 67-82.
- 14. Russell F. Weigley, Eisenhower's Lieutenants: The Campaign of France and Germany, 1944-1945 (Bloom-ington: IN: Indiana University Press, 1981), 457.
- 15. Bradley, 455-56.
- 16. Ibid., 455.
- 17. John S.D. Eisenhower, The Bitter Woods (New York: Putnam, 1969), 215.
- 18. Bradley, 357.
- 19. Ambrose, 556.
- 20. Ridgway, 112; Dwight D. Eisenhower, 345-49.
- 21. Clay Blair, Ridgway's Paratroopers: The American Airborne in World War II (Garden City, NY: Dial Press, 1985), 432-33; Weigley, 481.
- 22. Blair, 435-41.
- 23. Ridgway, 118-19.
- 24. David Eisenhower, Eisenhower at War, 1943-1945 (New York: Vintage Books, 1987), 569-70.
- 25. Bradley, 357; see also J.D. Morelock, Generals of the Ardennes: American Leadership in the Battle of the Bulge (Washington, DC: GPO, 1994), 128-29; Carlo D'Este, Patton: A Genius for War (New York: Harper Collins, 1995), 682. Before losing command, Bradley had not visited either of his commanders. Patton visited seven divisions and regrouped an army.
- 26. Dwight D. Eisenhower, 355; Weigley, 503.
- 27. Alfred D. Chandler Jr., ed, The Papers of Dwight David Eisenhower, vol IV: The War Years (Baltimore, MD: John Hopkins Press, 1970), 2,371-72.
- 28. D'Este, 683.
- 29. See Martin Blumenson, ed, The Patton Papers, vol 2: 1949-1945 (Boston, MA: Houghton Mifflin, 1972-74), 600-08.
- 30. Blair, 441.
- 31. Cole, 400-01.
- 32. Cole, 371.
- 33. Ridgway, 119.
- 34. Ridgway, 120-21.35. Weigley, 532-33.
- 36. Blair, 472-73.
- 37. Eliot A. Cohen and John Gooch, Military Misfortunes: The Anatomy of Failure in War (New York: Free Press, 1990), 26.
- 38. Sibert, N9.
- 39. Bradley, 459-60.
- 40. Bradley, 464. Bradley viewed the Germans as a badly beaten enemy and believed he could not conscientiously withhold in reserve divisions better used on the offensive.
- 41. See Morelock, 128-29; Chandler, 2,238. In a 14 January 1945 cable to General George C. Marshall, Eisenhower again recommended Bradley for promotion and called his leadership through the Ardennes affair "admirable."
- 42. See Robert J. Bunker, "Five-Dimensional (Cyber) Warfighting: Can the Army After Next be Defeated Through Complex Concepts and Technologies?" Strategic Studies Institute, US Army War College, Carlisle Barracks, PA, 1998.
- 43. See Stephen E. Ambrose, Citizen Soldiers: The U.S. Army from the Normandy Beaches to the Surrender of Germany, June 7, 1944-May 7, 1945 (New York: Simon & Schuster, 1997), 165-67. According to a senior British officer, a growing problem in the US Army was that not even battalion commanders went to the front, which resulted in senior officers and their staffs not knowing what they were ordering their companies to do.
- 44. See Tom Clancy and General Frederick Franks, Into the Storm (New York: G.P. Putnam, 1997), 293-95, for an example of the contrasting views between a senior commander tethered to a rear command post and one who operates forward; see also Norman Schwarzkopf with Peter Petre, It Doesn't Take A Hero (New York: Bantam Books, 1992), 455-63; Franks, "Battle Command: A Commander's Perspective," Military Review, May-June 1996, 4-25. Franks indicates that in the Gulf War he received 20 percent of his information during the battle from command post input, 50 percent from being up front on the battlefield and through his commanders' assessments and 30 percent from embedded memory and training.
- 45. Blumenson.

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Questions for Command

Many officers say, "I would do anything to get a command." If you are one of these, do you really mean it? Are you suited for command? Have you really considered what having a command entails? General Bruce C. Clarke challenged commanders to answer the following questions:

- 1. Are you willing to devote all hours of the day and night, seven days a week?
- 2. If it is necessary, is your spouse willing to do likewise in order to make a happy Army community in your unit's area?
- 3. Is your family willing to be secondary, if necessary, to your company, battalion, group, regiment, combat command, brigade, or division?
- 4. Are you willing to learn, to teach, to stress, and to live with fundamentals that are necessary to make your unit good and still believe that your great talents for bigger things are not wasted?
- 5. Do you like to be with young people? Can you live with their energy, their points of view, and the problems that they create?
- 6. Are you willing to take the criticism that comes from carrying the responsibility for the failure of your subordinates?
- 7. Can you juggle training, maintenance, tests, administration, inspections, communications, messes, supply, athletics, marksmanship, discipline, and public relations at the same time, without dropping any of them?
- 8. Are you able to do many things concurrently, or are you a consecutive doer? Can you manage a complex job?
- 9. Can you receive and carry out orders? Are you a good follower as well as a good leader?
- 10. Can you stand tough competition from like units in your command and still keep a spirit of cooperation and teamwork with them?
- 11. Are you physically and emotionally fit to carry the load of responsibility?
- 12. Do you have the courage to make, and to stand by tough decisions?
- 13. Are you and your family willing to live in a goldfish bowl in which your subordinates and superiors closely observe your actions?
- 14. Are you enthusiastic and cheerful when you are confronted with seemingly impossible tasks that you must perform with inadequate means?
- 15. Are you willing to take responsibility when events go wrong in your unit and to correct a bad situation rather than to blame it on a subordinate, the staff, or higher headquarters?
- 16. When you are tasked to perform with inadequate means, are you willing to do your best with what you have?
- 17. Are you confident that you can produce a superior unit with an ordinary run of manpower? Can you inspire personnel to produce outstanding accomplishments?
- 18. Are you willing to take a chance on being relieved for attaining only mediocre results?
- 19. Do you really want a command or do you just want to have your record show that you have had command responsibilities?

According to General Bruce C. Clarke, "If your answers to these questions are 'yes' you should fight to get a command. And, if you hear an officer say 'I want a command,' you should confront him with these questions. If his answers are 'yes,' he is undoubtedly sincere and you should make every effort to see that he gets a command. No assignment will ever give greater satisfaction or enable an officer to contribute more to the Army and our country."

Command

JOHN W. FOSS, GENERAL, US Army

In May 1990, the same month this article was published, Mikhail Gorbachev won the Nobel Peace Prize, Boris Yeltsin became the Russian Federation president and the dissolution of the Soviet Union was becoming a clear possibility. Three months after this article appeared, Saddam Hussein's Iraqi forces invaded Kuwait. General Foss's comments are very relevant in light of how quickly the politico-military situation can change.

THE EVOLUTION of warfare, enhanced by dramatic advances in technology, has led to high demands on mobility, agility and rapid decision making. Technology has prompted not only great demands, but also a myriad of devices to assist the commander. How we command will be the key to our future success. During the coming decade, the Army must stress and reinforce some aspects of command that have always been important, but which now have become even more essential.

We can choose one of two paths-a strong command path or a strong control path. Technology and electronic devices will push us toward control. Such a path is dangerous. Only the command path provides for initiative, the acceptance of risk and the rapid seizure of opportunities on the battlefield. The control path appears safer but leads to caution, a more deliberate manner, and an emphasis on process as opposed to outcome. We must realize, though, that the future battlefield will be less forgiving of slow decisions than ever before. It will not be a place for cautious, bureaucratic centralizers glued to computer monitors waiting for that one additional piece of information which will allow a "sure" decision to be made.

This article argues for a strong command philosophy for the US Army and asserts that we must begin to embed that philosophy throughout the force now. This strong command philosophy empowers commanders with maximum authority to accomplish their tasks, to develop a strong chain of command and to practice command on a daily basis in peacetime training just as we will have to exercise it in war.

Philosophy

A strong command philosophy is essential to how our Army functions in peace and in war. We have had many fine commanders, present and past, who have practiced a strong command philosophy, whether it be:

- When in charge, take charge!-General Maxwell R. Thurman
- Never tell people how to do things. Tell them what to do and they will surprise you with their ingenuity. General George S. Patton Jr.

As an institution, though, we are not consistent in our application of command and command authority. We often send our subordinates conflicting signals-in how we act, what we say, or even what we call things. When we say "C4," we tend to place all parts of command, control, communications and computers on an equal basis. However, we all know that control, communications and computers are subordinate to, and support, command.

What does a strong command philosophy entail? It is a total approach to empower commanders with the authority to deal with tasks as assigned in combat or peacetime. We have often referred to this as "mission tactics" or "mission orders" or freedom of action for the commander to execute his mission in the way he sees fit, rather than being told how to do it. To deal with such a concept, we must first place our approach to command in perspective; then discuss the role of control, with communication and computers clearly defined as what they are-components of the control apparatus that supports command.

Command

A strong command philosophy is built around three precepts: vision, freedom of action and responsibility. A commander must design a simple command system that will survive the dynamics of combat and is based upon a strong command philosophy rooted in our first precept-mission tactics. Who is better able than the commander on the ground, forward at the decisive point, to recognize and seize the opportunity? The commander must be empowered to exploit these opportunities and avoid the vulnerabilities of dynamic combat. Only the practice of mission tactics will enable the decisive commander to exercise initiative and, in recognizing opportunity, rapidly accomplish the mission.

The commander must, however, act within the parameters of the overall mission. An understanding of the intent of the higher commander is a prerequisite to mission tactics. Our next precept-"commander's intent"-provides vision and enables subordinate commanders to clearly understand what the larger force must accomplish in order to gain victory. The commander's intent is designed not to restrain, but to unleash a subordinate by giving him greater freedom of action to accomplish the mission. Subordinate commanders view their mission within the context of the higher commander's intent. Should battlefield opportunities arise, the commander can immediately capitalize on them, rather than wait on instructions from higher headquarters.

But the display of initiative and the exercise of freedom of action within the commander's intent also bring attendant responsibilities. These are governed by our third precept-the designation of the main effort. The commander who has been assigned the main effort knows he has greater freedom of action and lesser responsibilities to the rest of the force. Commanders who have been assigned missions other that the main effort know they have responsibilities to support the main effort (for example, protect the flank, provide supporting fires, and the like) and not divert resources from the main effort. In the chaos of combat, an understanding of the main effort provides a common basis for action.

Thus, a strong command philosophy is really a three-legged stool. Mission tactics (freedom of action reinforced by knowledge of the commander's intent (vision) and focused on a main effort (responsibility) constitute the basis of a strong command philosophy. This synergism results in effective command and a philosophy relevant to any battlefield, in any theater of operations, in any type of conflict.

Control

The proper understanding of control is embodied in the axiom, "The more control imposed, the less command applied." Control, by definition, restricts command. This is not to say, however, that control is bad. No one has "total" freedom of action all the time. Some control is necessary to focus the effort. In some complicated actions, a great deal of control is required to ensure synchronization. Therefore, the rule is to apply only those control measures essential to the operation.

The most common form of control is the mission itself. Not only does the mission structure commonality of actions, it focuses the entire unit on the main task at the critical time.

Another control that is automatically applied is the common doctrine adopted by the US Army and instilled in commanders during their formative years in units and in military schools. Higher commanders expect their subordinates to understand, apply and act within the tenets of Army doctrine.

Most controls, however, are not automatic. For example, the operations order (OPORD) is tailored to the mission as are the graphics on the operations overlay. Although optional and situationally dependent, these are, nevertheless, controls and must be reviewed by the commander prior to implementation. Well-meaning staff officers sometimes sprinkle control measures into an OPORD without full cognizance of the impediments placed upon subordinate commanders. The basic rule governing optional control measures is the test of "purpose." Each control measure should have a specific purpose that contributes to mission accomplishment. If a control measure fails the purpose test, do not apply it-it unnecessarily restricts freedom of action. Occasionally, the purpose test will necessitate very restrictive controls. For example, certain night operations or attacks on fortified positions, by their very complicated nature, require a high degree of synchronization among several units and supporting fires. Thus, selective and restrictive control will be required. Once these specific mission are completed and the need for restrictive control abates, the commander should then relax controls and revert back to the minimum control necessary.

Some controls are system oriented. As with operational controls, the commander should specifically review these control systems-such as the Army Tactical Command and Control System (Sigma Star)-to determine their applicability to the mission. This is especially important because without specific direction from the commander, the system tends to run toward the goal of efficiency rather than effectiveness. But, as we all know, the mission demands effectiveness.

In summary, control is inversely proportional to command. A good commander is like a good horseman; he maintains a strong grip and, at the same time, keeps a loose rein. He allows freedom of action, but is prepared to take control quickly when required. Ultimately, "what," not "how," is most important.

Communications

Communications provide the link between command and control that enables commanders to lead from the front and directly influence the action. A robust communications capability facilitates command by allowing the commander to tighten or loosen control rapidly through some mode of communication other than face-to-face. A strong, flexible communications system allows the staff and subordinate commanders to pass information. Communications systems are tools that facilitate the command and control imposed by the commander, enabling him to issue timely orders directly to subordinates. But even with very sophisticated communications capabilities, the commander must strive to personally issue orders to subordinates face-to-face whenever he can or, failing that, by voice radio. The tone, rate and pitch of a commander's voice will tell more than any graphic or written message could ever convey.

Computers

These remarkable and ubiquitous devices are an aid to help provide information to the staff and commander. This information must then be assessed for its operational relevance by the staff and passed to the commander. The commander must resist the temptation to tie himself to the computer. Although the flow of information is facilitating, most data is input by the staff and is intended for the staff. The commander cannot treat the computer information as totally correct because a computer can be given poor, partial or outdated information on which to compute. The computer also passes on all the trivial data important to only a few individuals, none of whom is a commander. After all, a computer does not question the input. Output must be assessed. Excessive reliance on computers, or a series of computers, can be embarrassing when the computer "crashes."

Properly used in their intended role, computers provide invaluable assistance; therefore, our development of them must continue. They can "mechanically" pass information, orders, data and graphics in almost real time. But the computer is not, nor can it be, a substitute for commanders talking to commanders.

The Commander

Having commanded at every level in our Army, I have learned-usually the hard way-some points along the way that I have developed into my command philosophy. Perhaps the most important thing to know about command is that it is personal. One cannot successfully command through the staff. Nothing communicates commander-to-commander as well as face-to-face. Patton observed that the senior should go forward to visit the junior, rather than the junior back to see him. The obvious exception is when it is necessary to collect several commanders at one location. Notice that Patton said "go forward." He did not say "call," or "communicate" or "write." The value of face-to-face command cannot be stressed enough, especially during critical moments of the battle. What the commander says, and how he says it, is the basis for the unit's actions. In peacetime, when routine activities tend to be turned over to the staff, a commander must constantly speak of the important issues, because staffs tend to treat everything as equal in importance.

Command is more than responsibility; it is also authority and authority must be actively exercised. Thurman's often-stated maxim, "When in charge, take charge," contains a lot of wisdom-be in charge and practice the authority given to you. Commanders must make decisions. Regardless of the difficulty at hand, a decision must be made in a timely and resolute manner.

Many years ago, I learned to command only one echelon down. This not only contributes to the entire chain of command having maximum freedom of action, it also reinforces the span of control theory. Commanding two levels down violates a fundamental principle of war-unity of command. Commanding one level down maximizes the information flow and increases the opportunity for face-to-face or voice-to-voice command. The commander must keep abreast of what is going on two or more levels down. By contrast, commanding too far down gives one a stereoscopic view, and this tunnel vision inhibits the ability to "see" the overall battle. The absolute worst effect of such a command style is that the chain of command goes into "neutral" and steps out of its responsibilities when a senior commander usurps its authority. That commander then misses the most vital input he needs-a subordinate commander's assessment of his unit's overall capability.

Next, good commanders anticipate. Not only do they anticipate the enemy, they anticipate their subordinates' needs and provide help and support to facilitate overall mission accomplishment. In this regard, the staff plays a key role. They must be forward-looking, helping the commander anticipate.

Successful commanders also have a vision of the task. They "see" the task in its proper perspective; they understand the "what" and "how" of the mission; and they understand the conditions necessary for success. Further, they can articulate those points to others. Good commanders are able to visualize not only the capabilities, but the intended actions of subordinate units in the accomplishment of the larger mission. It is especially important that the commander, not the operations officer (S3/G3/J3), personally articulate the commander's intent portion of the order. If others do this for the commander, the unintentional, yet inevitable, filters are applied and the result becomes not "what the commander intends," but "what the staff officers thought he intended."

Before I conclude, let me offer a few words on peacetime command. If we learned nothing else from the recent operations in Grenada and Panama, we have learned that soldiers fight exactly as they are trained in peacetime. We must command in peacetime as we command in war. We must place the same responsibilities upon subordinates in peacetime that we expect of them in combat. We must foster the same relationships in peacetime as in war. As commanders, we must demonstrate daily that we will say what to do, not how to do it; and that we will not skip echelons in directing and overseeing tasks, but consistently adhere to the chain of command. We must emphasize the important things and avoid the trivial. If a commander finds himself or his unit doing something for peacetime only, he should question how this will affect his war-fighting mission. If the answer is: there is no war-fighting purpose to the task, then he should not do it. It is that simple. But if he has no option, then he must convert the execution of the task into an exercise of the chain of command so as to gain maximum benefit from the task.

Just as command personifies the commander, so must the chain of command represent and personify the command system. A strong chain of command is essential to a successful unit. It implies trust and confidence between echelons of command and develops junior leaders by placing the appropriate authority, responsibility and decision making at each level. Authority, responsibility and decision making must be practiced. Senior commanders must remember that we do not live in a perfect world; they must underwrite subordinates' honest mistakes as part of the developmental process. That is what produces risk-taking, initiative-grabbing and war-winning commanders.

Commanders train, teach, coach and develop their subordinate leaders and units to a high standard. One way senior commanders develop subordinate commanders is by watching. The process of watching them leads to training, teaching and coaching in such a manner that both the subordinate commander and his unit can overcome weaknesses and improve performance. While commanders must avoid dictating "how," they must never be afraid to tell a subordinate what to do or even when to do it.

Good commanders must be willing to take some risks. In combat, commanders operate within the higher commander's intent, tempered by doctrine and procedures. In peacetime, commanders must understand and operate within the same guidelines. The "garrison" exercise of command entails risk just as it does in wartime. The combat requirements of initiative and risk taking are just as applicable in peacetime as they are in war. The commander who makes no mistakes and takes no risks probably does not accomplish very much-nor does he have soldiers with great confidence in the unit or its leaders. The commander who centralizes everything in an attempt to be strong everywhere is, in fact, strong nowhere. But worst of all, his chain of command and his junior leaders will never develop responsibility and initiative.

There is a saying in our Army, "Command is command." Translated, that means command of any unit-combat, combat support or combat service support, in the Continental United States or forward deployed, tactical or nontactical-is still command, which beats not being a commander. Equally important in that statement is that command-in the field, at one of the combat training centers, in peacetime, during a contingency operation or in warmust be practiced as it will be executed in war.

We have talked about command, control, communications and computers. I have asserted that we must have simple, robust command systems built upon a strong command philosophy. Commanders must be provided the maximum freedom to command and have imposed on them only those control measures necessary to synchronize mission accomplishment. A strong command philosophy recognizes the many tools available to the commander, but emphasizes that tools are no substitute for exercising the personal element of command.

In the next war, the price of failure will be very high and the margin for error grows smaller. We must get the maximum effect from our leaders and our units. At a time when technology and electronic devices appear to offer an easy path to overcome the complexities of modern battle, the Army must empower commanders, embrace the

mission tactics and use technology to assist-not take over-the art of command. Most important, we must be an Army that practices strong command on a day-to-day basis in peacetime, so our units are always ready for the demands of combat. The capabilities we now possess in our officer and noncommissioned officers corps say that now is the time to empower leaders to get the most out of this great Army. *MR*

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Mentoring

Shortchanging Our Young Officers: Military Traditions Denied STEPHEN C. HALL, LIEUTENANT COLONEL, USAF

LOOKING OUT over the 80-plus shiny, squeaky-clean, company grade officers gathered in front of me at the Johnson Manned Space Flight Center in Houston, Texas, I could not help but think that if this group of young men and women did not make a person feel great, then feeling great was simply not in the cards. We were halfway through a day-long seminar I bill as the "Company Grade Officer Training Program, or Lots of Things Someone Should Have Taught You Along the Way But Probably Didn't!" and it had been a day to remember. Since beginning this free-lance program over two years earlier, I had traveled all over the country speaking to young officers and had never met a more enthusiastic group. We had talked about everything from military justice and how to put a bad actor in confinement to social etiquette and how not to feel like a fool in a receiving line. Their response had been exhilarating; the young officers were eager, bright, and hungry for traditional military values. Their response was all the more exciting when I reflected upon how far removed from the mainstream of Air Force lives these engineers and computer experts were; the Space Flight Center did not even have a BX! Nevertheless, these young officers showed the same desire for traditional military values I had witnessed in well over 1,500 of their contemporaries all over the country.

I introduced the first hour of the afternoon session by stating the topic of discussion: military customs and courtesies and the senior/subordinate relationship. For 30 minutes I extolled the accepted formalities and courtesies exchanged between officers of different rank and especially between commanders or supervisors and their subordinates. "There is a long-established tradition of courtesies and customs," said I, "all designed to show proper respect for persons of higher rank and authority and to clearly define and to make more workable the senior/subordinate relationship." I then spent several minutes discussing why it is wrong to use a senior's first name. From the back of the room a second lieutenant raised his hand.

"Sir, I have a problem with that," he said.

On the one hand, I was not surprised at his comment, since a certain aversion to special treatment for higher rank is not uncommon among officers of this young man's generation. On the other hand, this particular group had been so receptive, to my strict military line that I was taken aback just a bit by the lieutenant's objections.

"What's your problem?" I asked.

The lieutenant stood up, looked me straight in the eye and replied, "Sir, I'm an engineer and I work for a major who keeps telling me to call him 'Jim'. Sir, if I'd wanted to call my engineering boss 'Jim,' I'd have gone to work for Hewlett-Packard!"

And in 35 words, that young second lieutenant said it all. We as an institution, as a profession, are denying to a fine, eager group of company grade officers the very military values for which they raised their right hands. We fail to train them in long-established military customs, courtesies, and traditions; we fail to demand proper and enthusiastic execution of duties along traditional military lines; and then we wring our collective hands and with bowed, shaking heads bemoan in officer corps that "just isn't what it used to be." The problem is big and getting bigger as year after year we fail to give our young officers the basic underpinnings of military virtues that will carry them through their careers.

What Are Our Young Officers Saying to Us?

How does one truly discover the issues posing the biggest problems for our lieutenants and captains? How do we really find out what they need to develop into the best officers they can be? For two years, from 1984 to 1986, I had a rare opportunity to explore these questions with over 1,500 young officers.

As a four-time aircraft maintenance squadron commander, I had discovered that my own officers were very uncomfortable in certain situations and, not surprisingly, did not perform well at certain critical times. My officers were terribly uncomfortable with officer/enlisted relationships, not an uncommon or unexpected malady for a 24 year-old second lieutenant faced with leading 100 enlisted members. Similarly, my young officers viewed military justice and discipline as a hot potato to be tossed either to the first available NCO or to the commander. And last, but far from least, my officers almost totally tacked those basic social skills that are a proud part of our military heritage.

To attack these weaknesses, my young officers and I developed the Company Grade Officer Training Program, a slightly unconventional series of weekly training sessions using lectures (by both me and my officers), role-playing, and field trips to expose the young officers to topics that were essential to their professional development. The course was so successful that we subsequently presented it to officers throughout the base and eventually took the show on the road. Through nothing more than word of-mouth advertising, invitations began rolling in from all over the country. Eventually the program was presented to hundreds of lieutenants and captains from coast to coast. At every stop, the company grade officers were literally bursting with questions, problems, and issues that they were understandably uncomfortable broaching with their superiors but that they readily revealed to a relatively safe source of information like me.

Throughout all the seminars, no matter the locale or the professional specialty or source of commission of the audience, an amazing unanimity of concern immediately became apparent: our young officers are far more militarily conservative than one would ever have expected, and they want far more military in their lives, not less. From Los Angeles to Boston, from Florida to Utah, the refrain rang true time and time again.

Today's lieutenants and captains entered the Air Force for many reasons, and high on the list were traditional military values. Today's young officers were not teenagers during the 1960s when nearly all traditional values, both civilian and military, were suspect. Today's young officers were teenagers in the post-Vietnam years. They saw the renewed stature of the armed services in the 1970s, and the general return to basic values throughout our country. These officers came into the Air Force expecting to find well-established (and well-enforced) codes of conduct and department; well-defined and proudly executed relationships between members of different ranks in both the officer and enlisted corps; and probably most important, they expected to find a cadre of field graders prepared to turn them not merely into good engineers, pilots, or administrators but into good officers. In far, far too many instances, these expectations have been frustrated.

The list of examples is almost endless. A first lieutenant graduate of the Reserve Officer Training Corps (ROTC) seriously asked if he was required to salute all ranking officers and chief master sergeants. (Probably not a bad idea, but one not supported by regulations!) A second lieutenant nurse related that she had been reprimanded by her nurse-in-charge for not encouraging her enlisted men and women to use her first name. A captain who graduated from the Air Force Academy asked why he was expected to limit his social contacts with enlisted men and women when his supervisor, a lieutenant colonel, was openly dating a staff sergeant. Literally hundreds of young officers uniformly stated, "My boss always finds time to talk to me after I've messed up.... I just wish I'd received some help a little bit sooner." And the list goes on and on and on.

Traditional Military Values--Why So Important?

This question seems so basic, and the answer so obvious, that we need not tarry overly long with it. Military customs, courtesies, and traditions are vitally important to our Air Force because shared traditions are one of the few things remaining that can bind officers of widely differing skills and specialties into one professional corps.

One hardly needs to perform a detailed document search to discover a perceived rise in careerism and the accompanying decline in cohesion and professionalism. A Squadron Officer School (SOS) survey of 613 officers showed that 76 percent of operations officers and 63 percent of support officers associated themselves more readily and strongly with their career colleagues than with the Air Force as a whole. While one may be displeased with this fact, the fairly parochial allegiance shown by young officers should come as no surprise. By its very nature, the Air Force is a compartmentalized service, the greatest and most obvious distinction being between those who fly those who do not. But while "rated/nonrated" is the most obvious distinction, it is not the only one that tends to promote compartmentalization within the Air Force. It is hardly surprising that the contracting officer who has never administered the many Air Force personnel programs has little in common with a personnel officer who, in turn, has never supervised 100 enlisted men and women around the clock as has the maintenance officer who, in turn, has never had to make the highly technical decisions of the computer or engineering officer who deals with civilian contractors.

Is compartmentalization bad? The question is most since career specialties are here to stay, as well they should be. National defense in general and the Air Force in particular are far too complex to be administered by anyone not possessing specialized skills. There is no other choice. But specialization has its price, and lack of cohesiveness is a big part of the bill.

Given the existence of some 217 career specialties based on 60 academic disciplines, the bonding effect of a solid body of traditional military values can hardly be overstated. The navigator, administrative officer, civil engineer, and doctor may have little in common in terms of job description, but they may nevertheless be bound together by the shared customs, courtesies, and traditions embodied in officer/enlisted relationships, military discipline, and professional social protocol. These topics, and many more, are no less important to one officer than to another, regardless of career specialty. At the risk of waxing excessively eloquent, I submit that there exists over all Air Force careers a patina of military values and officership skills that offers to all members a common bond of professionalism. But the veneer grows thinner by the day.

Traditions Denied Specifically

My experiences with hundreds and hundreds of officers all over the country revealed that the officership skills they need--and which we fail to provide--are very similar to those problem areas articulated by my own squadron officers and alluded to earlier.

Officer/Enlisted Relationships

The special relationship between officers and enlisted members can be one of the most rewarding facets of military service, or one of the most confusing and frustrating. For the officer properly schooled and trained in the complementary roles of the enlisted and officer corps, the relationship is nothing short of wonderful. What a thrill it is when an officer, junior or senior, can help guide a young airman through the early, trying years of service. What a thrill it is when a young airman matures both personally and professionally as a result of a concerned, involved officer in charge. The same thrill is equally intense when roles are reversed, when the master sergeant takes a young officer in tow and helps turn that officer into a fine leader. The memories of hours spent working with and learning from fine NCOs will remain in an officer's heart long after the roar of the engines grows quiet.

For the properly schooled and trained officer, the opportunity to work closely with the fine members of the enlisted corps is reason enough, in and of itself, to join the Air Force. But for the unschooled, untrained officer, relationships with the enlisted corps can be a source of constant uncertainty and consternation. All too many of our young officers find themselves in this latter category, and they suffer terribly. For most of our young officers, the relationship with a corps of enlisted men and women is a totally new phenomenon, one without corollary in the civilian world. Our lieutenants and captains are too young in both age and service to have learned how to properly and effectively work with enlisted members, yet they are expected to do so from day one. The questions they raise show the immediacy of the problem and their concern.

"Can I date an airman who does not work directly for me but who is in my squadron? And if I legally can, should I?"

"I don't think the chief likes young officers. What should I do?"

"When we're TDY, some of my NCOs call me by my first name, Is this OK?"

"My NCOIC is 10 years older than me and has a personal problem. How is a young person like me supposed to help?"

These questions and hundreds more like them came forth in seminars all across the country as our young officers highlighted a glaring omission in their professional upbringing. For the most part, schooling in officer/enlisted relationships receives short shrift. Formal training invariably consists of seminars in which a cadre of enlisted members attempts, in two or three hours, to impart some feeling of NCO expectations and responsibilities to our young officers. The effort is noble but only marginally productive. And if 1,500 young officers are to be believed, counsel from their own officer superiors is woefully lacking. The young lieutenants and captains apparently are expected to learn by osmosis the intricacies of one of the most important, meaningful, and sensitive relationships in military service. That our young officers experience so many difficulties in this arena should be no source of surprise to those of us whose duty it is to properly train them. It should also be no source of pride.

Discipline and Military Justice

Young officers almost totally lack the skills necessary to do their part in maintaining a fair and effective system of military discipline. Their shortcomings in this critical area of military life result from the lack of experiences that

accompany their short time in service and from a near-total failure of their superiors to explain to them both how they fit into the military discipline/justice system and how they can effectively discharge their duties. At best we glibly toss at them trite phrases and little more.

"Enforce standards!"

"Don't permit shoddy performance!"

"We've gotta have discipline!"

Though noble assertions, these phrases do little to tell three-year lieutenants *how* to execute their disciplinary responsibilities. From the minor--but significant-- offense of avoiding a salute, to theft of government property, to the thousands of events in between, the young officer is ill-prepared to take the proper action. Most ROTC instruction is by officers who have yet to hold command and who have never, in most cases, imposed administrative or judicial discipline on any military member. Subsequent formal training dedicates very little time to the topic. Of 268 hours at SOS, only 3 1/2 hours deal with military discipline. Further, most superiors spend little or no time discussing discipline with their officer subordinates. Ask the next five captains you meet the difference between a letter of counseling and a letter of reprimand; ask them to describe an unfavorable information file; ask them to identify the key elements of any offense in the Uniform Code. Unless you are extremely fortunate, you will not receive learned responses.

This is *not* to say that one should expect a young lieutenant or captain to be the equivalent of a squadron commander or a military trial counsel. Because the disciplinary task is so difficult and because the effects of disciplinary action are so significant, we purposefully reserve this task for field grade commanders or at least for officers with many years in service. But this does not mean that the young lieutenant or captain has no role in the disciplinary system. The young officer must be able to distinguish acceptable conduct from unacceptable, must know when to act, and must know how to act. The vast majority of the young officers with whom I spoke did not possess the requisite skills for this critical duty. And they are not to blame. How can we blame them for what we never taught them? As a result, they either avoid their disciplinary responsibilities altogether or make well-intentioned but fatal errors in administering discipline. In either case, both they and the Air Force suffer.

Social Protocol

Inherent in all of the military services is a proud history of professional social contact, a history of protocol and social etiquette that helps distinguish our profession of military service from its civilian occupational counterparts. From a New Year's Day visit to the commander's home, to the formal military ball, to the daily customs and courtesies exchanged between military members, professional social etiquette has been a continuing thread throughout military history. Yet our young officers know almost nothing about their social obligations and how to gracefully execute their social duties. One hears "an officer and a gentleman" or "an officer and a lady" far more often than one sees proper execution of all that is denoted in those phrases.

What do our young officers not know about the social aspect of their profession? Plenty! With very few exceptions, the officers with whom I spoke do not fully appreciate their responsibility to actively support the officers' club and its attendant associations, do not know how to extend thanks to the hostess for a club or home party, do not know basic rules of engagement for receiving lines, do not know when and for whom to stand (either socially or at work), and many do not even know proper etiquette for the national flag! Again, we should not be surprised at the absence of social skills shown by these fine young officers. In most cases, their civilian rearing offered little opportunity to acquire even rudimentary social skills, and, for the most part, Air Force efforts do not get the job done. ROTC instruction relies heavily on a yearly dining out as the primary reaching tool; current SOS curriculum offers only 90 minutes of instruction on the subject, 30 minutes of which is preparatory reading.⁶

Should it be our objective to turn our officers into simpering dandies who, with little fingers property extended, nibble watercress sandwiches while making cocktail party conversation? Hardly! But the objective should be to make our officers comfortable in a broad range of social situations, to be able to effect proper manners and protocol both at home and abroad, to complement their strong technical and leadership skills with equally strong social skills, and to represent the Air Force as polished officers, ladies, and gentlemen. Amazingly enough, our young officers are eager to learn. They have, felt uncomfortable on far too many social occasions, and they do not like the feeling.

They want to do the proper, courteous, gracious thing but simply do not know what to do. They see the value of the professional social contact but are often deterred from participation by their lack of social proficiency.

The Verdict

In the final analysis, the sincere, honest assertions of hundreds and hundreds of our finest lieutenants and captains can lead to only one conclusion: no matter how well we think we are training our young officers in traditional officership skills, we are simply not hitting the mark. Our best intentions and efforts notwithstanding, we are not giving them what they want, what they need, what they deserved.

Military Traditions Revived

What can be done to return military traditions to their rightful place in Air Force life? What can be done to make our time-tested military values part and parcel of the professional development of each of our fine young officers? There is much that can be done, both institutionally and personally; and if we are truly sincere in our efforts, the necessary actions are not all that difficult.

Beginning at the Beginning: Fixing "the System"

The institutional remedy requires only that we codify our important traditions in regulations, pamphlets, or curricula, and then use these as tools to instruct our young officers. We should by no means wait until an officer attends SOS to begin such instruction. From the earliest days at the Air Force Academy, in university and college ROTC programs, and at Officer Training School (OTS), our young officers should be instructed in detail on the three topics discussed here and on many topics of similar value.

The first step in this process is to clearly articulate in a regulation or similar document those military traditions we wish to foster. AFR 30-1, *Air Force Standards*, is generally accepted as the prime document that articulates basic values and is certainly the most widely read and best known. But AFR 30-1, in its current form, falls somewhat short of the mark in both content and specificity. While the regulation speaks to customs and courtesies, professional relationships, military ethics, dress and appearance, and the like, it does so in rather general terms. Our young officers need specifics to guide them through the specific problems of their daily lives. When the regulation says it is "inappropriate" for a subordinate to address a senior by first name, what it really means is that subordinate will not address seniors in so informal a manner. If this is what it means, why not say so? The regulation is a fine document but can be even better.

Amazingly enough, superb material already exists for teaching many of the subjects identified in AFR 30-1, but we do not make the best of what we have. Law for Commanders and the Decorum/Protocol Handbook used today at the Air Force Academy are exactly what the doctor ordered. The academy training outline on officer/enlisted relationships is an equally fine document. These texts deal with real issues in a thorough, detailed fashion. But one must be an academy cadet to benefit from them! Are these topics any less important to an officer commissioned via ROTC or OTS? Obviously not. This material should be the basis of instruction in all commissioning programs. The Other Half, a booklet created by a student at Air Command and Staff College and available at ROTC units today, is an excellent primer on social survival skills. However, the degree to which this booklet is used is left to the discretion of individual ROTC detachments. Finally, the Air Force Officer Guide, now in its 27th edition, is a fine book for teaching military customs, courtesies, and traditions but often spends more time on bookstore shelves than in the hands of a young officer. The Guide and the other texts mentioned here could form a solid nucleus for expanded professional education in our commissioning programs, at SOS, and in the Lieutenant's Professional Development Program.

The instruction should be meaningful. Military discipline should be taught by squadron commanders who have had to make those tough decisions that changed people's lives. I doubt there is a squadron commander (or excommander) who would not gladly visit an ROTC detachment, OTS, or SOS and share real-life experiences with a group of prospective or commissioned officers. If one truly wants to teach officer/enlisted relationships, let first sergeants visit our officer schools and offer their perspectives. A fine first sergeant possesses a wealth of experiences beyond compare. Let us use those experiences to better teach our company grade officers. To impart to our young officers the necessary social survival skills, who would be better suited than protocol officers or aide-decamps, many of whom are company grade officers themselves? Their experiences would be invaluable to all company grade officers; and especially because of age and rank similarities, their experiences would be credible. We would never dream of permitting aviation skills to be taught by a nonflier, or medical skills to be taught by

anyone other than a medical professional. Yet we all too often allow important officership skills to be taught by people who, through no fault of their own, simply do not possess the body of experiences absolutely essential to meaningful instruction.

The instruction must be sufficiently detailed to be of real value. Three hours devoted to military discipline would not achieve the desired goal even if the instructor were Oliver Wendell Holmes; and Amy Vanderbilt herself would be hard-pressed to teach social etiquette in 90 minutes! The expected objection to an expanded curriculum is that there is too little time to permit such a detailed examination of these specialized subjects. A valid rejoinder to this objection would be to restructure the current curricula in our commissioning programs and in company grade officer education. At the risk of speaking words of blasphemy, I submit that to the prospective or novice officer, basic officership skills are at 1 east as important as national grand strategy, system acquisition, or--dare I say it?--the Program Objective Memorandum (POM) process. But should it prove impossible to change existing curricula at ROTC, OTS, or SOS, the officership skills I have discussed and many more can be covered via correspondence school. A well-designed correspondence course, specifically designed to address traditional military subjects and mandatory for all company grade officers, could work wonders.

"Physician, Heal Thyself"

While the institutional remedy is absolutely essential to improve the officership skills of our young officers, the institution cannot solve the problem by itself. It is all too easy to point the accusing finger at a regulation, at a commissioning program, or at military academia. Indeed, the lengthy discussion in this very paper of institutional remedies could lead one to view them as the answer to the problem and to ignore that which actually is both the source of the problem and the key to its resolution. The real key to increased professionalism among company grade officers is the total commitment of their superiors to making them the best officers they can be. All the formal training in the world will be for naught unless there is complementary personal training and modeling by superiors. We cannot expect formal training to do in a few hours that which we ranking officers should be doing every day.

Every ranking officer should view as a total honor the fact that the Air Force has entrusted into their care the professional upbringing of subordinate company grade officers. With that honor also comes total responsibility for that upbringing. Discharging that responsibility is far from difficult, and little things do mean a lot. Two hours weekly spent with young officers simply discussing pertinent topics can do wonders. Monthly breakfasts, retreat ceremonies, celebration of special national and military holidays, and attendance at leadership school graduations are but a few easy ways to foster professionalism. Failure to teach one's subordinate officers everything needed for a productive Air Force life should be viewed as nothing short of dereliction of duty on the part of the superior. Officers who do not do everything possible to improve the professional qualities of subordinate officers have no right to expect high marks for their own professionalism at evaluation time.

How much contact, training, and interaction are required of the superior officer? The test is simple. One needs only to answer this question: "If the subordinate lieutenants and captains working for me were my sons or daughters, what would I be teaching them in order to make them the most professional officers they can be?" Both the analogy and the question posed by it seem totally appropriate, since in no small sense is an officer of superior rank the military parent of the subordinates placed in his or her charge. Whatever we would do for our own sons and daughters we should do with equal enthusiasm for all our young officers.

Back to Houston

The simple question posed by a fine young lieutenant at the Johnson Manned Space Flight Center and recounted at the beginning of this article shows in the clearest terms exactly what our young officers want, need, and deserve. They want more military in their lives, not less. They want to learn and lead-today! Yet they are being denied the very officership skills they seek. Where lies the fault for this predicament? Is the problem insoluble? Has the decline in military traditions simply become an irreversible fact of Air Force life? Hardly. As Cassius said to Brutus when discussing their own shortcomings, "The fault, dear Brutus, lies not in the stars, but in ourselves." The fault lies in ourselves as we institutionally and personally deny to our company grade officers the basic military skills so essential for their professional development. But what we have done, we can undo. We can take steps to once again instill traditional military values into the lives of all our fine young officers. We owe it to ourselves to do just that. We owe it to our company grade officers. We owe it to the Air Force.

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Mentoring a valuable tool for NCO leaders

CHRISTINE E. SEITZINGER, CSM, US Army

In Greek mythology, Mentor was a loyal friend and adviser to Odysseus, king of Ithaca. Mentor helped raise Odysseus' son, Telemachus, while Odysseus was away fighting the Trojan War. Mentor became Telemachus' teacher, coach, counselor and protector, building a relationship based on affection and trust.

Mentoring today is synonymous with the process by which we guard and guide others. Mentors seemingly "adopt" those placed in their care.

Although mentorship is not new to the Army, it is most often associated with officers. But, mentors can be -- and are -- squad leaders, section or platoon sergeants, first sergeants and sergeants major, as well as officers and civilians.

Mentoring is an especially critical skill for NCOs because they are charged to train and develop junior leaders. Ideally, every soldier is both a practicing mentor and a protégé recipient of mentorship. This ideal circle of mentoring only occurs when a unit has created an atmosphere where the art of leadership is recognized as a learning and growing process, and where mistakes are tolerated as part of that process.

There is the adage that "some people live and learn; and some just go on living." Those who do live and learn must be given a chance to succeed or fail. They must be challenged and pushed to take risks -- to think for themselves.

Today's recruits are the best and brightest ever. NCOs have the responsibility to develop these soldiers to the best of their abilities. We make that happen by sharing our knowledge with the leaders of tomorrow. And the most effective way to share that knowledge is through mentoring.

Becoming a mentor should not be a hasty endeavor. It is not a part-time job. It is an intense relationship between teacher and student. The process requires time and caring.

Effective mentors are totally committed to spending the necessary time and attention it takes to share values, attitudes and beliefs. This includes helping a soldier make career decisions and providing support and encouragement that allow leaders to grow.

Information on training and caring for soldiers can be found in FM 22-100, Military Leadership; FM 22-101, Leadership Counseling; and FM 22-101, Soldier Team Development.

The accompanying mentor's checklist also provides some basic guidance. You might have other suggestions or priorities that can be added to this checklist. The important thing is that you offer your soldiers a program for growth.

Mentoring is not just a fancy buzzword. It is a proven approach and a valuable tool for NCO leaders.

The Mentor's Checklist:

- Set an example for the soldier to follow in your daily displays of courage, candor, competence and commitment.
- Get to know your soldier inside and out and identify his or her strengths and weaknesses. Then create a training program that is tailored for your soldier.
- Review the soldier's military records, teach the soldier about these forms and files, and assist with updating and correcting records.
- Develop a job description that includes the soldier's input.
- Within the framework of the unit's and your standards, work with the soldier on establishing challenging and attainable goals.

- Discuss with the soldier the importance of understanding and following the professional Army ethic of loyalty to nation, the Army and to the unit; duty; selfless service and integrity.
- Continually evaluate the soldier's performance and provide timely feedback.
- Teach the soldier how to objectively evaluate his or her performance and to use each success or failure to learn and grow.
- Formally counsel each quarter at a minimum.
- Prepare the soldier's NCOER fairly and accurately.
- Get the soldier enrolled in MOS and soldier-oriented correspondence courses.
- Send the soldier to the Army Education Center to improve communication skills, such as taking the Army Writing Program.
- Encourage the soldier to go to college on a part-time basis.
- Prepare for and send the soldier to appropriate military schools.
- Give the soldier additional responsibilities and appropriately reward him or her.
- Help the soldier learn how to polish communication skills through practical exercises, role playing and junior leadership training.
- Create opportunities and encourage the soldier to teach classes to other soldiers.
- Train the soldier to do your job; then let the soldier do it.
- Teach the soldier how to use Army regulations, field manuals and pamphlets so he or she becomes familiar with them and knows where to get information and answers.
- Prepare the soldier for promotion, hold mock promotion boards and provide constructive criticism.

(Editor's note: Seitzinger is command sergeant major of the 70th Medical Battalion (Dental Services). This commentary was originally published in the NCO Journal)

Assessing Self-Development

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CRAIG BULLIS, MAJOR, US Army

Puzzling over your commander's remark that your communication skills need improve-ment, you went to a friend to ask for advice. "I could have told you that. There are quite a few times when you don't listen to anyone." "Well, why didn't you tell me?" "You never asked." "Well, what else haven't you mentioned?" "Well, now that you ask. . . . "

The US Army has long recognized that its quality in performance of mission is dependent upon the quality of its soldiers and leaders. To continuously improve soldier and leader quality requires a comprehensive means to provide both developmental and performance assessment and feedback on how well we do our jobs.

Accordingly, leader development is best defined as "the preparation of military and civilian leaders, through a progressive and sequential system of institutional training, operational assignments and self-development, to assume leader positions and exploit the full potential of present and future doctrine." I US Army leaders have historically relied on the assessments from their superiors, not only as the primary gauge of job success and mission accomplishment, but also as the means to identify developmental needs. If the boss was happy, all must be right with the world. Today, in a time of growing interest in Total Quality Management, both the public and private sectors are moving toward other sources of feedback to measure success and to assess and develop leaders.

Recent initiatives have pushed the Army to examine itself more closely with the intention of developing better leaders. One method of improving leadership is the concept of multirater assessment. As the Army considers multirater assessment potential, it is examining tools that may significantly enhance our personal development. Multirater assessments provide a means to construct developmental action plans to improve our own leadership skills, given direct feedback from our peers, subordinates and superiors.

The Self-Development Process

Army leader development is founded on two principles:

- All development, such as institutional training, operational assignments and self-development, must be properly sequenced.
- The Army must maintain life-cycle models-which describe critical tasks and responsibilities-for all leaders in their respective areas.3

Department of the Army doctrinal literature maintains that "Self-development is a planned, competency-based, progressive and sequential process in-dividual leaders use to enhance previously acquired skills, knowledge, behaviors and experience, and to enhance readiness and potential for progressively more complex and higher-level assignments. Self-development focuses on maximizing leader strengths, minimizing weaknesses and achieving individual leader development goals."4

Two imperatives are tied to the self-development pillar:

- Stress the individual responsibility for leader development.
- Identify, specify and refine self-development requirements.5

Further, self-development involves "a continuous process that takes place during institutional training, education and operational assignments." 6 In other words, self-development occurs wherever the soldier is, no matter what the soldier is doing. The self-development program should "stretch and broaden the individual beyond the [current] job or training." 7

Self-development generally occurs in a series of phases and begins with an accurate self-assessment that identifies the individual's developmental needs.8 This assessment is followed by discussion with trusted others to identify the causes of identified strengths and weaknesses. Then an "action plan" is developed to highlight and prioritize the specific actions that should be taken by the individual to achieve his/her self-developmental goals. Commanders are responsible for providing "advice, assistance and support as individual leaders prepare and execute their

developmental action plans."9 This implies that the action plan development process is a *joint* activity between the leader and the subordinate. Commanders, leaders and supervisors are responsible for ensuring that their subordinates develop and execute a self-developmental action plan.

Assessing leader strengths and weaknesses is clearly the most important step in the process. Just as having an accurate understanding of friendly and enemy unit strengths and weaknesses is paramount to successful military operations, having an accurate understanding of individual strengths and weaknesses is paramount to the development of an effective self-development action plan. "Great answer-wrong question" results in no credit given on an academic test. Similarly, developing an action plan that answers the "wrong question" does not provide an efficient opportunity for individual leader self-development. Given today's operations tempo, most leaders find themselves planning for a wide variety of missions, including missions that we have no tactics, techniques or procedures for. Because planning and practice take time, it is critical that commanders carve out time in their training schedules for self-development activities to focus on the critical skills development that will make them better leaders.

Action plans should focus on three sets of activities which are distinguished by how far in the future self-development is focused:

- Immediate goals focus on accomplishing tasks related to the current job and are therefore very specific.
- *Near-term goals* are somewhat broader in scope and develop leaders for their responsibilities at the next operational assignment.
- Long-term goals are the activities that have the broadest scope, focusing on tasks that prepare leaders for their duties and responsibilities beyond their next operational assignment.10

The scope of activities that can be employed for self-development is limited only by one's imagination and includes: attending education courses, par-ticipating in professional organizations, reading professional materials, seeking challenging assignments, practicing critical leader technical and tactical tasks and participating in leadership activities in both the military and civilian communities. However, a problem emerges when we look at the self-development activities associated with each rank category. For officers, leader self-development emphasizes "on-the-job training coupled with an extensive reading program." Warrant officer activities focus primarily on attending civilian education courses toward attaining college degrees. Noncommissioned officer self-development activities are the broadest in nature and include professional reading and writing, formal military education (Self-development Test and Army Correspondence Course Programs) and civilian education through the Army Continuing Education System (ACES). For civilians, self-development opportunity spans the spectrum of opportunities listed above. Because of their position stability, civilian self-development activities can have a potentially greater impact.

Commanders, leaders and supervisors provide feedback that helps the individual identify strengths and weaknesses. What is generally not addressed is the "value added" to that self-assessment when peers and subordinates also provide input to the person's assessment of developmental needs. Leadership research has clearly identified that the roles required of leaders are different dependent on whether they are the individual's superior, peer or subordinate.

Multirater Assessments

Relying on feedback from superiors, we have traditionally concentrated on those personal development areas that we perceived were important to the commander. While this approach led to success for us as individuals, it did not necessarily help us attain maximum self-development or create a better organization. Every day, we have routine contact with others who have formed an opinion of our abilities, and who, if we listen, can provide valuable insights into our own self-development needs. This feedback is important because it comes from those who have far more contact with us than our raters or senior raters.

The multirater assessment concept, often called 360-degree assessment, is not new to the Army. For many years, we have used feedback from others in evaluation processes, including peer ratings at Reserve Officers' Training Corps (ROTC) Advanced Camp, the US Military Academy, Ranger school, the Combined Arms and Services Staff School (CAS3), the Warrant Officer Staff Course and peer/subordinate ratings at the Army Management Staff College. While sometimes used in an evaluation role, assessment results often lead to behavior modification. This change is

inspired not by the direction of a leader, but by our concern for how our actions may be affecting others who work with or perhaps for us.

A multirater assessment is any assessment that takes into account more than just a superior's feedback. Sources of feedback include peers, subordinates and external customers. Customer relationships are often overlooked in the military, but most units do indeed serve external customers. Recently, greater emphasis has been placed on our relationships with external customers and the support we provide. Customers can include higher headquarters staffs or subordinate units dependent on us for information. Feedback sources are as varied as our daily personal contacts. Measuring feedback from multiple sources using a common instrument is the methodology used in multirater assessment.

Scientific study indicates that the accuracy of our assessments increases as the number of raters increases.11 This same multiple-source concept increases the likelihood that an individual will take feedback "ownership," particularly as they see the results reinforced by feedback from others. Multirater assessments have been linked to skill and performance improvement in those areas where the assessments have been tied to performance objectives. The multirater assessment concept fits well with the system of management by objectives (MBO) that we use daily in the Army. Specifically, MBO takes the form of the Officer Evaluation Report (OER) support form, where specific goals and objectives are outlined and agreed to by the officer's supervisor.

When used for individual development purposes, a multirater assessment may be best used in comparison with our own self-assessment. In first identifying what we perceive as our personal strengths, weaknesses and developmental needs, we provide a baseline to measure our other assessments against. We then use the other assessments to validate our self-assessment, to reexamine our assessment in divergent areas or to identify and investigate areas where we did not recognize a need. This comparison allows us to locate areas where we may act differently with different groups of people. For example, we may communicate well with our superiors but have difficulty passing information down to subordinates, or vice versa. The first step is to honestly assess one's own leadership and recognize those areas where improvement can and should occur.

The Leader Azimuth Check

The primary goal of any feedback system is development. The more valid the feedback an individual receives, the greater the potential for improvement. The Army intent in developing a multirater feedback mechanism is to provide individuals with more feedback on their leadership skills from which to build their own self-development program. Rater and senior rater feedback provides only an occasional and very limited view of an individual's daily leadership.

With this intent in mind, pilot programs for multirater assessment have been initiated by the Center for Army Leadership (CAL) at CAS3 and the Command and General Staff Officer Course (CGSOC) at Fort Leavenworth, Kansas. Individuals are given the opportunity to obtain feedback from superiors, peers and subordinates at their duty station prior to attend-ing these courses. This feedback is tied to a self-assessment and the results are provided to the students for their use in creating a Developmental Action Plan. This plan allows the individuals to chart near-, intermediate- and long-term goals in their personal leadership development.

The current survey instrument is called the Leader Azimuth Check. Developed by the Army Research Institute (ARI) in conjunction with CAL, the survey asks for feedback in 14 areas. The latest survey is related to emerging leadership doctrine and directly reflects the leadership concepts listed on the front of the new OER.12 Feedback is provided through a 6-point scale representing how closely an individual is described by each instrument statement. Questions reflecting effective leadership dimensions are shown in the figure.13 The scores from these individual questions are averaged to obtain overall scores in selected leader dimensions. Comparison scores are given for each of four rating sources: self, peer, subordinate and superior. Individuals may then assess how they rate themselves versus these other sources. Information is also provided to individuals on their comparison group, a set of individuals with the same background, experience or perhaps grade. Each individual analyzes his results before establishing action plan goals.

Army experience with multirater assessment has shown promise. People involved with the process generally believe the process benefits them and the Army. Assessment subjects have expressed a motivation to change their behavior based on at least some assessment dimension. Any motivation to improve behavior could be considered a success

for this program. Many individuals continue to put sincere thought into ways to improve their personal leadership abilities.14

Since the primary goal of multirater assessment is self-development, the feedback provided to the focal leader is anonymous. This confidentiality permits the assessor to be more candid in evaluating an individual's leadership abilities. Unfortunately, an evaluation report rarely gives an individual a true picture of his or her abilities. Unless "for cause," an evaluation report is even less likely to point out a specific weakness or developmental need. The candid snapshot of an individual provided through multirater assessment is intended to identify those areas where an individual may wish to focus self-development.

To maintain rater response confidentiality, individuals do not receive reports from peers and subordinates unless at least two assessments are received in each category. The final output averages cannot then be tied to any individual. This confidentiality must be maintained so individuals can trust that their feedback will not cause some form of retaliation. Occasionally, the truth hurts. This same confidentiality is not applied to superiors because they are expected to provide truthful, accurate assessments of subordinates.

Developmental Action Plans

The multirater assessment's desired outcome is development of individual action plans for self-development. Action plans must be tied to identified developmental needs and to personal, as well as unit goals and objectives. The best developmental actions are those that can be done on the job while accomplishing the mission. Short-term action plan goals may be accomplished simply by practice and repetition in those areas where needs are greatest. For example, knowing that you have a problem motivating subordinates may lead to actions that should improve your methods of dealing with those subordinates by setting clear expectations or properly rewarding good performance. Long-term goals should fit in the more structured environment of the Leader Development Model contained in Department of the Army Pamphlet 350-58, *Leader Development for America's Army: The Enduring Legacy*. Developmental Action Plans must consider the various leader dimensions compared to both the individual's personal goals and to the Army's need for leaders with specific leadership abilities.

Although currently focused primarily at Army "schoolhouses," the concept and implementation of multirater assessment has great potential for use in regular units. With its focus on self-development, multirater assessment can provide anyone with a check against personal needs and goals. Assessments can provide leaders with immediate climate checks on how their leadership is affecting their units. The multirater concept has been piloted at several operational units with good results.

Use of multirater assessments at the unit level can foster teamwork. When team members believe that their input counts and is recognized, their productivity increases. Communication is fostered, because there is less tendency to hide the truth. Team members often have more opportunity to view the leadership of their leader than his superior. Currently, there is no formal method for leaders to obtain feedback from subordinates or peers on their leadership effectiveness. When the assessments are used properly, leaders will develop confidence that their subordinates can provide valid and useful feedback that has been missing in the current system.

At the unit level, response confidentiality is the key to success. If individuals know that their responses are kept confidential, they will provide valid feedback. Fear of retribution based on a less-than-successful assessment would rapidly cause multirater assessment to fail.

Multirater assessment falls outside the normal chain of command. Since feedback comes from all sources, there is a possibility that the feedback will be discounted as unimportant. This is overcome if there is a willingness to seek self-improvement. It has worked well in cases where the commander requested the assessments for his unit. Multirater assessment is available on request through CAL and ARI.9

Multirater assessment is not without problems. The process of obtaining feedback, consolidating that feedback into meaningful reports and returning it to an individual is a time-consuming process. Valid feedback survey instruments contain 50 to 75 questions or statements that must be answered. The feedback must be processed using statistical software and a report produced. Time and computer hardware are scarce commodities in operational environments. Currently all processing is done through ARI at Fort Leavenworth. Work is under way to upgrade this software and have it resident with both ARI and CAL.

Gaps in information are common, Individuals sometimes fail to submit or correctly complete the feedback instruments. This lost data can and often does affect the assessment process outcome. When individuals do not receive feedback they desire, they tend to blame the entire process. Great effort must be expended to obtain the most accurate data possible. Within CGSC, this problem was common to about 25 percent of those involved in the pilot program.

Some individuals feel threatened by honest feedback. They do not like to be told the truth, or do not like less than good news. Others are often surprised to receive candid feedback that differs from what they had received through our inflated evaluation system. Raters cannot, because of our system, tell it like it is. Time must be spent searching inside and admitting that we have weaknesses and developmental needs. It is easiest to simply ignore or discount feedback that does not conform to our "self-picture." The value of multirater assessments is also discounted by those who do not fully embrace self-development's value. However, these difficulties can be overcome, and it is our belief that self-development benefits easily outweigh its costs.

Within the CGSC pilot, all Active Duty Army officers were prompted to create a Developmental Action Plan based on the results from their 360-degree assessment. About 75 percent of participating students had good results to serve as a base for their action plans. The remainder were asked to make a plan based only on a self-assessment. Many of the action plans based on the full assessment showed sincere effort and, if implemented, will lead to improvement. Resistance to the concept of developmental action plans was expressed primarily by those who failed to complete the entire 360-degree process. Senior leaders are often those who are most difficult to convince that they have room for improvement.

Army publications have clearly communicated the importance of leadership to successful mission accomplishment. The Army's emphasis on leader development accentuates the responsibility of all soldiers to develop themselves as leaders for the Army's future. Moreover, given the unstructured nature and increasing complexity of future missions, Army leaders must be more prepared to solicit and receive feedback from more individuals than those included in existing formal feedback channels. The concepts contained in multirater assessment programs are consistent with the multiple roles Army leaders play now and will continue to play in the future.

Multirater assessment programs have swept corporate America and are being used successfully within the Departments of Defense and Energy. As a self-development tool, its value has been proved. The Army has taken on the concept as an initiative to improve the leaders of tomorrow. Through aggressive evaluation and instrument improvement, we can fully develop a program that will aid in leadership skill development for all Army leaders. MR

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Mentoring—A Critical Element in Leader Development MAJOR GENERAL LON E. MAGGART, US Army, RET and

COLONEL JEANETTE S. JAMES, US Army

The US Army is recognized around the world for its exceptional leader development programs. In fact, it has no equal. We have made great strides in counseling our subordinates to help them improve their performance. But, turbulence, budget and other policy constraints have created the need for a more personal approach to taking care of our soldiers.

The knowledge, skill and experimental requirements thrust on leaders today may well exceed our formal education system's capacity to develop future leaders capable of dealing with the complex problems they will face. As the Army shrinks, soldiers must perform increasingly more complex tasks, often in jobs for which they have insufficient experience or training. Also, soldiers must work more efficiently and produce quality work in diverse areas without benefit of previous experience or, for that matter, specific training.

Twenty-first century leaders will have to set the conditions that give their subordinates the best possible chance for success. One of the easiest ways to do this is through mentoring. Personal mentorship between senior and junior leaders is essential in filling information gaps, and mentorship provides another avenue to help motivate, educate and guide quality people to higher levels of performance and responsibility. Leadership success in the immediate future will depend on mentoring more than any other single process.

Mentoring may be the critical missing key to help compress young leaders' learning curve. Today, there is so much to know and so little time to learn it that mentoring might be the best way to ensure future leaders' professional development. The mentor can help subordinates sort through information to identify the things that are really important.

Mentoring also is self-perpetuating. Leaders who have been well men-tored tend to become great mentors themselves. The bond of trust and confidence from a close mentoring relationship could last a lifetime. Mentoring provides a unique opportunity for young leaders to have a permanent, personal linkage with experienced senior officers and noncommissioned officers who have demonstrated professional competence, outstanding leadership and technical ability.

The best mentoring comes from personal commitment between senior and junior leaders rather than from some type of formalized assignment process. Mentoring may well occur outside normal command relationships or branches. In fact, mutual trust and confidence must exist between the mentor and those whom he mentors long before a permanent mentoring relation-ship unfolds. Trust is critical for the mentoring relationship to be open and honest. Mentors must be able to tell those they mentor what they *need* to hear even if it is not what they *want* to hear. However, honesty must flow in both directions. Mutual trust between the mentor and the mentored helps soften the sting often associated with honest communication.

Mentoring can take several forms and be strictly related to branch issues or a solely intellectual engagement. The subjects for discussion are unlimited, ranging from leadership to theoretical constructs. It is up to the mentor to decide which areas are ripe for exploration and for those mentored to seek information that meets their specific needs. Accordingly, mentoring can be transformational for both the mentor and those mentored. Each learns from the other as they work together. For the mentor, it is a way to influence the progress of bright young leaders. Collective wisdom gained from years of experience is passed from senior to junior leaders as a bridge between the past, present and future. The mentor gets the pleasure of watching young leaders grow and progress far beyond a level that could have been achieved otherwise. Interestingly, those who are best mentored often achieve a level of expertise far beyond that of their mentor. The mentored learn, grow and mature.

The mentor also gains access to what subordinates are thinking, and they, in turn, gain insight about the organization and the Army at large. Mentors learn what is working well and what is not and gain valuable and honest feedback from those who make the organization work. The mentor can use those who are mentored to help impart new ideas and ways of doing business throughout the organization and beyond. Mentoring provides both security and courage

to those mentored. *Security* occurs because there is someone with whom to check signals. *Courage* comes from the knowledge gained.

The mentor provides focus for young leaders' natural curiosity to learn and explore the various components of soldiering. The mentor serves as a guide to help young leaders gain the most from beneficial experience while helping them avoid potential pitfalls. The mentor can teach both the art and science of a thousand important topics and can expose young leaders to expert knowledge on the subtleties of various job skills. More important, the mentor can model the enduring values and positive spirit so important to the Army.

Mentoring brings both participants exhilaration and exhaustion. There is no greater satisfaction than teaching or learning something new and useful. However, considerable energy must be expended to challenge and teach even a small group of bright young leaders. For those mentored, there is an expectation of performance to a higher standard.

Mentoring offers unparalleled opportunities to build a better Army. If you are a senior officer or non-commissioned officer and are not mentoring several promising young leaders, you are missing an important opportunity to contribute to the Army's future. Mentoring is the single, easiest way to develop young leaders. But to do so, the mentor must be willing to commit the time and energy necessary to do it right and to set the conditions for success so young leaders will seek him out to be their mentor.

Because mentoring is so critical for growing future leaders, it is up to every one of us to provide the guidance and inspiration to give them the tools to do in the 21st century what we did in Operation *Desert Storm*—overcome danger, fear and adversity with calm professionalism. *MR*

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Tailored Reading Programs That Make A Difference

Stu Downing

In late October 1962, the United States and the Soviet Union were on the brink of nuclear war. President John F. Kennedy's efforts to force the Soviets to remove nuclear missiles from the island of Cuba had moved the two superpowers closer to mutual destruction than the world would ever know.

In David Detzer's book, *The Brink, Cuban Missile Crisis, 1962*, President Kennedy's concerns as the crisis escalated were explained as follows:

American intelligence redoubled its efforts all around the world. What was happening at this border crossing or that airfield. The tiniest change might indicate war was about to begin. The United States had to be prepared to move fast. Simultaneously, one did not want to become too jumpy. America might overreact to some inconsequential action and initiate the very war it wanted to prevent.

The President had recently read Barbara Tuchman's book *The Guns of August*, covering the beginning of World War I, telling how European leaders stumbled into that war. Not a single major leader, according to Tuchman, had wanted that war, and yet it had begun. Bad communications, mistakes, stupidities on all sides had brought it on. John Kennedy talked about the book with his brother Bobby, Ted Sorenson and Kenny O'Donnell. He recalled for them something the German chancellor had later said when asked how the war had started: "Ah, if we only knew."

O'Donnell remembered Kennedy saying, "I wish we could send a copy of that book to every Navy officer on every Navy ship right now."

The important historical lessons that Barbara Tuchman's book could have offered the Navy officers involved in the blockade of Cuba would have been priceless. This true story is the perfect example of a commander understanding the importance of perspective while conducting military operations. Unfortunately, our President did not have a long-range training calendar with an event titled "Cuban Missile Crisis." If so, he could have had his Navy officers read the book in July, discuss it for a few months, and then conduct the crisis with officers well in tune with the problems associated with a world on the brink of war.

How does this apply to you? Simple, don't wait until you're in command to develop the reading program you want to have as part of your Officer Professional Development (OPD) Program, because by then it will be too late.

At that point you will only have time to look through your old stack of folders, brush off your old "canned" Career Course reading list only to thrust it the faces of your lieutenants, and order "read this stuff in your free time."

Sure, technically you will have a troop/company reading program, as well as an entry for your OER support form. However, you will have missed a perfect opportunity to focus your officers on the types of leadership, training, and warfighting most appropriate for your upcoming training and/or deployment milestones, in addition to those lessons and vignettes you hold most dear.

My proposition is simply to take some time to craft a reading list for your lieutenants based on the type of unit you command, your upcoming training events, and any deployments you are scheduled to make during your tenure.

Furthermore, don't limit yourself to four or five books that are typically on every reading list you might encounter; instead, do some research. There are volumes of periodicals and circulars that have been written on your particular type of organization which will serve to help you-- and your subordinate leaders-- make your troop/company a more effective unit. Most importantly, your particular reading list will be one that is responsive and attuned to the problems and issues that your lieutenants can expect to encounter while you are their commander.

Example:

Prior to assuming command of C Company, 1-10 Armor, CPT Maurice J. Johnson worked in the Brigade S3 shop, and he knew his tank battalion would be going to the NTC after an eight month train-up. Because his Small Group Instructor at the Armor Career Course was a USMC Tanker, he was influenced by some additional readings he had done at while at FT Knox.

CPT Johnson brought with him a core list of books he wanted all of his lieutenants to read, as well as a separate list for each duty position based on some research he had done in his spare time. His research included:

- a. Interview with a company commander in a different brigade who had just returned from an NTC rotation.
- b. The AAR from C Company's last NTC rotation.
- c. Office calls with the BN XO, S3, CSM, and BN Commander. (The S3 had been a OC at the NTC)

d. 30 Minutes on the Internet.

Maurice's Reading List:

All Lieutenants:

- Closing with the Enemy; Company Team Maneuver. "CALL" Publication, Mar 98. "Special Study" by LTC James B. Hickey.
- The Defense of Hill 781. LTC James R. McDonough. (Great reading for LTs who have not been to the National Training Center)
- Orchestrating the Direct Fire Fight. CTC Quarterly Bulletin, 4th Qtr, FY 99, No. 00-03, MAR 00.
- The Art of War. Sun Tzu.
- Warfighting. USMC MCDP 1. Warfighting Manual for the USMC. 96 Pages.
- Hell in a Very Small Place. Bernard Fall, 1967.

Executive Officer (XO):

- CASEVAC at the Task Force Level. CTC Quarterly Bulletin, 3d Qtr, FY 99, No. 99-14, OCT 99.
- Combat Service Support (CSS) Operations Made Easy. CALL Newsletter, No. 99-6, JUL 99.
- Command and Control. MCDP 6. Command and Control Manual for the USMC. 138 Pages.
- Logistics. MCDP 4. Logistics Manual for the USMC. 115 Pages.

Platoon Leaders (PLs):

- Focused Platoons; Winning Platoons. CTC Quarterly Bulletin, 3d Qtr, FY 99, No. 99-14, OCT 99.
- Defile Operations at the NTC. CTC Quarterly Bulletin, 1st Qtr, FY 00, No. 00-04, MAR 00.
- Use of Dismounted Infantry in the Offense. Trend 1. CTC Trends, NTC, No. 99-10, AUG 99.
- The Defense of Duffer's Drift. The Infantry School, 1972.
- Tactics. MCDP 1-3. USMC Tactics Manual. 128 Pages.
- Expeditionary Operations. MCDP 3. USMC Manual on Expeditionary Operations. 122 pages.

Fire Support Officer (FSO):

- Let's Fix Company Level Fire Support. CTC Quarterly Bulletin, 3d Qtr, FY 99, No. 99-14, OCT 99.
- FISTV Survivability and Employment. CTC Quarterly Bulletin, 1st Qtr, FY 99, No. 99-3, JAN 99.
- *Fire Support Integration in Engagement Area Development and the Fire Support Sergeant*. CTC Quarterly Bulletin, 2d Qtr, FY 99, No. 99-8, JUL 99.

• Fire Support Team (FIST) Degraded Operations. Trend 15. CTC Trends, NTC, No. 99-10, AUG 99.

Twice weekly, CPT Johnson had "Brown Bag" lunches in his office with all of his lieutenants so they could discuss how their reading assignments were going. These lunches served as opportunities to both check on progress and to discuss how each book or article might apply to Charlie Company. The lunches usually lasted only 30-45 minutes, and were invaluable for keeping his officers focused on warfighting and their upcoming NTC rotation.

Conclusion:

A well crafted, well researched, and well executed reading program at every level can make a difference. As a troop/company commander responsible for focusing your subordinates' professional development, use the tools you have to develop a program that applies to your troop/company's upcoming training events and deployments, or you will be missing a perfect opportunity to better prepare them for the tasks at hand.

Some places for you to do your own research:

- USMC Doctrine Web Site
- USMC Reading List
- CGSC Book Store
- Army War College Book Review List
- US Army Center for Army Lessons Learned (CALL)
- CALL Book Review List
- CALL Video Web Page
- FT Knox Library Reading List

Fodder for Your Professional Reading Airpower and the Sea Services Dr. David Mets

*I wish to acknowledge the valuable assistance of Lt Col David L. Coulliette and Lt Col Wray Johnson, USAF, and Maj Michael A. O'Halloran, USMC, in the preparation of this article. I also want to thank Maj Pete Osika of the College of Aerospace Doctrine, Research, and Education at Maxwell AFB, Alabama, for his significant contribution. Any mistakes of interpretation or fact remain my own responsibility.

WHY IN THE WORLD would a young Air Force warrior-scholar want to use up precious professional reading time examining the story of airpower and the sea services? I suppose that one could build a case that such an endeavor is even more important than going further in studying the history of one's own service. Just about everyone coming out of the officer-accession programs already knows who Billy Mitchell and Hap Arnold were, but how many among us could discuss the role of William Moffett or Joseph "Billy Goat" Reeves? Yet, many of us are destined to serve in joint assignments with sea-service colleagues raised on a diet of Moffett, Reeves, and Midway. Thus, one finds some utility in a study of maritime airpower, if only to create a vocabulary for communicating with our joint brethren. If one of them stated that "Schweinfurt proves . . . ," most of us would have some idea of whether we should challenge that assertion. But were he to argue that "Leyte Gulf proves . . . ," how many of us could step forward to question him?

More important, what if one day you are a joint force air component commander (JFACC) or one of his or her staffers? What if the JFACC works for a naval commander in chief (CINC) at Pacific Command or a Marine CINC at Central Command? Would you need to know more about the character of maritime airpower than you do now? What if one day an Air Force officer becomes a CINC and has both naval and marine component commanders working for him or her? Will that CINC need to know what Midway, Yankee Station, and "traps" are all about? Once the Tomahawks and F/A-18s cross the shoreline, do significant differences exist between them and F-16s or air-launched cruise missiles? Does a MiG know whether the missile that hits it came from an F-14 or an F-15? Is it essential, therefore, for the twenty-first-century air strategist to understand as much about airpower "from the sea" as any of its other forms?

The purpose of this article, then, is to give you some ideas about enhancing your professional reading program-widening its scope to give you some additional insight on airpower in the naval and maritime contexts. We begin with a summary of the naval experience with airpower, then offer minireviews of five new books that are mostly about airpower in the naval context, and conclude with a list of 10 books that would give you a fair start in the study of airpower as it relates to the US Marine Corps and Navy.

A Shoestring Primer on the Development of Airpower and the Sea Services

The Jeffersonian Era

Through most of American history, the United States has not been a major sea power. In the beginning, we had no hope of competing with Britain's Royal Navy; in any case, we had other fish to fry with our continental expansion and development. Our overseas commerce was important, but the threats to it were usually limited. In any event, it benefited from Pax Britannica, under which the Royal Navy made the seas somewhat safe for American commerce. So the vision that prevailed for most of the nineteenth century was Thomas Jefferson's preference for a small-ship navy whose main purpose was to defend the coasts and offer minimal protection to commerce. The main exception occurred during the American Civil War, in which the Union built up one of the world's great navies and used it to good effect in blockading the Rebels and assisting the Army with riverine operations and a few amphibious attacks.

The New Imperialists and Mahan

At the first centennial's end, a sea change occurred. Because the frontier closed in 1890, any expansion would have to be overseas. A vast maritime technological revolution took place during and after the Civil War: the Navy converted to steam propulsion and metal ships; submarines arrived even before World War I, along with practical torpedoes; the effectiveness of naval gunnery made a quantum jump; and coaling stations for both commercial and naval vessels became essential en route to overseas markets. As Alfred Thayer Mahan saw it, the function of the Navy was no longer merely coastal defense, commerce protection, and raiding. Rather, the service should now gain command of the sea through a great naval battle between capital ships, as in Trafalgar, where Adm Horatio Nelson had defeated the Napoleonic naval threat. This new function would require a great fleet of huge, heavily gunned ships of the line.

The Test of the Great War

The United States did not get into the war in time for the great battle of Jutland, and, in any event, that fight little resembled Trafalgar. The German U-boats demonstrated that a Jeffersonian-era assault on maritime commerce had more potential than Mahan thought and that conventional command of the sea could do little to stop it. So, no clear "lessons" of the naval war existed, and the US Naval Institute's *Proceedings* in the 1920s published many articles about Jutland and an equal number about the utility of naval aviation. Destruction of the German fleet deprived the US Navy of its main—almost only—threat.

Naval Aviation as an Auxiliary

The Navy of the 1920s was not nearly as Neanderthal as many Air Force officers seem to believe. True, most officers valued aviation as an enormous enhancement of the effectiveness of gunfire—and it was that. But some admirals even then had visions of aircraft ultimately becoming the main striking force. British carriers of the early 1920s were clearly ahead of their US counterparts, but by the end of the decade, America had the best naval aviation in the world, and the USS Lexington and Saratoga were the leading carriers. The end of that decade saw Pacific Fleet exercises in which air forces practiced attacks on both Pearl Harbor and the Panama Canal. Still, for most people, the main function of aviation was to win air superiority over the battle—and the best way of doing that was sinking the enemy carriers.

Hesitant Development of Naval Aviation as the Main Striking Force

Some doctrinal and organizational change followed the technical revolution that produced aircraft and carriers. The task force gradually replaced organization by ship type, and on the day of Pearl Harbor, the United States had eight battleships and seven aircraft carriers under construction. The flattops included the 27,000-ton Essex class that would win the naval air war in the Pacific. Arguably, only on the eve of war did carrier decks feature Dauntless dive-bombers with the capability of lifting a bomb big enough, carrying it far enough, and aiming it accurately enough to threaten the horizontal armor of most of the world's battleships.

Pearl Harbor and the Test of War

Pearl Harbor was defective as a test of Mitchell's theories for the same reason the 1921 tests proved inconclusive: the American battleships were immobile and undefended. However, the Japanese quickly sent the Royal Navy's *Repulse* and *Prince of Wales* to their watery graves even though they were moving, but without any air cover. During the war, though, battleships transitioned from the main striking arm to support roles as antiaircraft platforms and amphibious gunfire-support ships. The carriers quickly became the capital ships for both winning the sea battle and then projecting power ashore. Again, in 1945 the Japanese navy was in its watery grave, and the US Navy had lost its principal—and only—threat.

Revolt of the Admirals

The Navy for a time seemed to be a service without a mission. Nuclear attacks evidently said that air attack would decide the next war in a matter of hours; therefore, there would be no time for sea power to have an effect. Because the USSR was so heavily a land power, no other possible mission existed. That, in part, explains the viciousness of the interservice rivalry surrounding the Unification Act and acquisition of the B-36. However, the Korean War not only opened the gates to the treasury but also showed that in the absence of jet fields, carriers could perform a very useful function in power projection ashore, notwithstanding the absence of any discernable naval threat.

The Blue-Water Navy and the Soviets

About the time the Navy began to make its case for power projection ashore in places like Korea, the Soviets provided that service with yet another reason for being: the building of a great submarine fleet, first to threaten the lines of communications to the North Atlantic Treaty Organization's member states, and then to threaten the American homeland itself with nuclear missiles. This mission remained viable for many decades afterwards, providing the rationale for sustaining great carrier and submarine fleets.

From the Sea

The collapse of the Soviet Union again deprived the US Navy of a threat upon which to build its house. The submarine fleet lost both its nuclear-attack role and its antisubmarine function. The carrier part of the Navy was somewhat better off because it could function in a conventional-attack role in many other areas of the world. But now an increasing focus on power projection ashore enhanced the brown-water parts of the Navy—the

minesweeping and amphibious forces. So lately, one perceives the function as establishing an enclave ashore to prepare for the follow-on heavy forces of the Army and Air Force.

The Jeffersonian Era

Some wonderful tales about American sea power existed before the Wright brothers came along. But for our first hundred years, naval power was not a high national priority. Even then, some leaders wanted to build great ships of the line. However, the population was small, the treasury usually bare, and Indians and outlaws on the frontier posed a more immediate problem than the great fleets of Europe. Our "Manifest Destiny" to expand preoccupied itself with filling up the continent for many years.

Thomas Jefferson's naval policy asserted that this country needed only a modest fleet of small ships and boats sufficient to protect its coasts and defend overseas commerce in a limited way. Although one must concede that this made sense, his policy briefly came to grief during the War of 1812, when enemy naval superiority allowed the British to sail up the Chesapeake and burn the White House. But even then, because the British could not establish naval superiority on the Great Lakes, the war ended in a standoff. For the rest of the period before Fort Sumter, not much need existed for a substantial navy--even then, the United States found refuge behind the peace maintained by the British Royal Navy. The conversion to steam, which began in that period, resulted in the founding of the US Naval Academy in 1845 to provide the requisite engineers.

The Union built up a very substantial fleet during the Civil War for both brown-water operations on the rivers and blue-water work on the high seas in blockading ports and chasing Rebel commerce raiders. Too, the ordeal of the Union stimulated more rapid technological change in the building of ironclads and even rotating turrets. But after the war, the US Navy quickly fell into stagnation that lasted for another 20 years or so.

The New Imperialists and Mahan

The industrial revolution in America started even before the Civil War, but it really got rolling after the agrarian South could no longer make its voice heard in Congress. Soon we built the railroads, populated the West, established the great manufacturing plants in the East, and witnessed the maturation of mechanized farms. These events, and many others, stimulated new interest in the overseas world. Because we needed new sources of raw materials, we had to find new markets.

All of that implied increasing involvement in trade routes and shipping, en route refueling stations, ship building and metallurgical industries, and a naval force to protect it all. Finally, the Republican Party, known for its responsiveness to the needs of big business, dominated politics for most of the period.

The Navy started stirring again in the 1870s--first with the founding of the Naval War College and the US Naval Institute and then with the beginning of the conversion to all-metal vessels (iron followed by steel). After abandoning sail propulsion, the service electrified the fleet and substantially improved its guns and gunnery. It also developed submarines and destroyers with the torpedoes to arm them. Gradually, the dedication to small Navy vessels like cruisers diminished, and battleships and dreadnoughts entered the fleet.

Brought up at West Point, where his father had been a professor of wide renown, Alfred Thayer Mahan attended Columbia University for a couple of years and then received advanced standing at the US Naval Academy. He remains the only person in the history of the institution who did not go through the freshman year. Mahan graduated in 1859, second in his class of 20. After Mahan served blockade duty during the Civil War, Stephen Luce recruited him to become a faculty member at the Navy's war college, then being set up in Newport, Rhode Island. Working mostly at the New York Public Library, Mahan prepared a series of lectures that became the basis of his course at Newport and also of his most famous work, *The Influence of Sea Power upon History, 16601783*, a smashing success. Afterwards, he went back to sea only one time--to Europe, where he even received an audience with Queen Victoria.

Mahan was a favorite of the imperialists of his day, especially Theodore Roosevelt, assistant secretary of the Navy under President William McKinley. The performance of the Navy in the Spanish-American War seemed much more splendid than it really was, and the service earned a good deal of public affection. An assassin's bullet brought Roosevelt to the presidency--a great benefit to the Navy, which enjoyed further buildup during the initial decade of the new century, just as the Wrights were first learning to lift us from the ground.

Mahan argued that command of the sea was vital and that one could achieve it by winning a great sea battle between the main battle fleets. After that victory, everything else would follow almost automatically: the denial of enemy commerce, the freedom of friendly commerce, the free use of blockades, the ability to conduct amphibious invasions, and on and on. In short, whoever commanded the sea would rule the world. Among the corollaries to that principle was the urgent need for a great American battle fleet.

Thus, at the time that the Army had just emerged from its role as a force of Indian fighters, the Navy was riding high, wide, and handsome. The Army acquired its first motor vehicle in 1906 and contracted for its first airplane in 1907--the same year that Roosevelt sent the Great White Fleet on its voyage around the world. Clearly, the Navy remained the first line of defense. The service found itself in the midst of a whole string of technological revolutions that had begun before the Civil War and that continued rapidly under Roosevelt. Technical change, a relatively novel thing in the Army, became a way of life with the Navy. Too, the Navy had developed its war college to a very considerable stature by the turn of the century, but the Army War College arose only after the fiascoes of the Spanish-American War made clear the need. The US Naval Institute and its publication *Proceedings* already had existed for several decades, and war gaming at Newport had become quite mature. By the time of World War I, then, these events were conditioning the way that the naval service would meet yet another technological innovation--airpower. By then, the old split in the Navy's ranks between engineering and deck officers had healed, but the memory of such problems lingered strong in the minds of senior officers.

The Test of the Great War

In a short time, the Navy followed the Army into aviation. Even before World War I, the Navy had landed airplanes on and launched them from its ships, established a flying-training program, and actually used aircraft in combat at Vera Cruz, Mexico, in 1914. Airpower really did not figure in the one great sea battle in World War I, and naval aviators involved themselves in antisubmarine warfare (ASW) and in more conventional air fighting at the northern end of the Western Front.

No definitive lessons would emerge from such a limited experience, but pressure for the development of aviation rose to high levels in the Navy in the immediate aftermath of the war. Aviation had captured the imagination of everyone during the conflict--especially so in reaction to the horror and dreariness of trench warfare and the scarcity of great sea battles. Sailing back from Europe aboard the USS *Aquitania*, Billy Mitchell treated Capt Jerome Hunsaker, USN, to a full explanation of his vision for the future of aviation--which did not allow a great part for battleships or the Navy itself. Hunsaker and Mitchell himself both treated the General Board of the Navy to this vision before the end of 1919. If the romance of it all were not enough, then the threat implied by Mitchell's schemes certainly helped stimulate the status of aviation in the naval service. If the admirals did not move swiftly in assimilating airpower to the Navy, then Mitchell would usurp it all for an independent air force. Indeed, they needed to look no further than the Royal Air Force, founded in 1918 and containing naval aviation.

Naval Aviation as an Auxiliary

Ships themselves were initially used as auxiliaries to the main striking arm in the Greek and Roman armies of ancient times. For many centuries they remained mere auxiliaries of the infantry, transporting soldiers to the scene of battle. But once they had closed with enemy vessels, the fight differed little from a battle on land. Only in the late sixteenth century did naval warfare become a battle between ships rather than among soldiers. So it was not at all unique that both the US Army and Navy first employed this new thing, the airplane, to enhance the effectiveness of older instruments of battle.

The term *battleship sailor* in more than just Air Force circles has become a euphemism for *unthinking, reactionary clod*. This is especially so among the intellectual heirs of Billy Mitchell. But I am sorry to report that in 1921 Billy may have been wrong and the battleship sailors right. It is true that the German battleship *Ostfriesland* went down under the force of the Air Service's 2,000 lb bombs and that the media got some splendid pictures of the sinking, leading to a field day in the press. But the ship was hard by the coast, stationary, and undefended. Pearl Harbor seemed to confirm that Mitchell's conclusions had been right. There too, however, the surprise attack caught the battleships at anchor, in narrow waters, and undefended either by antiaircraft artillery (AAA) or airplanes. Soon after, early in World War II, the Japanese caught the British capital ships *Prince of Wales* and *Repulse* at sea and under way. Both went to the bottom. But they too had no air cover, and the AAA was not as dense as it later became on battleships. The *Bismarck* was a tough nut to crack when the Royal Navy tried to run her down. When the British

finally found her, their aircraft torpedoes disabled but did not sink her. The force, commanded by surface sailors, gave her the coup de grace with gunfire and torpedoes. When the US Navy caught the world's greatest battleship, the *Musashi*, in the narrow waters of San Bernadino Strait without any air cover in 1944, after the Japanese had been bled seriously for almost three years, it took 19 torpedo hits plus numerous bomb strikes to put her down.

The point is that the battleship sailors of 1921 and long after did have a case in logic. If Pearl Harbor had come at almost any time before 1940, *battleship sailor* might well have become a euphemism for *foresighted military leader*. As Thomas Wildenberg shows in his book *Destined for Glory*, reviewed below, it took the development of divebombing as a method of getting the accuracy needed and the acquisition of an aircraft like the Dauntless that could haul a heavy enough bomb a reasonable distance to make an impression on modern, horizontal battleship armor. The Dauntless did not turn up until 1940.

Meanwhile, aviation in a supporting role certainly did enhance the effectiveness of battleships. In the last decades before World War I, the development of newer and larger rifled barrels, new propellants, and more effective projectiles greatly extended the range of artillery. On land, artillery spotting became vital since guns far outranged eyesight from the trench level. Thus, spotting from the air became a vital advantage for ground generals. Consequently, they became the first to raise the cry for air superiority—to develop a permissive environment for their own spotters and deny it to the enemy's. Similarly, fire control at sea lagged gun range. Further, the United States remained well behind the Japanese and the British in the numbers of cruisers, a principal function of which was scouting or long-range reconnaissance. Surface sailors well knew that they were not about to get much cruiser money out of Congress and were persuaded that carrier aircraft, land-based airplanes, or airships could do such scouting more rapidly and much more cheaply.

Even before the Great War, guns could hurl a 1,500 lb projectile far over the horizon. At first, fire control experienced improvement by centralizing it aboard ship and putting the fire-control officer high up in the superstructure. But that was not enough. Towed kites and balloons provided some thrilling rides for the spotters, but they were impractical. Using airplanes for spotting right after the Great War immediately revealed that the battleship fleet with air superiority would have a decisive advantage over its enemy. If one could make the environment safe for one's own spotters and lethal for the enemy's, one could destroy the enemy battle line before it could begin accurate fire itself. If the spotters could yield, say, only five miles in range advantage, that might well be enough. With the enemy battle fleet steaming at around 20 knots, firing at it for 15 minutes (assuming one was not steaming away from it) might well be enough to win the battle--and the war, according to Mahan. If one's aircraft could not sink enemy battleships but only slow them down by damaging or forcing evasive maneuvers on them, even that was all to the good.

So at first, battleship sailors thought they would need aircraft carriers to supply air superiority over the battle area and then reconnaissance and spotting services to make gunfire more effective. They quickly saw that the best way to achieve air superiority entailed sinking the enemy aircraft carriers. At the time of the Mitchell trial in 1925, however, the aircraft of the day did not have a prayer of carrying an appreciable bomb load out to battle distance or of consistently finding the enemy. Further, dive-bombing was not developed until 1927 and the decade that followed, and B-17s at Midway proved that hitting a maneuvering ship from level flight was very difficult if not impossible. The complete attrition of Torpedo Squadron 8 in the same battle indicated that that mode of attack was far from a free ride. Moreover, the addition of blisters to battleships to detonate torpedoes away from the main hull and the limitations of the size of the torpedo warhead limited its promise. These problems were partially solved by 1940, but by then the statute of limitations had run out for the *Ostfriesland* tests.

Hesitant Development of Naval Aviationas the Main Striking Force

Completed in December 1927, the *Lexington* and *Saratoga* became a factor in fleet exercises the following year. Before the end of the decade, carrier aircraft maneuvering at sea had run mock attacks against the Panama Canal. Long after, Adm John Thach recalled that he had participated in a surprise mock air attack against Pearl Harbor in the very early 1930s. For a long time, warships had been organized according to types: battleship or destroyer squadrons and the like. Starting in the early 1930s, though, the Navy began experimenting with task organization—a more or less permanent unit containing all types and built around an aircraft carrier. This became standard procedure during World War II and has persisted to the present. An associated development involved the press to get as many planes as possible aboard a given vessel and to raise their sortie rate to as high a level as possible. In the end, this gave US carriers a decided advantage over all others.

Air Force officers often do not appreciate the tight relationship between ship and aircraft design that exists in the Navy. For us, if the airplane becomes heavier, we just thicken the runway. If its landing distance increases, we just lengthen the runway. But on a carrier, once the flight deck attains a certain strength, then increasing it would require a truly major operation. Moreover, the size of the elevator limits the weight and size of carrier aircraft. If the fill in aircraft bombs becomes too sensitive, then we in the Air Force just buy more real estate and store fewer of them in each igloo. But in the Navy, that is not an option. The size of the ship's magazine remains fixed--or nearly so.

When the *Lexington* and *Saratoga* joined the fleet, they used up almost half of the carrier tonnage granted the United States under the Washington treaties (66,000 of 135,000 tons allowed). So for a time, the Navy thought it best to make new designs smaller to get as many units as possible from the total allowance. Thus, the first American ship designed as a carrier from the ground up (both the *Lexington* and *Saratoga* started out as battle cruisers) was the *Ranger*--about 14,000 tons. As it turned out, this made her too slow and vulnerable for service in the wartime Pacific, so she stayed in the Atlantic throughout World War II. We built one more carrier about that size and then three of about 20,000 tons. The Navy appreciated the value of size long before Pearl Harbor and, when the Japanese attacked, had a design already in the shipyards that delivered a ship of 27,000 tons (*Essex* class), not far short of the *Lexington*. This increase in size enabled the development of the heavier Hellcat and Corsair fighters that made us more competitive with the Japanese Zeros--the source of so much trouble in the early days of the war. Thus, by the onset of war, we had the ships and some of the airplanes we would need, a doctrine for achieving air superiority and command of the sea, and a developing task-force organization that remains in use

Pearl Harbor and the Test of War

The typical Air Force officer, it seems to me, knows a lot more about World War II in Europe than in the Pacific. The typical Navy officer, I am sure, knows much more about the Pacific war than the part of it in Europe. So, to some extent, when they find themselves on joint staffs, they tend to talk past each other--to speak with different vocabularies. The systemic and parochial reasons for this need not detain us, but Air Force warriors have good reason to give the Pacific more attention. A big part of our war in Europe was about the heavy bombing of large industrial centers--something not likely to happen again. Until the last year of the war, the fighting in the Pacific war featured tactical air operations and campaigns of limited size that may offer good instruction for the future. Finally, we should note that for a time in the early and even the middle part of the war, the United States had more forces deployed to the Pacific than to Europe.

One of the two main campaigns in the Pacific, the one through the Central Pacific, was very largely a naval war although it did involve vicious fighting ashore. The other, in the Southwest Pacific under the command of Gen Douglas MacArthur, was more of a land war but involved a very substantial naval and amphibious element. This situation probably violated the principle of mass, but either arm of that strategy usually outnumbered the Japanese, so it did not make that much difference. Although it is hard to say which campaign did more damage to the Rising Sun, no doubt our naval brethren tend to call the Central Pacific drive the main attack.

In any event, in part because of US naval competence, in part because of good fortune, and in part because of an intelligence coup, the Battle of Midway put a severe dent in Japanese airpower, especially naval airpower, its stronger form. Soon after in the Solomons campaigns, we further decimated Japan's naval airpower. The Battle of the Philippine Sea, which occurred in the summer of 1944, was a one-sided thing--a "turkey shoot." When we saw that the Japanese were staggering, we moved forward the invasion of Leyte, stimulating the last great naval battle--a close-run thing. The Japanese almost got their combat units in among MacArthur's amphibious forces, but we saved the day by the narrowest of margins. Thereafter, the main threat was the kamikazes, a problem to which we found no real solution before nuclear weapons precipitated the end. The United States Strategic Bombing Survey concluded that the combination of the submarine blockade and the strategic bombing of the home islands had proved decisive, but you may find it hard to persuade your carrier-flyer colleagues on joint staffs of the validity of that inference.

Arguably, the Navy became a victim of its own success. The German fleet had gone to the bottom at the end of World War I. Now the Japanese navy was out of the picture. The United States had command of the seas, and no one could challenge us. The British trea-sury would not support a great navy any more, and, in any event, war with Great Britain was unthinkable. The USSR was in no shape for a war; moreover, it was almost wholly a land power and not at all dependent on raw materials or food from overseas. So what threat justified the existence of the greatest navy in history?

As with the Army Air Service and Air Corps, naval aviators long felt that the "Gun Club" was denying them their rightful place in the sun. True, senior operational commanders in the Pacific did not cut their teeth in aviation.³ But soon after Hiroshima, aviators began to take their places at the pinnacle of the profession. The first career aviator who became chief of naval operations was Forrest Sherman, who took office in 1949.

Revolt of the Admirals

The most memorable hours in my 70 years as an American were VJ-day, when the war ended. The whole city of Quincy, Massachusetts, poured into the square, smiling and joyful. Dour New England had rarely seen such public hugging and kissing. It was just great to be an American. Our monopoly on nuclear weapons and the new United Nations would guarantee world peace forevermore. The quick appearance of cheap atomic power would wipe out poverty once and for all. Looking back, I am amazed by how fast that great feeling dimmed.

Arguably, that was also the greatest day in the history of the United States Navy. It had risen from the depths of despair at Pearl Harbor to the heights of its greatest glory in September 1945 at Tokyo on the quarterdeck of the battleship *Missouri*. American carriers had won the naval war in the Pacific, and Navy aviators had come out of the wilderness poised to grasp the reins of power in their service. But the clouds of interservice rivalry soon masked the sunlight of that great victory.

The initial vision of the meaning of nuclear weapons was that they were so horrible that no one could ever stand up to them. If they did not inhibit war entirely, they were so deadly that one could not resist them for long. One assumed that they would never be much smaller than the 10,000 lb weapons dropped on Hiroshima and Nagasaki. Thus, only large, land-based aircraft could carry them. They would make such short work of war that neither blockades nor amphibious operations nor efforts at commanding the sea would have time to make any difference. In any event, who was left to blockade? Who challenged our command of the sea? Who had a submarine fleet that we could depth-charge? A two-ocean Navy was a relic of times gone by.

On top of that, the whippersnapper Air Force (Army Air Forces just then) had come on the Pacific scene with its B-29s and "nukes" at the last minute to hog all the glory that should have been the Navy's. The media quickly forgot the long grind through the Pacific islands and became fascinated with the nuclear marvels. Congress and especially the president were on the lookout for an "econo" way of providing national security. Perhaps we could do it with one air force and a few nukes instead of the huge, expensive Navy and Army.

All of that resulted in American military history's most vicious interservice battle--a debate over service unification and an independent air force. In form, Mitchell's dream came true--such an air force and a Department of Defense became reality. However, not one but three or four air forces emerged, and the Department of Defense was only a hollow shell of what Mitchell had envisioned--strictly limited in size and having power only to "coordinate." The separate existence and size of the US Marine Corps became chiseled into the stone of law, and naval aviation continued its existence as well--with a substantial element of land-based airpower. The Unification Act of 1947 did not really do much to settle things.

Early in 1948 President Harry Truman gathered the chiefs of staff down at the naval base at Key West, Florida, to attempt to bring more harmony and cooperation into the services; he held another such meeting at Newport, Rhode Island, later in the year. They did not work. Qualifications to the agreements hammered out soon made them meaningless. The US Air Force, the new kid on the block, drove hard to stake out the strategic-attack mission as its own private preserve. Part of this included acquisition of the B-36, a very long range bomber of truly massive proportions. The Navy, having lost so many missions, now tried hard to get a piece of the nuclear pie, partly out of its need to develop a carrier-attack airplane with a bomb bay big enough to hold a 10,000 lb weapon. This entailed building a new, flush-deck supercarrier--the *United States*. Although the Navy had previously embraced power projection ashore, that now threatened to become its principal mission, putting it in direct competition with the Air Force.

Secretary of Defense James V. Forrestal committed suicide about that time, and his replacement, Louis Johnson, promptly cancelled the building of the *United States*, setting off a major revolt among the admirals. The conflict produced anonymous accusations of corruption in the B-36 acquisition program and ultimately led to the relief of the chief of naval operations himself, Adm Louis Denfeld. Although Congress investigated the accusations and

found no corruption by Secretary of the Air Force Stuart Symington or anyone else, the dawn of 1950 saw no end to the looming bureaucratic battles.

But in June 1950, the North Koreans invaded South Korea, stimulating an unexpected US military response. This new war, so soon after Hiroshima, dispersed the euphoria that had followed the defeat of the Japanese. It did, however, reopen the gates of the treasury for the armed forces, and soon the rivalry diminished greatly. The scarcity of jet airfields on the Korean peninsula enabled the carriers to demonstrate real utility even in a nuclear world without an obvious naval adversary. At the end of the Korean War, President Dwight Eisenhower, who had been a major proponent of unification and a separate air force, appointed Adm Arthur Radford as chairman of the Joint Chiefs of Staff. Eisenhower's selection of Radford, one of the main opponents of unification and a separate air force, symbolized interservice peace, as did the fact that in the 1950s the Navy got its authorization for the *Forrestal* class of supercarriers.

The new carriers, about the size intended for the *United States*, were not flush-decked, but that did not matter any more. By then, one could miniaturize nuclear weapons to the point that small carrier aircraft could carry them. By then, too, the Soviets were providing the threat upon which the Navy could build a new house.

The Blue-Water Navy and the Soviets

In 1945 the Soviets captured a good part of the German submarine fleet along with the supporting science and technology, transferring all of it to their homeland. Soon they began building a submarine fleet of their own, based mostly in their northern ports, and began to threaten US sea lines of communications with NATO allies. They also followed the United States into the submarine launched ballistic missile (SLBM) business, which came to threaten the American homeland itself. All of this stimulated the rebuilding of the Navy's ASW capability, at first based on light surface combatants and airpower but later expanded to the use of attack submarines themselves as ASW platforms. The Soviets' actions also became part of the justification of a carrier-fleet nuclear mission that would not compete with the role of the Air Force: attacking the Soviet submarine menace at its source, also in its northern ports. All of that became a maritime strategy that in its most ambitious form called also for a naval attack on the right flank of the hypothetical Warsaw Pact charge to the westward. It reached its culmination during the administration of President Ronald Reagan.

Because of technological problems, the Navy lagged the Air Force a bit in the transition to an all-jet force. The early jets required a great length of runway for takeoff and accelerated slowly when their pilots elected to make a missed approach. The latter difficulty was especially dangerous because a late decision on the part of the pilot could easily result in a crash into aircraft that had previously landed on the foredeck, loaded with highly volatile fuel and munitions. Two British ideas, the steam catapult and the canted deck, ultimately overcame these problems. The catapult allowed the launch of heavily laden aircraft from minimum lengths, and the canted deck moved the landing area outwards so that an aircraft on a missed approach could take off straight ahead without going over airplanes on the forward end of the flight deck. The problems also diminished with the building of ever-larger carriers, culminating with the current *Nimitz* class at a displacement above 80,000 tons--three times the size of the *Essex* class of World War II vintage. But again, the heyday of the Reagan years did not last long and was undermined by the collapse of the USSR and the Warsaw Pact.

From the Sea

The disappearance of the Soviet threat hurt the submariners of the US Navy the most. Both parts of their mission, ASW and SLBM, focused almost exclusively on the USSR, and neither adapted easily to other kinds of conflict. But the aircraft carriers proved more adaptable. They had demonstrated a high utility in the early days of the Korean War, a limited conflict resembling the diffuse threat now seen in the American future. Since no one had anticipated Korea, no elaborate bases existed to which we could deploy land-based air units. Similarly, since it is difficult to predict future areas of conflict, the portable airfields on aircraft carriers gain some utility. One can also vary their deck loads to adapt to many different conflict scenarios--something not possible for submarines.

The Navy's new "From the Sea" strategy allows for no blue-water threat--no great battle for the command of the surface of the sea or the region below the surface. Too, the future adversary is beyond prediction--the threat is diffuse. But most important places are only a short distance from the sea, many accessible by amphibious forces composed of naval and marine units. Future conflict will likely occur not in the open ocean but along the shore--the littoral--in the brown-water area so long considered a backwater for the US Navy. This is the province of

amphibious and mine-warfare forces, both of which take on a new prominence under the "From the Sea" concept. The idea is that the Navy and Marine Corps have the special capability to make surprise invasions that can force entry into an enclave which will then supply the base area for the heavier Army and Air Force forces--if heavier forces are needed at all. Aircraft carriers are essential for this kind of war, and some ASW capability is necessary as well to protect the power-projection force from small submarine attacks.

For the readers of *Airpower Journal*, a whole new airpower world waits to be examined. It is alien to many of us, but--fortunately--a huge and interesting literature describes it. It be hooves the Air Force's young warrior-scholars, such as you, to become somewhat familiar with maritime airpower and the sea ser-vices through the vicarious experience of reading some or all of the works on the sampler list below. If you have the chance to experience carrier operations at sea, by all means grasp it. Doing so will add greatly to your education and at the same time serve as a fascinating interlude.

Five New Books on Airpower at Sea

Air Warriors: The Inside Story of the Making of a Navy Pilot by Douglas C. Waller. Simon & Schuster, New York, New York, 1998, 416 pages, \$25.00.

Waller, a *Time/Newsweek* journalist specializing in national security, is a strong writer but a dilettante in matters of aviation. He bases his book very largely on short tours at Pensacola and on shipboard, a few flights, and many interviews. Some journalistic bias turns up in his tendency to take the words of ensigns and lieutenants at face value while viewing everybody over 30 with suspicion. If you are at all inclined to the subject, go on to Baldwin's *Ironclaw*, below.

Destined for Glory: Dive Bombing, Midway, and the Evolution of Carrier Airpower by Thomas Wildenberg. Naval Institute Press, Annapolis, Maryland, 1998, 280 pages, \$34.95.

This book, written by a serious naval historian who is now a scholar at the National Air and Space Museum, shows how dive-bombing and carrier aviation developed during the last decade before the war to produce a true ship-killing capability that really could decide battles at sea. This work is worth your time because it effectively relates technology, doctrine, and organization in a way that will enhance your understanding.

Ironclaw: A Navy Carrier Pilot's Gulf War Experience by Sherman Baldwin. William Morrow, New York, New York, 1996, 265 pages, \$24.00.

Baldwin is a qualified carrier pilot with a strong writing style. Although his book overlaps Waller's to some extent, Baldwin writes engagingly and with a good deal more authority. This book will give you some of the flavor of the day-to-day life aboard carriers and some insights into coping with the prospects of and actual combat.

Sea Wolf: A Biography of John D. Bulkeley by William B. Breuer. Presidio Press, Novato, California, 1989, 318 pages, \$16.95.

This is a chest-thumping, hero-worshiping biography done by a prolific author supplying the market for popular history. Because it contains very little on airpower, you can skip this one or go back to William Lindsay White's *They Were Expendable* (1942) for the story of the deliverance of Gen Douglas MacArthur on PT boats in 1942.

U.S. Marine Corps Aviation, 1912 to the Present, 3d ed., by Peter B. Mersky. Nautical and Aviation Publishing Co., Baltimore, Maryland, 1997, 383 pages, \$29.95.

Written by a short-service Marine aviation veteran, this book is a mind-numbing listing of every unit and ace pilot in the history of the corps, with little analysis of Marine air doctrine and still less of an effort to place it in context. Skip this one in favor of the Sherrod, Cagle and Manson, and Uhlig books listed in the sampler, below. Of the five works listed here, I would give the Wildenberg work a fairly high priority and then recommend Baldwin's for lighter but informative reading. The rest, you can skip.

Baer, George W. *One Hundred Years of Sea Power: The U.S. Navy, 18901990*. Stanford, Calif.: Stanford University Press, 1994. See pages 12527 for the context in which naval aviation developed.

Barlow, Jeffrey G. *The Revolt of the Admirals: The Fight for Naval Aviation, 19451950*. Washington, D.C.: Naval Historical Center, 1994. Written by a Washington Navy Yard employee whose father is a naval aviator; that shows, but the book is nonetheless authoritative.

Buell, Thomas B. *Master of Seapower: A Biography of Fleet Admiral Ernest J. King.* Boston: Little, Brown, 1980. A model biography that yields important insights into the development of naval aviation during the 1930s and World War II.

Cagle, Malcolm W., and Frank A. Manson. *The Sea War in Korea*. Annapolis: US Naval Institute Press, 1986. Written by two experienced naval officers (Cagle became an admiral); includes good chapters on naval air in Korea. Reynolds, Clark G. *Admiral John H. Towers: The Struggle for Naval Air Supremacy*. Annapolis: US Naval Institute Press, 1991. The life story of a pioneer naval aviator--strong on the early days down to the end of World War II. Sherrod, Robert. *History of Marine Corps Aviation in World War II*. Washington, D.C.: Combat Forces Press, 1952. A survey of the subject down to the end of World War II--still authoritative.

Trimble, William F. Admiral William A. Moffett: Architect of Naval Aviation. Washington, D.C.: Smithsonian Institution Press, 1994. A first-class description of the role of Moffett, who was not a pilot but nonetheless crucial to the way in which naval aviation developed.

Turnbull, Archibald D., and Clifford L. Lord. *History of United States Naval Aviation*. New Haven: Yale University Press, 1949. The classic overview of naval aviation down to the end of World War II--still valid. Uhlig, Frank, Jr. *Vietnam: The Naval Story*. Annapolis: US Naval Institute Press, 1986. Contains a good chapter on naval aviation by Vice Admiral Cagle and another by Lt Gen Keith B. McCutcheon on Marine aviation in South Vietnam.

Winnefeld, Adm James A., and Dr. Dana J. Johnson. *Joint Air Operations: Pursuit of Unity in Command and Control*, 19421991. Annapolis: US Naval Institute Press, 1993. Explains the success of the Solomons joint air campaign compared to most others. The authors discuss Operation Desert Storm, deeming it more successful in unified effort than either Korea or Vietnam.

One for Good Measure

Melhorn, Charles M. Two-Block Fox: The Rise of the Aircraft Carrier, 1911–1929. Annapolis: US Naval Institute Press, 1974. The classic work on the foundations of naval aviation.

Notes

- 1. William Briggs Hall, the first man in the class, resigned at the onset of the Civil War, leaving Mahan as the top graduate on active duty for most of his service. *Register of Alumni, Graduates, and Former Naval Cadets and Midshipmen* (Annapolis: United States Naval Academy Alumni Association, 1992), 149.
- 2. For an authoritative source on the life of Mahan, see Robert Seager II, *Alfred Thayer Mahan: The Man and His Letters* (Annapolis: Naval Institute Press, 1977). Mahan's triumph was *The Influence of Sea Power upon History*, *16601783* (Boston: Little, Brown, 1890).
- 3. Adm Chester Nimitz had been in submarines and cruisers. Adm Ernest King, chief of naval operations, had wings, but he had won them as an O-6 and never served in a squadron. Adm William Halsey also won his wings as an O-6. Adm Raymond Spruance, the victor at Midway, was a cruiser sailor. Finally, Adm Marc Mitscher, the seniormost leader and one of Spruance's task-force commanders in the Fifth Fleet, had been in aviation from the ground up.

Contributor

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Current Military Affairs

Our New Old Enemies RALPH PETERS

From Parameters, Summer 1999, pp. 22-37.

Our enemies of the future will be enemies out of the past. As the US armed forces put their faith and funding behind ever more sophisticated combat systems designed to remove human contact from warfare, mankind circles back to the misbehaviors of yesteryear. Technologies come and go, but the primitive endures. The last decade of this millennium has seen genocide, ethnic cleansing, the bloody rending of states, growing religious persecution, the ascendancy of international crime, an unprecedented distribution of weaponry, and the persistence of the warrior-the man of raw and selfish violence--as a human archetype. In the 1990s, our Gulf War was the sole conventional conflict of note. Both lopsided and inconclusive, it confirmed the new military paradigm: The United States is unbeatable on a traditional battlefield, but that battlefield is of declining relevance.

We have failed to ask the most basic military question: Who is our enemy? Our ingrained response when asked such a question is to respond with the name of a country--ten years ago it was the Soviet Union, while today China is the answer preferred by lazy analysts and defense contractors anxious to sell the unnecessary to the uncritical. We are desperate for enemies who make sense to us, who certify our choices and grant us clarity of purpose. But the age of warfare between states is waning--it may return, but it is not the preeminent military challenge of the coming decades. We must ask that question, "Who is our enemy?" on a much deeper level. We must study the minds and souls of violent men, seeking to understand them on a level our civilization has avoided for 2,000 years. We can no longer blame atrocities and the will to violence on the devil, or on mistaken ideologies, or even on childhood deprivations. None of the cherished explanations suffice. In this age of technological miracles, our military needs to study mankind.

Morally, the best among us may be those who argue for disarmament. But they are mistaken. The heart of the problem is not the weapon, but the man who builds and wields it. Were we to eliminate all weapons of mass destruction, as well as every last handgun and pocketknife, the killers among us would take up wooden clubs or rocks. The will to violence is within us--it is not merely a function of the availability of tools. Man, not space, is the last frontier. We must explore him.

It should not surprise us that religions have done a better job of locating man's desires and impulses than have secular analysts, whether Hegel, Freud, or media critics. Religions handle the raw clay, and only those that address all of man's potential shapes survive. We are defined by the full range of our desires and behaviors, not only by those worthy of emulation. Successful religions grasp our totality (and our fears). While social orders are concerned with surface effects, religions look within. And every major religion has a prohibition against killing. There would be no need for such rules were man not a killer by nature.

In the Judeo-Christian heritage, there is a commandment believers credit directly to the writing finger of God: "Thou shalt not kill." Think about that. Overall, the Ten Commandments did a remarkable job of cataloging human frailty. As behavioral rules they are as valid for today's techno-civilization as they were for the dreary near-Orient of 3,000 years ago. Those prohibitions acknowledged the most destructive things that we humans are apt to do, and they warned us not to do them. The warning not to kill was the bluntest commandment.

For the moment, lay aside the concept of the Old Testament as a sacred book and consider it as a documentary of human behavior: It is drenched in violence, and its moral tenets arose in response to a violent world. It begins with the plight of two refugees--Adam and Eve--and moves swiftly to the fratricide of their children. In book after book, we encounter massacre, genocide, ethnic cleansing, rape, plunder, kidnapping, assassination, ineradicable hatreds, and endless warfare. The fall of civilizations is reported with a merciless eye, and cities vanish with a terse comment. It sounds like the 20th century: Humanity is consistent.

Historians, however, are inconsistent. Today, we have moved away from our earlier view of civilization as a process of constant improvement, with Western civilization as man's crowning achievement. Yet, the most vociferous multiculturalists and anti-modernists, who imagine virtue for all that is foreign, still insist thoughtlessly that humankind is perfectible, if only we would take the latest scholarship on the mating habits of aborigines more seriously. I do not believe that Man has improved. There is no evidence for it. Are we better than Christ, the

Buddha, or Mohammed, better than Socrates, Ulug Begh, Maimonides, or Saint Francis? Fashions, conveyances, medicines, communications, and the sophistication of governmental structures have all evolved. Man has not. Man is the constant. Saddam is Pharoah, and Cain will always be with us.

I have chosen religious texts and figures as examples because you know them and they resonate. Is there a more powerful cautionary myth for a military man than that of Cain and Abel? Throughout both Testaments, we encounter violent actors and soldiers. They face timeless moral dilemmas. Interestingly, their social validity is not questioned even in the Gospels. Although the New Testament is often ambivalent toward soldiers, the thrust of the texts is to improve rather than abolish the soldiery. It is assumed that soldiers are, however regrettably, *necessary*. In the Book of Luke, soldiers approach John the Baptist asking, "What shall we do?" John does not tell them to put aside their arms. Rather, he answers them, "Rob no one by violence or by false accusation, and be content with your wages." Would that the generals and admirals involved in procurement heeded that advice today.

The Bible does not sugarcoat man's nature. Faith is not required--read it as a secular history and you will get a better picture of the very human enemies our soldiers will face in the next century than any work of contemporary scholarship or speculation provides. From child warriors to fanatics who revel in slaughter, man's future is written in man's past.

Still, if you are uneasy with the Old Testament as a catalog of human behaviors, substitute another work, the *Iliad*. It is the fountainhead of our civilization's secular literature. That epic begins with an argument over raping rights, proceeds through slaughter and betrayal, and has genocide as its goal. It is about the wreckage of Yugoslavia.

In our staff and war colleges, we still read Thucydides--not for the history, but for the immediacy. Has there been another historian since the Greek twilight who matched his wonder at man's stubborn imperfection, at his ineradicable nature?

Literature is history with the truth left in. I believe we can profit from the study of the classical texts as never before. The veneer of civilization, so recent and fragile, is being stripped from much of the world. The old problems are today's problems--and tomorrow's. If we want to know "Who is our enemy?" we must look within.

Mankind is a constant in a changing world. We love the familiar, and find change hard. The conflicts in which our military will engage in the coming years will have many topical causes; at bottom, however, there will be only two: Man's nature, and the effects of change upon him.

The Muezzin and the Microchip

Whether or not we as individuals believe in a divine being, we can recognize religion as the most supple and consistently effective behavior-modification tool available to mankind. Now if you study religions--and the soldier who does not know what his enemy believes fights blindly--you will find that virtually all of them have two myths in common: a creation myth and the myth of a lost golden age. The need for a creation story to explain our origins is self-evident--it responds to the adult counterpart of the child who wants to know where his little sister came from. But the myth of a lost golden age, of the white and shining temple before the fall, is directly relevant to understanding our enemies.

We live in an age of unprecedented change. This is statistical fact. Never before has so much happened on so many levels with such breathtaking speed. Developments in a wide range of disciplines tumble over one another in a practical and psychological avalanche. Whether we speak of social structures and gender relations, medicine, communications and the utility of information, the changing nature of work and wealth, convenience and the shape of the inhabited landscape, or the sheer revolution of choice available to our citizens, our society has undergone a greater degree of intense and layered change than has any human system in history. It is a tribute to the robustness of our civilization that we have coped so well with change thus far. Other civilizations and cultures (and some individuals everywhere) are less resilient and are not coping effectively; in fact, they are decaying. And the decay of a culture is the human equivalent of the decay of atomic particles.

We live in an age when even the most adept, confident man or woman feels the earth shifting underfoot. In the parlance of strategic theorists, change is destabilizing. In the experience of the human being enduring it, change is

confusing, threatening, and often hurtful. In the great scheme of things, most change turns out to be positive for most people. But it is only rarely so perceived.

Especially as we grow older, our eyes play tricks on us--we are more likely to see that which is lost than that which is gained. How often do we hear our colleagues, friends, or relatives complain about the passing of the good old days or how much better things were under the old boss (forgetting how that boss was resented during his or her tenure)?

Experience is of two kinds: that which we undergo, and that which we remember. Those "good old days" were not better. If Man has not developed much, his (and certainly her) opportunities have. But we long for the certainty of that which we have known, suffered, and survived--especially when it lies at a safe distance. When I was a kid, a drugstore in my hometown displayed a poster showing a little boy lowering a bucket into a well. The print read, "Remember how sweet the water was from the old well? It was the leading cause of typhoid fever." I have never encountered a more succinct description of man's relationship to change. In our memories, we sweeten the waters of the past and erase the dirt and the sickness from the myths we make of our experience.

Men Fight for Myths, Not for Truth

Those myths of the lost golden age are most seductive in turbulent times. In the ferocity, confusion, and competition of the moment, we *need* to believe that things were not always so hard or so unfair, that there was a time of greater kindness and justice, when man's better qualities prevailed--and that such an epoch might return, if only we take the correct actions. Whether a radicalized mullah aching to turn back the clock to the days of the great caliphs, or a weekend militiaman in the American midwest longing for the surety of a misremembered childhood, the impulse to believe that times were better once upon a time is universal.

The experience of change and the consequent impulse to gild the past is a timeless element of the human saga. I wrote above that we live in an age of unprecedented change. This is true. Yet, it is also true that men and women in past ages lived through their own times of unprecedented change. They, too, felt the earth shake beneath their feet and heard the heavens rumble. Accounts of the early days of the locomotive and telegraph are packed with wonder and warning. An early weapon of mass destruction, the crossbow, was outlawed in its time by secular authorities and by the Pope. Poets have always wept over the prosaic nature of their own ages, when the beauty of the past lay murdered by the practical. Can we imagine the shock of the arrival of bronze weapons on the people of the ancient Middle East? How the villager must have recoiled from the stench and temptation of the rising city. The first wooden cask would have excited mockery and the insistence by the old guard that wine was meant to ferment in clay pots and that was that. The potato, the most revolutionary food in modern history, terrified Europeans when it was first imported, inspiring the belief that it caused leprosy, among other diseases. The information is lost to us now, but try to imagine the shock the first laws codified by a state had upon ancient populations governed until then by custom and fear of the supernatural. For that matter, imagine the shock a legitimate, enforced code of law would have upon Russia or Mexico today.

With man's inherent fear of change, it is astonishing how intensely we have developed our civilizations, if not ourselves. We have changed the world, but all we have changed about ourselves are our table manners.

The longing for the preservation or resurrection of an old order, real or fantastic, is the key to understanding much of the world's disorder. Even when our enemies are not personally motivated by the fear of change, it is the fears of their neighbors that grant those enemies opportunity. Wrapping themselves in the cloak of this convenient cause, they exploit any rupture between the governing and the governed, any gulf between a prospering "progressive" elite and the stagnating ranks of believers or traditionalist masses. The men who guide their followers to massacre understand the power of a call to the banner of nationalism, or an appeal to tribal supremacy, or an invitation to do some god's cleansing work with fire and sword. Demagogues capitalize on the sense of a trust betrayed and the "evil" of the new. They are geniuses of blame. All of their failures, and the failures of all of their followers, will forever be the fault of someone else.

Men will fight to the death to cling to a just-bearable past rather than embrace a less certain future, no matter its potential.

In periods of great change, human beings respond by turning to religion and resuscitating tradition. In the age of science, the frightened turn to belief. Perhaps the truest of all our clichés is that "ignorance is bliss." Men and women do not want to know. They may be pleased to learn of the misfortunes of their neighbor--confessional television shows have their roots in tribal whispers--but they do not want to know that their way of life, of belief, of organizing, learning, producing, and fighting, is a noncompetitive bust. The greatest effect of this information age is that it makes the global masses aware of their inadequacy.

At the height of the British Empire, the average imperial subject had no idea how his rulers lived. Today, the poor of the world's slums have awakened to the lifestyles of the rich and famous, courtesy of television, film, video, radio, cassettes, the self-justifications of kinsmen who have gone abroad and failed, and appalling local journalism. They do not, of course, grasp our reality. But they believe they do. The America they see is so rich and powerful it must be predatory. It *must* have robbed them to grow so rich. It has no right to be so rich. And it is unjust that they should not be so rich.

The media create instant myth. An illusion of America arrives, courtesy of lurid television serials, exaggerating Western wealth, ease, and sexuality. There is no mention of the sufferings of our ancestors on the long road to contemporary prosperity, or even of the workaday lives of average Americans today. It is as if our riches had fallen from the skies. It is an unbearable spectacle to those who have not.

At the same time, those who watch from abroad, appetites growing, find themselves less and less able to compete with the American juggernaut. Economic structures, the decline in the relative value of muscle power, educational inadequacies, social prohibitions and counterproductive customs, the ineffectiveness of civil law . . . these things and more constrict the potential of other cultures to compete with the Great West--the United States and our most culturally agile allies. Even cultures that appeared poised to break out to near-equivalence with us, such as those of Southeast Asia, hit cultural ceilings--and such ceilings are made of iron, not glass.

Most analysis of the current plight of the Asian "tigers" focuses on economic issues, but the underlying problem is cultural: the human infrastructure could not support the level of success already achieved, let alone that which was desired. The most disappointing, and worrisome, aspect of the near-collapse of Asian economies was not the financial losses but the alacrity with which the disappointed states, leaders, and people blamed foreigners for their misfortunes, when the problems were transparently homemade. Some also blamed their own minorities, especially the overseas Chinese. In Indonesia, we saw the return of ethnic pogroms. Even our South Korean allies responded to economic crisis with a tantrum of xenophobia. Hatred and revenge are always more satisfying than a sense of responsibility for one's own failure.

When nations and their underlying cultures fail to qualify in today's hyper-competitive world, they first complain. Then, if there is no turnaround, they kill. Iraq did not invade Kuwait in a burst of self-confidence, but from fear of economic decline and future inabilities. Tomorrow's enemies will be of two kinds--those who have seen their hopes disappointed, and those who have no hope. Do not worry about a successful China. Worry about a failing China.

And even a failing China is unlikely to become the threat defense charlatans would have us believe. China is culturally robust. Our most frequent opponents will rise from cultures on the rocks. In our grim century, Russia and Germany grew most dangerous after systems of cultural organization failed. Above all, this means the Islamic world will be a problem for the foreseeable future, since it is unprepared to deal with the demands and mandatory freedoms of the post-modern age. Beyond that faded, failing civilization, watch out for other change-resistant cultures, from tribes and clans to states that never shook off feudal, agrarian mentalities. None of these will threaten our homes; abroad, however, they will threaten our preferred order and the extraction of the wealth that pays for our homes.

Contrary to the myths of the old, pitiful Left, the United States did not build its new cultural-economic empire on the backs of the world's workers and peasants. But, thanks to the information age, we will expand that empire at the expense of failing cultures, since the world insists on devouring our dross. The Left understood neither the timeline nor the dynamics of history. And today's shriveled Left--hardly more than a campus entertainment--still gets one thing hugely wrong: the notion of an American determination to impoverish others. The United States prefers *prosperous* markets--starving masses don't buy much software (and they really do work on the Western conscience). But we cannot force people to be successful.

Those who fall by the wayside in global competition will have themselves, and their ancestors, to blame.

"Sherman, Set the Wayback Machine . . . "

With the anti-modern tide of fundamentalism that has swept away regimes and verities over the past two decades, we have come to accept, once again, that religious belief can turn violent. Yet, when we analyze our opponents, we insist on a hard, Joe Friday, "just the facts" approach that focuses on numbers, hardware, and, perhaps, a few of their leaders. We maintain a mental *cordon sanitaire* around military operations, ignoring the frightening effect of belief on our enemy's will and persistence. We accept the CNN reality of "mad mullahs" and intoxicated masses, yet we do not consider belief a noteworthy factor when assessing our combat opponents. Yet, only plagues and the worst personal catastrophes excite the religious impulse in man to the extent that war does.

The interplay of religion and military violence deserves books, not just a few paragraphs. But begin with what we know. In vague outline, we are all familiar with the Great Indian Mutiny, when the British East India Company's native levees, both Muslim and Hindu, reacted to a rumor that their new cartridges had been soiled with pig fat or beef lard by rising up and slaughtering their colonial overlords. While any Marxist will tell you there were structural factors at play in the Sepoy Mutiny and that the cartridges were but a catalyst, the fact remains that the most savage experience of the Victorian era was the butchery of the Mutiny--first the atrocities committed against British men, women, and children, then the slaughter perpetrated against the native population by the British, which was crueler still.

The Great Mutiny offers only a hint of the religious violence once extant in the British Empire. London's imperial history offers an interesting study for today's problems: the overwhelming force of industry-backed regiments against native masses, the shattering of established orders, the spiritual dislocations of the defeated . . . all this is replaying around us, and will play on into the next century at fast-forward speed. Notably, Britain's most embarrassing defeats of the 19th century were dealt the empire not by other organized militaries, but by true believers--whether the Zulus of South Africa, the ferocious holy warriors of Afghanistan, or the devout Calvinist Boers. Again and again, resistance to British influence or rule rallied around a religious identity, whether following the Mahdi in the Sudan or, in our own century, the Zionists struggling to recreate Israel. Our own national introduction to imperial combat involved a Chinese revivalist order, the "Fists of Righteousness," or Boxers, while in the Philippines the impassioned Muslim Moros proved a far tougher enemy for us than the conventional Spanish military.

And what of the role of belief within armies? It is a war-movie truism that the frightened and dying turn to the chaplain, but, if we argue individual cases, we might conclude this is evidence of desperation, not of a genuine propulsion toward belief. Yet, consider our own bloodiest conflict, the Civil War. It saw a widespread religious revival in blue ranks and gray--though as the South's condition worsened, the intensity of religious fervor in the Confederate armies grew extreme. Although it is unfashionable to say so, there is ample evidence that for many on both sides, this was a holy war. Certainly, the hungry, ill-clothed men in the Army of Northern Virginia fought with the determination of martyrs. Stonewall Jackson *entered* the war a religious extremist and fought with a holy warrior's dedication. Sherman was a secular fanatic produced by an age of belief. His march from Atlanta to the sea, then northward through the Carolinas, was a crusade executed with religious fervor, if without religious rhetoric. When we examine contemporary letters and reports, it is clear that God was very much with both sides.

This is an ancient phenomenon. Return to the *Iliad*. Read differently and more closely this time. Don't skim the long passages detailing sacrifices or the name-dropper poetry about squabbling gods. Look at what Homer tells us about belief in the ranks. The book begins with Agamemnon's defiance of the ordained order of things--a middle finger thrust up not only at Achilles but at the gods. The Greek forces suffer for it. Plague sweeps them. The Trojans briefly turn the tide. *And the Greeks respond in terms of their religion*. The first step is not a new battlefield strategy, it is a religious revival. Even the king must be called to order. Penitence is in. Sacrifices must involve real sacrifice. Certainly, the return of Achilles to the fight boosts morale, but the Greeks also experience a renewed sense that the gods are on their side. Meanwhile, in threatened Troy, an otherworldly fatalism takes hold, dark prophecies ring out, and Priam and his people search for an explanation of their impending fall in the will of the gods.

Of course, we do not read the *Iliad* that way. It is not our habit; we shy away from manifestations of faith, suspecting or ignoring them, or, at best, analyzing them in the dehydrated language of the sociologist. But if we

want to understand the warriors of the world and the fury that drives them, we had better open our minds to the power of belief.

In our own Western cultural history, the fiercest military brutalities and the most savage wars were fought over faith, whether the Crusades or defensive wars against Muslims, campaigns of suppression against dissenting Christians, the great religious wars of the 16th and, especially, 17th centuries, or the 20th century's world wars between secular religions.

Now our history is playing out in other flesh. When Indonesian rioters murder Chinese merchants, or when the Sudanese Muslims who hold power butcher and enslave the Christians in their country's south, their behavior is not inhuman. On the contrary, it is timelessly human.

Beware of any enemy motivated by supernatural convictions or great moral schemes. Even when he is less skilled and ill-equipped, his fervor may simply wear you down. Our military posture could not be more skewed. We build two-billion-dollar bombers, but we cannot cope with bare-handed belief.

The Shaman and the Gangster

If the intoxicated believer is one dangerous extreme in the range of our enemies, the other is the man utterly free of belief, or fear of the law, or civilizing custom. When you encounter them together--the saint and the cynic in league-you have the most dangerous combination on earth. True believers and opportunists are a dynamic match, as many a successful televangelist instructs us. You see it in a sloppy fashion with Saddam Hussein and his belated attention to Islam, but also in the alliance between the current set of Kremlin bandits and the Orthodox Church.

From Algeria's religious terrorists to politicians anywhere who align themselves with religious movements whose convictions they privately do not share, it is often difficult for us to determine where the prophet ends and the profiteer begins, how much is about faith and how much about grabbing power. In such cases, we tend to err on the side of cynicism, preferring to impute base motives to our enemies (even as we imagine that those enemies are somehow redeemable). But slighting either side of the equation, the human potential for cynicism or for belief, brings us only half-answers. In conflict, the saint and the cynic can complete each other without consciously understanding why their alliance works so well; together they combine the qualities of the cobra and the chameleon.

The most difficult thing for Americans in (and out of) uniform to face may be that even the most powerful military can, at most, briefly alter outward behaviors. We subdue belief only by killing the believer. From Somalia to Bosnia, the opportunist will bow to the threat of lethal power--until you turn your back. But no display of might will change the essence either of the man driven by God, or of the man driven by greed.

We have entered another age when empires begin to learn their limits. While America has and will maintain informational dominance, we cannot dictate which information will be accepted and acted upon by foreign populations. We can flood them with our culture, shock them into doubt, and sell them our wares, but we cannot make them behave as we would like . . . unless we are willing to commit brutalities on a scale that would destroy our own myth of ourselves.

Certainly, if sufficiently provoked, we are capable of killing plentifully and with enthusiasm. But such events are exceptional. In their balance and wisdom, the American people will fight genuine enemies, but they would not countenance the unprovoked slaughter of foreign populations over distant misbehaviors. The mark of our civilization's greatness is a simple but rare one: at this point in our social development, we would rather do good than evil, so long as it doesn't cost too much. It is a surprisingly scarce quality.

In other regions of the globe, there is less interest in the inviolability of the individual. We face enemies whose sole motivation to refrain from killing is the fear of being killed. Nothing else moves them. It is difficult for Americans, with our lack of historical knowledge and our confused notion of the validity of all cultures, to grasp the richness of hatred in this world. For all of our alarm over crime, most Americans live in an astonishingly safe environment. We are not threatened, and we behave cooperatively and corporately. But our safety is both the result of and contributor to our insularity. We lead sheltered lives. And we imagine that the rest of the world is just like us, only less privileged.

Hatred

But the rest of the world is not like us. For all of our lingering prejudices, we have done a remarkable job of subduing our hatreds. Perhaps it is only the effect of wealth bounded by law that makes us such a powerful exception to history, but our lack of domestic faction is a miracle nonetheless. We are indescribably fortunate, but our good fortune has lulled us into our primary military and diplomatic weakness: we do not understand the delicious appeal of hatred.

We cannot understand how Serbs and Kosovar Albanians, Croats and Bosnian Muslims could do that to each other. We cannot understand how Hutus and Tutsis could do that to each other. We do not understand how the Chinese could do that to the Tibetans. We do not understand how the Armenians and Azeris could do that to each other. We do not understand how India's Hindus and Muslims could do that to each other. We do not understand how the Russians and Chechens could do that to each other. We do not understand how Haitians, Somalis, Colombians, Mexicans, Indonesians, Sri Lankans, Congolese, Burundians, or Irish could do that to each other....

Over the years, I have written about "warriors"--the non-soldiers from guerrillas to narco-traffickers--whom we encounter and fight. In the past I stressed the importance of recognizing five types of warriors: the scum of the earth, the average Joe who is drawn into the conflict as it drags on, demobilized military men, opportunists, and true believers. Now I worry about only two of these sources of conflict: the opportunists and the believers, the gangsters and the godly, the men unrestrained by morals and those whose iron morality is implacable. They are the centers of gravity. The others are swept along by the tide.

Man, the Killer

Of all the notions I have advanced over the years, the only one that has met with consistent rejection is my statement that men like to kill. I do not believe that all men like to kill. At the extreme, there are those saintly beings who would sacrifice their own lives before taking the life of another. The average man will kill if compelled to, in uniform in a war, or in self-defense, but has no evident taste for it. Men react differently to the experience of killing. Some are traumatized. Others simply move on with their lives. But there is at least a minority of human beings-mostly male--who enjoy killing. That minority may be small, but it does not take many enthusiastic killers to trigger the destruction of a fragile society. Revolutions, pogroms, genocides, and civil wars are not made by majorities, but by minorities with the acquiescence of the majority. The majority may gloat, or loot, but the killing minority drives history.

Violence is addictive. Police know this. That's where the phrase "the usual suspects" comes from. In our society, the overwhelming majority of violent acts are committed by repeat offenders. Statistics would make us a violent nation; in fact, we are a peaceable people until aroused. The numbers are skewed because we have failed to deter recidivists. Spouse- and child-abusers do not do it once, they repeat. Sex offenders--and all sex crimes are crimes of violence--are notorious repeat offenders. Most barroom brawls are begun by the same old troublemakers. Even in combat, when mortal violence is legal, most enemy combatants killed in close fighting appear to be killed by a small number of "high performers" in our ranks. Throughout history, many a combat hero has had difficulty adjusting to peace.

We reject the evidence of the human enthusiasm for violence because it troubles us and undercuts the image we have created of perfectible Man. But violence has an undeniable appeal. Certainly for the otherwise disenfranchised, it is the only response left. Perhaps the psychologists are right that much violence is a cry for help. But what both of those arguments really say is that violence, however motivated, is gratifying and empowering.

Religions and civilizations may be seen as attempts to discipline mankind, to trim our worst excesses. Traditionally, religions and civilizations acknowledged mankind's propensity for violence and imposed appropriate strictures. Certainly no religion or civilization has believed it could ignore violent behavior as peripheral. Yet our contemporary American approach is to treat violence as an aberration, the product of a terrible misunderstanding. It is the mentality of the born victim, of the wife who believes every weeping apology by her abuser husband, of the social worker who believes in the mass murderer's rehabilitation. Our willful denial of the full spectrum of man's nature, from the sublime to the beastly, is a privilege of our wealth. It is not a privilege that will be extended to our soldiers.

Look at the wreckage of this decade. Can we pretend that the massacre of half a million Rwandan Tutsis by their neighbors was carried out as a laborious chore? On the contrary, reports from the scene describe murderers

intoxicated by their deeds. When we consider the ingenious cruelties perpetrated daily in Algeria, can we believe that the killers are forced to commit those atrocities against their inclinations? Will we pretend that the dead of Srebrenica were the victims of reluctant hands?

A meaningful sense of humanity demands that we ask hard questions about the nature of man. Military effectiveness in the coming decades will make the same demands. It will be terribly difficult for us. Our uniquely noble elevation of the individual's worth is ill-suited to a world in which our opponents regard the masses who follow them as surplus capital.

The American Myth of Peace

A corollary to the universal myth of a lost golden age is the recurring myth of the peaceable kingdom, where the lion lies down with the lamb and the spear is broken in two. This has long been a powerful myth in the American ethos, carried from Europe in the first ships that sailed for New England. In those northern colonies, many of the early settlers belonged to dissident Protestant sects out to replicate the kingdom of God on earth. Many were pacifists or had strong pacifistic inclinations. They had been oppressed and, no matter that they would become oppressors in their time, their experiences had condensed their vision of an ideal world to a diamond hardness.

Our founding parents fled Europe's dynastic struggles convinced that such wars, and by extension all wars, were ungodly. Later, they fought the Indians, then the French, then the British, then their hemispheric neighbors, then much of the world. But they never accepted war as in the order of things. War was a terrible, unnatural misfortune, perpetrated by despots and madmen, or spawned by injustice. But it was not a core human endeavor.

From that heritage we Americans have developed our historical belief that all men want peace, that all conflict can be resolved through compromise and understanding. It leads to the diplomatic equivalent of Sunday-night snake-handling--faith in the power of negotiations to allay hatred. Because we are privileged and reasonably content with our corner of the planet, we find peace desirable. There is nothing wrong with this. The problem arises when we assume that all other men, no matter how discontented, jealous, disenfranchised, and insulted, want peace as well. Our faith in man is truly a blind faith.

Many human beings have no stake in peace. They draw no advantage from the status quo. We even see this in our own fortunate country. A disproportionate share of crime is committed by those with the least stake in society--the excluded and marginalized with little or nothing to lose. In this age of accelerating change, we too suffer from extreme fundamentalism concentrated at the lower end of the social spectrum (though not at the bottom among the drug-wrecked Lumpenproletariat). Consider the crimes that trouble us most. Gang crime occurs between those with the least to gain or lose from the social order the rest of us cherish. The Oklahoma City bombing was the work of a man who felt rejected by the society around him, who felt wronged. The repeated bombings of abortion clinics consistently prove to be the work of low-skilled males who have turned to aggressive religious beliefs in which tolerance is intolerable. Dangerous true believers and violent opportunists are very much with us even in our own homeland.

We are, however, well positioned to moderate their excesses. Neither right-wing militias nor extreme fundamentalists are going to take over our country in the foreseeable future. But much of the world is less fortunate. Where there is less opportunity (sometimes none) and the comforting status quo begins to shrivel, human beings want validation and revenge. They cannot accept that their accustomed way of life is failing and that they are failing individually because of the behaviors to which their culture has conditioned them. They want someone to blame, and then they want revenge on that someone. A leader, secular or religious, has only to preach the gospel of foreign devils and dark conspiracies to absolve his listeners of responsibility for their own failures--and he will find a willing audience. Humans do not want change. They want their customs validated. They want more material possessions, but they do not want to alter their accustomed patterns of behavior to get those things. This is as true in America's inner cities as it is in the slums of Karachi or Cairo.

Again, many human beings thrive on disorder. When the civil war ends, the party is over. Many of the difficulties in Bosnia today stem from warriors who built thriving black market and criminal networks during the fighting and do not want to let go of them. Often, those who do the bulk of the fighting are men ill-equipped to prosper in peace. The gun is their professional tool. When they grow convinced by, or are at least cloaked in, nationalist or fundamentalist religious beliefs, they are vulnerable only to greater force. In Russia, much of the citizenry longs for

the rule of law, even the harsh law of the past. But those who have enriched themselves during Russia's new "time of troubles" like the system just the way it is. It is difficult to convince a prospering gangster that democracy and the rule of law will work to his advantage, despite professions to the contrary by our Department of State. Around the world, from Uganda to Abkhazia, it is difficult to persuade those whose only successes in life have come from the gun in their hand that they should hand over that gun. Being a warlord, or just the warlord's retainer, is a far more attractive prospect than digging a ditch for a living--or, worse, failing to find work as a ditch-digger.

We profit from peace. Our opponents profit from conflict. It is as fundamental a mismatch as the one between our forces and theirs. When they try to play by our rules whether in the military or economic sphere, we demolish them. When we are forced to play by their rules, however, especially during military interventions, the playing field is not only leveled, it often tilts in their favor.

When we drive the warriors into a corner or defeat them, they will agree to anything. When our attention is elsewhere, they will break the agreement. Their behavior, natural to them, is unthinkable to us. And then they massacre.

We pride ourselves on our rationality, while avoiding reality. If we are to function effectively as diplomats and soldiers, we need to turn a dispassionate eye on mankind. We need to study the behavior of the individual and the mass, and to do it without stricture. We cherish the fiction that technology will be the answer to all of our dilemmas, but our enemies know that flesh and blood form the irresistible answer to our technologies.

Troy and Jerusalem

Another cliché with a core of truth is that Americans are the new Romans, proprietors of a near universal empire based upon engineering and codification of law. Certainly, we guard the walls of our civilization against new barbarians. But the mundane parallels are more intriguing. First, even when the Romans behaved cruelly at the height of empire, it was a measured policy. Second, their military was tiny in proportion to the range of their empire, and their legions, while rarely defeated, were often astonished by the savagery of their opponents. Third, the Romans so cherished their civilized image of themselves that it blinded them to barbarian strengths.

Fanatics brought Rome down. We associate the fall of Rome with Alaric and the Visigoths and a jumble of other warrior peoples who swept in from the north for long weekends (as German tourists do today). But Rome's decline was slow, and the empire rotted from within. Romans loved the law--even under the worst emperors, the rule of law never disappeared entirely--and they grew convinced that peace was the natural order of things. Their judges sought equity and order, and their legalisms crippled them.

Let us return to our beginning and consider the New Testament. We are made in the image of Pilate the Roman. On his fateful day, he was annoyed, briefly, by a seemingly minor case he just wanted to put behind him. He did not understand the matter and did not even believe it lay within his purview. He was baffled and annoyed by the local squabbles, failing to appreciate the social and religious complexities involved--and the greater implications. Jesus was beneath the consideration of Rome's threat analysts. Pilate simply wanted the problem to go away. Capable of insight, cruelty, and greatness on other occasions, on the most important day of his life the Roman was caught drowsing. He was the classic representative of empire, the patron saint of diplomats.

We can almost smell the heat of the day and taste the dust. Imagine Pilate's impatience with his translator and his disbelief that the shabby, battered figure before him could be the cause of such a fuss. There simply was not enough of a challenge in evidence to excite a Roman governor and gentleman of great affairs. When a perfunctory attempt at arbitration between the locals failed, Pilate washed his hands of the prisoner's fate, anxious to move on to serious business, or maybe just to lunch. He did let his soldiers do a bad day's work, but only because the Romans kept a careful monopoly on capital punishments.

Pilate was a symbol of weakening Rome and growing Roman self-doubt. He served at Rome's apogee, yet the cancer was already there. His descendants, preferring debate to decision, would be no match for the fanatics who could kill the sober and the just without blinking. Pilate stuck to the letter of the law, and the law damned him.

As empires fall--and I am not suggesting that our own empire will fall for a long time--the people of the empire return to religion, to cults, to blood ties. Christianity, a liberating mystery religion of the dreary classes, had to

struggle during the heyday of empire. But when the decline became impossible to deny, the new religion, with its revolutionary rhetoric, prospered. In prospering, it further accelerated the decline of the old order. The repressions were too little too late, and they were a counterproductive tool to wield against the followers of that particular creed. Rome turned scolds into martyrs. The Roman threat analysts had failed again.

The Romans were chronically late to respond to challenges in the age of the lesser Caesars. They loved stasis and remembrance. The destruction of Solomon's Temple in Jerusalem and the suppression of the Jewish kingdom were not signs of remaining imperial strength, but of weakness, frustration, and decline. In its confident years, the Roman empire had been absorptive and tolerant. For centuries, these qualities lent strength and co-opted new subjects, but ultimately core identities and commitments to the Roman idea became fatally diffuse and diluted. It was those who refused to be absorbed and who rejected toleration, from the brute German tribes to the true believers from the eastern provinces, who outlasted the greatest empire the earth knew until our own century. Rome's greatest failure was its inability to understand the changing world.

We can measure historical climates by reading the growth bands of a tree stump. We can measure the climate of a culture by noting its religious revivals or the advent of a new religion--each marks a time of great stress on the society. In 1999, we are living in the most passionately religious age in centuries. The future looks ferocious.

Leaving aside the threat from weapons of mass destruction, however, the United States appears invulnerable for the foreseeable future. Terrorists might annoy us, but we will triumph. We will, ultimately, find the strength of will to do what must be done. The problems raised in this essay affect the average, prosperous American citizen little, if at all. But it is the soldiers of our new empire, the men and women who serve in our expeditionary forces and deploy to subdue enemies we neglect to understand, who will pay the cost of our ignorance. They will still win, when allowed to do so. But more of them will suffer and die for lowered returns because of our unwillingness to face the complexity of mankind.

Come back now to Troy. Read that great poem one more time, without the prejudices we have learned. You will find that the triumphant Greeks were the devious, the barbarous, the murderous. The Trojans were the urban, civilized, and tolerant. Troy stood for learning, piety, and decency. Its mistake was to humiliate implacable barbarians, without the will to destroy them. The Trojans fought to be left alone in their comfortable world. The Greeks fought for revenge, spoils, and the pleasure of slaughter. The Greeks won. Ulysses, who finally inveigled a way through the city gates of Troy, was the first great Balkan warlord. The defeated Trojan monarch, King Priam, was a decent man who watched the war from behind his walls and had to beg for the return of his son's mangled body. He was presidential in his dignity.

We are not Trojans. We are far mightier. We rule the skies and seas, and possess the power to rule the land when we are sufficiently aroused. But we have not learned to understand, much less rule, minds and hearts and souls. The only moral we need to cull from the *Iliad* is that it is foolish to underestimate the complexity and determination of the killers from the other shore.

Ralph Peters (LTC, USA Ret.) retired from the Army so that he could write and speak freely. His commentaries on military and strategic issues have appeared in a wide range of media outlets. His two most recent books, published in spring 1999, are Traitor, a novel about corruption in America's defense industry, and Fighting for the Future, a look at coming conflicts based upon his essays in Parameters. This article was originally presented at the US Army War College's Ninth Annual Strategy Conference, sponsored by the Strategic Studies Institute.

The American Mission

RALPH PETERS

We, the American people, have reached the end of a two-and-a-half-century crusade that defined us and changed the world as profoundly as any event in history. For a quarter of a millennium, we fought empires. Now, those empires are gone--every one--and we do not know what to do with ourselves. Our present enemies are vicious, but small. They cannot excite us to a new national purpose. The United States is suffering from victory.

Pentagon officials struggle to justify the purchase of \$350 billion worth of unnecessary aircraft, while our diplomats sleepwalk through atrocity and our foreign policy is an incoherent shambles. None of our outward-looking institutions has grasped the dimensions of change. We need to break 250 years of habits we did not even realize we had. Our national cause, never articulated or even consciously realized, was to break the imperial hierarchies that held mankind in bondage. In 1989, as the last and worst of the old empires fell, we won a complete victory, and found ourselves unprepared for the fractured world the struggle left behind.

The verities and cherished villains are gone, and we have entered an age of small-scale evils. We crave a great, new American mission, and policy circles feel confusion and malaise in the new threat vacuum. The mightiest American foreign policy tradition is gone--a tradition that predated our existence as a country. We are a people formed in opposition, and that opposition was always to empire. Now there is no mightiness to oppose, no galvanizing evil, but only hard-to-locate countries where bloody shreds of mankind butcher neighbors.

We began under English dominion, opposing the French empire in a struggle that culminated in the mid-18th century. If America's independence began at Lexington and Concord, it found its inspiration on the Plains of Abraham before Quebec, where colonial militiamen learned how easily an empire might fall. Next, we fought the greatest empire of the age, Britain itself, to champion the political and economic rights of man. A first war drove the British out, while a second confirmed their relegation to the Canadian margins of our continent.

Then we fought the Mexican empire and cut it in half. Our subsequent Civil War was an internal purge, cleansing from our soil the last European notions of hereditary authority and human subjugation. It was an Americanizing bloodbath that ended the first phase of our anti-imperial struggle, consolidating the physical shape of the United States we know.

The second phase of our crusade began with the Spanish-American War, a globe-spanning conflict whose brevity and relative lack of suffering have always obscured its importance. This time, we not only defeated a European empire, but destroyed it. It was not a local revolution against colonial overlords, but an international assault upon colonial possessions. No matter that Spain's imperium was little more than a carcass--this was a watershed in history, the death knell for the old European empires. The Spanish-American War was noteworthy, too, because it was our first war against a distant "evil empire." Spain's treatment of its Cuban and other colonial subjects both moved us and gave us an excuse to grasp its treasures. It proved an addictive model.

Japan observed the low price we paid, then emulated us half a dozen years later, when it attacked the other decayed European empire with dominions in East Asia, the Czar's Russia. Japan won brilliantly, then launched itself as an upstart empire that would end 40 years later, in humiliation, on the deck of an American battleship.

The First World War was a conflict of discontents that were not ours, a hacking off of Europe's diseased limbs by the afflicted body itself. That great European civil war fatally weakened the remaining empires, while spawning new ones. America's late entry aligned us against three more empires: the Second Reich of Germany, Austria-Hungary, and the Ottoman Empire. Although we hardly engaged the latter two, we guaranteed their destruction.

In the Second World War, America saved the world from unspeakable tyrannies. This is an unfashionable, but absolutely accurate way of putting it. For all the valor of crumpled Britain and agonized Russia, the United States decided the outcome. In doing so, we destroyed the Japanese and Nazi-German empires, as well as the operetta empire of Fascist Italy. Fatally weakened, the British and French empires collapsed of their own weight after the war. Only the Soviet incarnation of the Russian empire, a domain of figurative and literal darkness, remained to represent the imperial idea of human subjugation.

In 1945, we found ourselves guarantors of a world we barely knew. It is not surprising that we made tragic mistakes, but that we made so few. During the Cold War, the complexity of our struggle increased. The force of arms proved weaker than the force of ideas--ours or theirs. In Korea, then Vietnam, we found ourselves engaged with a grisly empire of ideology. Yet, the populations against whom we fought were fighting their own anti-imperial struggles. The United States fought anti-imperial wars against anti-imperialists fighting to expand a totalitarian empire. The Cold War was an age of paradox and moral erosion--as dark as it was cold--overshadowed by the ever-present threat of nuclear cataclysm.

At the end of this last struggle, those who believed that man should govern himself from below had defeated those who believed that man must be governed from above. In that sense, 1989 marked the end not of a mere quarter millennium of human history, but the climax of man's entire previous history of governance. Certainly, many a local tyranny remains around the world, but they will not prosper. The future belongs to citizens who control their own governments. All else is a vestige.

When the Berlin Wall fell, we were triumphant and at a loss. We opened the door to mankind's future, but closed the door on who we had been for so long. Along the way, we had become an empire ourselves, if of an unprecedented kind. Ours is an empire of culture and economic power, not of military occupation and physical enslavement. Nonetheless, the nation that defined itself as David has become the last Goliath.

We destroyed the old world, but lack a useful vision for a new order. Since 1989, too much of humanity has failed to live up to our ennobling rhetoric. Our victory over the last of the old empires unleashed forces we failed to anticipate, the zealous butchers wrapped in religion and ethnicity. Perhaps all that is left to us is a long minding of brute children.

We destroyed or helped destroy 11 empires in this 250-year epoch, while the remaining few--Portuguese, Dutch, Belgian--died of decay. The fundamental difficulty remaining, apart from mankind's innate tendencies, is that those empires twisted the world into unnatural shapes. Although the empires are gone, the treacherous boundaries they established remain. Empires drew borders based not upon popular preference or human affinities, but as a result of conflicts, competition, and compromise with other empires. Often, borders were defined in ignorance of local affairs or even of geographical detail. Lines inked--or sometimes crayoned--upon a map determined the fate of millions. Those borders remain a plague upon our times.

The United States, history's most powerful force for human liberation, now finds itself in a perverse and ill-considered position. Due to inertia and the fears of bureaucrats, we have slipped into the role of defending inherited, utterly dysfunctional imperial borders. Our Department of State, administrations drawn from both parties, lawyers, and academics all oppose "violations of sovereignty" and even the most logical and necessary amendments to borders. Future historians will be amazed at America's actions across the past decade. One administration initially tried to convince the Soviet Union to remain together, while successive administrations opposed the breakup of Yugoslavia, an entity as unnatural as any cobbled-together state could be. In our addiction to stasis and our obsession--for it is nothing less than that--with "inviolable" interstate boundaries carved out by imperial force in a different age, we are putting ourselves on the side of the empires we destroyed. America thoughtlessly supports oppression because we find the lines on the map familiar and convenient. The ghosts of kaisers, kings, and czars must be howling with glee in hell.

We must rethink this blind and destructive policy. Instead of using our might in vain attempts to force those who hate one another to live together--our "no-divorce" approach to foreign policy--we should lead the way in developing mechanisms to amend borders peacefully--or as peacefully as possible. Of course this will be difficult to do, for many of those in power profit from the present arrangement, and the sufferings of the powerless do not move them. And justice will be relative, for the redefinition of many borders will involve population transfers: even when statistically just, such changes will prove unfair to many individuals. Amending borders is not a formula for a perfect world, only an approach to improve the present one and lessen slaughter.

The alternative is ethnic cleansing, genocide, and violence without end. We cannot force a man to love his neighbor. And, most important, redrawn borders and population transfers work. Those conducted at the end of World War II in Europe resulted in the longest period of peace in European history--until the disintegration of Yugoslavia, where borders had *not* changed.

Certainly the least mention of just borders will bring howls from every scruffy dictatorship in the United Nations. But should the nation that changed human history for the better and shattered the imperial model quake at the protests of Balkan thugs, African strongmen, or Asian authoritarians?

Of course, it will not be possible to impose effective changes in every case. Strategic interests will have their due, while some demands for independence arise only from a minority of the championed minority. At times, the ethnic mixing will be too complex, the claims too layered and contradictory. And in some cases the local populations will still have to settle their differences in blood. There will be no universal formula for success. Each case will have its own dilemmas. Yet, who believes that the present system is functional, or acceptable, or decent? As we prepare to enter a new millennium, it is time to discard those foolish prejudices that have come to pass for wisdom in world affairs. Bad borders will change. The only question is how those changes will occur.

Our American mission is not over. Although it is ever a temptation to withdraw from this troubled world and celebrate our own wealth and comfort, isolation is an impossible dream. The world is now too much of a piece, its interlocking systems too complex and binding. American interests are everywhere, or nearly so. We are condemned to work for global betterment.

This does not mean our current penchant for plunging thoughtlessly into random crises that happen to get our attention is a wise one, or that we must engage always and everywhere. On the contrary, a consideration both of where our greatest national interests lie and of what is actually achievable (and affordable) should always shape our web of policies--economic, diplomatic, and military. But there are two worthy goals that we might bear in mind:

First comes the practical matter of borders. We must either foster the creation of mechanisms to fix those that do not work or at least side with those seeking self-determination and not with dying, repressive regimes that cling to every inch of their "sovereign" territory. This world is changing, whether we like it or not. A fundamental change is occurring in the forms, shapes, and sizes of statehood, reflecting national downsizing in the aftermath of empire and the simultaneous development of transnational modes of cooperation. Although horrified diplomats and professors declare the impossibility of changing borders, they are wrong. Borders are already changing, from Colombia's internal borders to the inevitable independence of Kosovo, from Central Africa to Indonesia. Our current position is at best naïve. Because we do not support the legitimate aspirations of other human beings to live peaceably among those for whom they feel a natural affinity, we find ourselves time and again on the wrong side of history. It is time to come to our senses and lead the way to freedom once again.

The second worthy goal is support of universal human rights. The present Administration, despite its deplorable failure to pursue that goal, began with appealing rhetoric. Long after the glare of scandal has dulled, America's enduring support for monstrous dictatorships will fascinate those who study our history. The mechanics of the present Administration's failure were simple. Coming to office with a genuine desire, but not a commitment, to support human rights, the Administration quickly found that it owed too much to too many interest groups--support for human rights was not compatible with business or diplomatic convenience. Early on, during a meeting of the National Security Council staff, the decision was taken to "give" Burma/Myanmar to the human rights advocates to appease them--anathematizing it for its human rights record and banning new American investment--while continuing to conduct business as usual with more important states such as China and Saudi Arabia, where human rights abuses were and remain far worse.

Support for human rights need not involve constant engagement on all fronts, with US troops deployed each time a bully kicks a dog. Rather, we simply should consider this moral and practical factor when making diplomatic decisions. Strategic requirements will not always allow us to put human rights first in every case and country. But their consideration must never be fully absent. Further, dependable support for human rights--and a range of penalties for abusers--would bring our country both renewed respect and practical advantage. Respect for basic human rights forms the basis for both sound policy and good business. The partner state that respects the needs and aspirations of its own citizens is apt to be a dependable partner, but the dictator always comes down in the end.

We have too often been on the wrong side of a popular revolution. We no longer have even the excuse of Cold War polarities to explain our penchant for supporting oppressors. When the Russian government slaughtered tens of thousands of its own citizens in Chechnya, we hastened to assure Moscow of our unreserved friendship. In the

Balkans, we cut deals with dictators time and again, only to watch the torrent of blood expand. In Indonesia, we clung to yesterday's corrupt regime even as the people pulled it down. Especially in the Middle East, we kowtow to regimes that oppress and abuse women, torment and even kill those of different faiths, and utterly reject democracy. These are inexplicable cases of the strong allowing the weak but intolerant to set the terms of engagement. We garner no respect, but are despised for our hypocrisy and fecklessness. We desecrate our heritage each day.

Americans attempt to defeat proposals they do not like by simplifying them to death. The propositions sketched above will be misinterpreted--purposely--as a call for sending in the Marines, or launching a quixotic global crusade, or even as supporting the bogeyman of world government. I advocate none of these things, but only an intelligent approach to change, a moral stance where one is possible, and a recognition that wishing away the desires of oppressed populations will not keep foreign borders intact.

As for sovereignty, it is the privilege of the just, successful state. Any state that butchers, or even oppresses, its own population forfeits any claim to sovereign rights. Recently, we heard repulsive arguments that attempts to stop mass murder and ethnic cleansing in Kosovo infringed on sovereign territory. By that logic, Hitler would have been acceptable had he killed only German Jews. States exist to protect and benefit their populations. That is the rationale for these United States. Shall other human beings be condemned in order to keep our atlases intact and embassy receptions on schedule?

If a state cannot control criminality, terrorism, or ecological devastation on its own territory and those problems adversely affect its neighbors--or the entire planet--may it still claim sovereignty? This is the argument of kings, not of the common man. At present, we pretend that ineffective or even criminal regimes are legitimate because we "know no other way." It is time to forge another way.

This world is one in which we cannot stand alone. While we must protect our own sovereignty, which is legitimate, earned, and beneficial to all, we must also recognize the need for teamwork. NATO served American interests well-and still does, despite that organization's need to evolve. The United Nations, pathetic, inept, and indispensable, has also brought us more advantages than disadvantages, from providing an umbrella for some necessary actions to giving discontented minor states the illusion of a voice. But NATO is a regional alliance, and will not span the globe. The United Nations remains ineffective in the clinch, not only because of its dreadful bureaucracy (which may, in fact, be a blessing, since it prevents the organization from doing much damage), but because it is too inclusive. No organization in which backward, vicious regimes, such as those of China or Russia, have veto power will change much of anything--least of all unjust borders, a digestive ailment from which both these gobblers of minorities suffer.

It is time to form a Union of Democratic Nations, of globe-spanning, like-minded states whose people live under the rule of law and choose their own leaders. We need a grand alliance that can act, diplomatically, economically and, when necessary, militarily, for global betterment. Such an alliance would include only true democracies, such as most European states, our own country, and others such as Japan, South Korea, Brazil, Argentina, Chile, Israel, South Africa, and the sturdy English-speaking states down under and to our north. It would exclude false democracies, such as Russia or Malaysia. Corrupt democracies and those in which religious prejudice or ethnic favor are dominant would also be excluded, until they reform. This would leave out for now India and Pakistan, Mexico and Nigeria. The purpose would be to unite in an alliance those states whose behavior has earned them the right to support positive change in troubled regions.

It would also have to be an open alliance, in which a two-thirds majority and not unanimity would be required for action, and in which no member would be required to participate in a specific embargo or deployment against its will. It would, in short, be truly democratic and utterly voluntary. Such an alliance might even prove capable of timely action. At a minimum, it would be the richest, most powerful, and most desirable club in the world.

On the threshold of a new millennium, Americans can be proud. We have led the world a long way out of the darkness. But there are still miles to go. We destroyed the old hierarchies that wasted human aspirations and talents as surely as they squandered human blood. We broke the tradition of rule by fiat that stretched from Babylon to Moscow. It is hard not to see these United States as blessed and chosen.

We are very fortunate. And with good fortune comes responsibility. We are condemned to lead. This means we must stop clinging to the past, whether antiquated notions about the sacrosanct nature of a butcher's borders or the belief

that what goes on beyond our neighbor's customs barrier does not concern us. It is not a matter of seeking "foreign entanglements," or compromising our own hard-won freedoms, but of doing what is best for ourselves, as well. A world in which men and women live freely and enjoy secure rights is the world in which our own greatness is likeliest to endure.

Ralph Peters (LTC, USA Ret.) is a novelist, essayist, and lecturer whose commentaries on military and strategic issues have appeared in a wide range of media outlets. His two most recent books, published in spring 1999, are Traitor, a novel about corruption in America's defense industry, and Fighting for the Future, a look at coming conflicts based upon his essays in Parameters.

Future War: Back to Basics MAJOR DAVID W. SHIN, US Army

As the weapons of war change so will the nature of war change, and though this is an undoubted fact, tactically it must not be overlooked that weapons change because civilization changes; they do not change on their own account. 1 J.F.C. Fuller

This article begins with the assumption that Fuller's observation concerning the nature of war is correct: the natural evolution of war is directly linked to paradigmatic shifts in civilization. This leads to the deduction that if one can prove we are currently experiencing a paradigmatic shift in civilization, then we must accept the fact that another "transitional military age" is upon us. At this point, Fuller would argue, "unless we have carefully thought out future possibilities" of war, we will not be prepared to wage it. The intent of this article is to determine whether a paradigmatic shift is occurring in our civilization; if a paradigmatic shift is occurring, how it will influence the nature of war; what war will look like in the 21st century; and if our current azimuth is pointing in the right direction to meet the challenges of the future. In short, can Force XXI meet the anticipatory changes in the nature of war?

The Future: The information Age?

The most popular theory of paradigmatic shift seems to be the faith in the dawn of the information age, but how do we know if we are in the information age? Bill Gates suggests that "when you begin to resent it if information is not available via the network," you know that the information age has become a part of your life. According to Gates, some of us are already living in the information age. Others have come to similar conclusions.

Futurists Alvin and Heidi Toffler have used their wave theory convincingly to argue that "industrial civilization is coming to an end." According to this view, the societal transition from the Industrial Age (Second Wave) to the information age (Third Wave) has already begun. As a result, our civilization will no longer depend on mass production to create wealth; on the contrary, wealth and dominance will be based on the creation and exploitation of knowledge. The significance of the argument is that the ongoing power shift "is not between East and West or North and South," and it has little to do with religion or ethnic diversity. The future is about the "coming division of the world into three distinct, differing and potentially clashing civilizations" consisting of the agrarian (First Wave), industrial and information-based societies. This is important because historical trends indicate that massive changes in civilization do not occur benignly; instead, they are normally accompanied by shock waves in the form of conflict between different waveforms. For instance, a major cause of the American Civil War was a struggle between the industrial interests of the North and the agrarian elites of the South.

Samuel Huntington also predicts a future that will be characterized by conflict between civilizations, but that is where the similarities with the Tofflers end. ¹⁰ He defines civilizations as a cultural entity consisting of villages, regions, ethnic groups, nationalities and religious groups. These entities all share unique characteristics such as language, history, religion, customs and other institutions. He notes that, although Westerners tend to view the nation-state as the primary actor in world affairs, historical review indicates that "broader reaches of human history have been the history of civilizations." ¹¹ He believes that the clash of civilizations is inevitable because there are simply basic differences between Western, Confucian, Japanese, Islamic, Hindu, Slavic-Orthodox, Latin American and possibly African civilizations. These differences will be amplified as interaction between civilizations increases due to modernization, and as a result, people are likely to become more aware of their differences and commonalities. Huntington concludes that "most important conflicts of the future will occur along the cultural fault lines separating these civilizations from one another." ¹² He offers plenty of evidence: the continued conflict between Croats, Muslims and Serbs in the former Yugoslavia; the fighting in Central Asia between Russia and Mujahideen guerillas; and the periodic US bombing of Baghdad after the Gulf War and subsequent condemnation by most Muslim nations. ¹³

Finally, Robert Kaplan warns of the coming anarchy. He believes that "some nation-states are becoming ungovernable and are descending into anarchy." Kaplan notes that several important states, such as China, Mexico, India, Pakistan, Indonesia, Nigeria and Iran, all have the potential to degenerate into anarchy. He believes that the root causes of this trend are scarcity of resources, cultural and racial conflicts and geographic destiny. The latter issue of geographic destiny highlights the fact that current geographical boundaries do not always portray the "realities of culture and sub-culture." For example, the realities of the Kurds are not reflected on the maps of Iraq and Turkey. In addition, Kaplan emphasizes that the coming anarchy will have significant implications for future wars. He predicts "future wars will be of communal survival, aggravated or, in many cases, caused by environmental

scarcity. These wars will be subnational, meaning that it will be hard for states and local governments to protect their own citizens physically." ¹⁶ Kaplan is predicting the return of low-intensity conflict or what some now call military operations other than war (MOOTW). ¹⁷

At this time, it is appropriate to share my second assumption: all three views are worth considering because they appear to be sound, and more important, the diversity of these works gives us more flexibility in considering the future. Evidence suggests that some of us are transitioning into the information age, others already live in it and there are those who may never get there. Even as the most advanced society in the world today, the United States has not fully transitioned into the information age. Many of us are still living in the Industrial Age and our Army reflects this truth—we still have masses of tanks, artillery, battleships and fighter aircraft. Moreover, we must consider other factors such as the existence of diverse cultures and the possible degeneration of the nation-state. Any of these trends identified by Huntington, Kaplan and the Tofflers could cause instability for the foreseeable future. If all this is an accurate portrayal of future civilizations, then what will wars look like in the 21st century?

Future Wars: Low-Intensity Conflict or Information Driven?

What can we expect from future warfare? Again, the Tofflers remind us that historical trends demonstrate that massive changes in civilization do not occur benignly; instead, they normally bring about shock waves in the form of conflict between different waveforms. Similar to Fuller, the Tofflers believe that "the way we make wealth and the way we make war are inextricably connected." They view the Gulf War as a war of duality, where methods of second and third waveforms were simultaneously employed by the US-led coalition. On the one hand, familiar attrition-style warfare was employed to carpet bomb Iraqi defensive positions. On the other hand, Tomahawk cruise missiles and laser-guided munitions were used to locate and hit critical command and control facilities throughout Baghdad with great accuracy.¹⁹ It appears that the third waveform of war characterized by the latter is what the Tofflers are predicting for the future. In fact, former Army Chief of Staff General Gordon R. Sullivan applied the Tofflers' vision of the future to shape his conception for the 21st-century Army—Force XXI.²⁰ According to this view of future warfare, in addition to smart munitions, intelligence systems such as JSTARS will "track and target tanks, artillery and other ground forces, providing ground commanders" with a real-time picture of enemy movements, as deep as 155 miles into the enemy rear.²¹ Further, corps- and division-level units will be able to receive national-level imagery that will enable commanders to see their area of operations in the order of magnitude of approximately 600 frames of imagery per day.²² These developments have led many to conclude that "knowledge came to rival weapons and tactics in importance, giving credence to the notion that an enemy might be brought to his knees principally through destruction and disruption of the means for command and control." In short, "good or poor exploitation of the computer's potential will likely be a dominant discriminant of military capability in the Western democracies and probably in the world for the next decades."²⁴

Huntington and Kaplan, however, remind us that future conflicts do not necessarily have to be driven by clashes of different wave societies. The implication is that the way we make wealth and the way we make war are not inextricably linked. In fact, future conflicts will occur along cultural fault lines separating different civilizations, with total disregard for how civilizations make wealth. In addition to these cultural clashes, Kaplan predicts, other factors such as environmental scarcity could lead to the proliferation of MOOTW in the years to come.

Future wars will be manifested in some form of conflict between civilizations or subnational entities. These conflicts may be driven by cultural differences, differences in how nations produce wealth or simple competition over scarce resources. We may also conclude that the entire spectrum of conflict, from low to high intensity, remains with us for the foreseeable future. Finally, the Tofflers have shown that information-based armies, such as the US-led coalition in *Desert Storm* can defeat an unorganized Industrial-Age army, but can it deal with the ubiquitous nature of the asymmetric threats of the future? In brief, can Force XXI meet the anticipated changes in the nature of war?

Force XXI and the Army After Next: A Wide-Spectrum Force?

Some US Army leaders are convinced that the paradigmatic shifts are occurring around us and our society is transitioning into the information age. The Army's own internal review, conducted to examine the impact of these changes, suggests that "tomorrow's battlefield will differ from today's in revolutionary ways." As a result, the Army plans to either modify or replace the existing systems and structures to prepare for information-age warfare. The central themes of information warfare are *knowledge* and *speed*. The Army expects its communications and

intelligence systems to provide continuous surveillance of the battlefield to deliver knowledge and connectivity to maneuver forces. It will also rely on speed to project power and to "collapse enemy maneuver forces." ²⁶

Others in the debate recognize the importance of the "individual and organizational competence and synergy." They argue that machines are useful tools, but the primacy of man in war remains unchanged since Ardant du Picq uttered the words, "man is the fundamental instrument in battle." Nevertheless, their focus is on the battle staff's role in battle command, not on the battlefield soldier. According to this view, the aim of battle command is to "optimize battlefield outcomes." This can be achieved through "teams of teams" working with a common purpose within a seamless information architecture. They also predict this will lead to a revolution in warfare, this time in battle command. The new intelligence and communication architectures are expected to provide commanders with the near ground truth. This is supposed to enable our commanders and staffs to make quicker decisions than ever before. Again, we seem convinced that knowledge might bring the enemy "to his knees principally through destruction and disruption of the means for command and control." This approach may be valid with an enemy such as the Iraqi army of *Desert Storm*, but what if we are involved in another low-intensity conflict like Vietnam or Afghanistan?

We will still face great difficulty with irregular warfare because the very nature of such conflicts tends to negate the technological advantages of our future force. It is important to revisit Henri Jomini's views on low-intensity conflicts. He concluded that there was an exception to the one great principle of massed, offensive action against a decisive point. He stressed that when encountering "civil, religious or national wars," it was pointless to mass since there was no decisive point to attack—the enemy will appear ubiquitous to the invader. He highlighted that "all the gold in Mexico could not buy the combat intelligence" required to conduct military operations by the French in Spain. However, Jomini failed to demonstrate any principles to deal with this kind of irregular warfare. His aversion to these "dangerous and deplorable" wars seems to persist today in our Army, which continues to deal with how it lost the war in Vietnam, especially when it had such overwhelming combat power over the enemy. As General Mohammed Nawroz has suggested, irregular warfare is not a war of the information age versus the agrarian society—on the contrary, it is a battle of national wills. In short, the US Army continues to follow the Jominian school of military thought, with its fixation on the enduring principles of war and continued apathy toward irregular warfare.

This leads me to conclude that the current trend indicates our Army is becoming a narrow-spectrum force designed primarily to deal with an enemy similar to the one we faced in the Iraqi desert. One solution to this problem may be the creation of what Lieutenant Colonel Robert R. Leonhard calls "asymmetrical organizations." He argues that we have traditionally designed our force structure to create mass on the battlefield, which required a large number of soldiers in a hierarchical organization resembling a "building-block" approach to force development. For instance, this methodology groups "similarly trained and equipped soldiers together in squads," a process which continued up to corps level. Leonhard suggests that we must stop thinking in terms of symmetrical building-block organizations if we are to deal effectively with asymmetric threats of the future. He promotes the idea of a multifunctional organization consisting of differently functioning units, resulting in a "functional integration" of our existing units.³² Furthermore, he envisions greater participation from all national instruments of power as well as international and US nongovernment organizations. This would require our cooperation with organizations such as the State Department, the intelligence community, the Red Cross and Doctors Without Borders. The Army's integration or cooperation with these organizations will allow further leveraging of "expertise and competence" into Army operations.³³ In brief, we clearly have much to think about as we transition into the next century, beyond our fixation on information technologies. Again, can we meet the anticipatory changes in the nature of war? How many have gone before us and suggested that a decisive arm or technology was about to cause revolutionary changes in the nature of war?

Military Theorists of the Past: Douhet and Fuller

It was not too long ago that Giulio Douhet claimed that if an air force was able to achieve air superiority, then it was only a matter of time before sustained air strikes at critical enemy targets would "quickly bring him to his knees." In short, air power was supposed to strike at the nerves of the enemy nation, ultimately causing its national will to collapse. In theory, this would bring a quick and decisive victory to the side with dominant strategic air power. In hindsight, we know Douhet's theory never came to fruition. On the contrary, the Allied strategic bombing campaign during World War II was arduous and very costly, and it was never so decisive or revolutionary. In fact, the US Army Air Forces spent approximately \$10 billion to field 34,898 heavy bombers. The bombing campaign also lasted over four years. More important, the Allies suffered 137,000 casualties during bombing campaigns over Germany. The suffered 137,000 casualties during bombing campaigns over Germany.

Ultimately, it came down to a war of attrition. Although almost all Germans suffered some form of hardship due to the bombing, most of them were able to escape "the more serious kinds of heartbreak or horror." At the same time, the bombing campaign demonstrated that people who are used to dealing with authority "will continue to respond even under very great physical stress." ³⁶ Hence, for all the damage done the bombing never broke the will of the German regime and its people.

J.F.C. Fuller also predicted revolutionary changes in the nature of war after World War I, arguing that there was an ongoing revolution in warfare. He was convinced that as the advanced nations fully transitioned from an agrarian society into the Industrial Age, it would eventually lead to similar change in military organizations and ultimately render the existing ways of war obsolete. This logically led him to the conclusion that mechanized forces would become the decisive arm instead of the infantry.³⁷ His experiences with World War I tanks made him realize that mechanized warfare could be the means to revive the art of maneuver through its means of protection and speed. He argued that it was maneuver, "not the attack, which is the foundation of victory." Most important, the object of maneuver is not to destroy the enemy but to force their surrender by denying access to supplies, especially gasoline.³⁸ Consequently, Fuller wanted to demoralize the enemy and disrupt their social infrastructure through maneuver, rather than destroy them.³⁹

One must acknowledge that Fuller's ideas held up fairly well until 1941. German victories in Poland, Norway, France and the Low Countries were indeed swift and decisive. The Germans also suffered low casualties during these campaigns. In fact, even during the hardest fighting experienced during the days leading up to Dunkirk, the Germans suffered only 5,700 casualties—considerably lower casualty rates than in World War I. The invasion of Russia, however, changed the nature of World War II from one of limited to total war. Like the air war, the land war also became a war of attrition. According to Brian Reid, it was the "180 million Russians and 150 million Americans and their willingness to fight, even more than the quality of their equipment, that decided the war."

When claims of revolutionary change dominate the military debate, the cases of Douhet and Fuller demonstrate that the correct approach is one of caution and skepticism. It would be difficult to challenge the assertion that Force XXI is fully capable of defeating another Iraqi-like threat in open terrain. However, we have discovered that there are many other fault lines which could pose significant challenges to our national security interests in the future. We cannot ignore that today's potential threats, ranging from intervention in tribal conflicts in Africa to defeating another Industrial-Age army at a location of its choosing, are likely to remain as threats in the foreseeable future. Our Vietnam legacy also serves as a reminder that no matter what the disparity in the size, technology and power of the belligerents, as long as there are no clear interests at stake, even the mighty are doomed to fail. Although we should continue to integrate the latest technologies in communications and intelligence into our organizations and systems, we must not assume that technological advances of the information age will bring about knowledge, and that knowledge will be the primary tool to impose our will on the enemy and win our nation's wars.

It is worth noting that Clausewitz viewed intelligence as "a source of friction, and a possible cause of failure." Although his views were based on the objective conditions of his era, we still have to deal with "human error and problems of perception." The fact that we may know more does not necessarily mean that we will be less uncertain. Even with the noted intelligence and communications successes during *Desert Storm*, commanders at corp level and above did not always have a common vision of the battlefield. In fact, they still had their own perceptions of the battlefield. The debate over whether VII Corps should have been in pursuit of the Iraqi Republican Guards toward the end of the ground war was largely due to "human error and problems of perception." According to General Frederick Franks Jr., the "blue lines on a map in Riyadh were probably inaccurate and thus gave General Norman Schwarzkopf an inaccurate picture of the enemy and friendly forces." This case challenges the assertion that "now you've got better visibility over the battlefield, you don't have to worry about that other direction any more. Now he [the commander] can focus all his energy in one direction." In brief, robust intelligence and communication capabilities do not necessarily equate to knowledge or a common picture of the battlefield. Even during the information age, commanders will continue to perceive information differently, and the resulting fog of war could lead to slow decision making or even costly mistakes on the battlefield.

Finally, I argue that as our Army transitions into the next century, du Picq's discovery of the primacy of man and morale in war needs more amplification. We must have a more balanced approach in dealing with the anticipated changes by modernizing our systems as well as refocusing on the soldier, tactics, discipline and organization. The power of digits and their potential effects on the battlefield cannot be ignored, but it will be the intellectual capital of our Army—the soldiers—that will transform digits into knowledge and, ultimately, help us to win our nation's wars

at the least cost. In addition to processing digits, the soldier must also understand different cultures and religions. The latter is no longer the purview of the special operations soldier or the foreign area officer. All individuals must attempt to study regional history, culture and the religions of the world, and the Army must develop a plan to institutionalize this training.

A good start in this process may be to integrate this concept with our Consideration of Others program and to expand the curriculum at our basic and advanced course to teach regional studies. We may be able to exploit retired Army foreign area officers to promote the latter effort. Our goal should be to help our soldiers "transcend the influence of our particular culture, our particular set of parents and our particular childhood experience upon our understanding." In the end, a true revolution in military affairs requires all of us to reexamine "notions of organization, training, leader development and materiel." It is abundantly clear that we need further dialogue within the Army to close the gap between technology and our current intellectual understanding of Force XXI. *MR*

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From Chancellorsville to Kosovo, Forgetting the Art of War VINCENT J. GOULDING, JR.

"Always mystify, mislead, and surprise the enemy."[1]

Those timeless words seem more likely attributable to Sun-Tzu than to their author, Thomas J. "Stonewall" Jackson; they are noteworthy because they were spoken before the 1862 campaign in the Shenandoah Valley and not in the wake of the great flanking attack at Chancellorsville. It is an important distinction. Chancellorsville was a one-sided tactical victory without strategic significance. The Army of Northern Virginia gained little except an overdeveloped sense of military hubris that brought it to the slopes of Cemetery Ridge two months later. Conversely, Jackson's tactical operations in the Valley Campaign are far less worthy studies in battle management, but masterpieces from operational and strategic perspectives. That said, Jackson's campaign in the Shenandoah Valley paid much greater dividends for the Confederacy than Robert E. Lee's "greatest battle" a year later. There is a reason for that.

The object of war is the imposition of will. It follows, then, that the object of combat operations is to maximize the impact of military force on the enemy, overwhelm him physically and mentally, and convince him that further resistance is futile. Jackson understood this fully and created in his Valley Army a specter out of all proportion to its size or battlefield successes in May and June of 1862. He did this by exploiting will-o'-the-wisp operational maneuver and the ability to hit hard where not expected. This seemingly rudimentary combination allowed the Valley Army to dominate the Union war effort in the eastern theater. In a theater of operations where Federal concentration of forces and bold action might well have led to the destruction of Lee's army outside of Richmond and an early end to the war, Federal civil and military leaders were mesmerized by Jackson and his tiny army.[2] History offers few better examples of operational success serving strategic purposes.

As we enter the 21st century, the question of whether the military forces of the United States offer the same prospect of operational success to their strategic leaders is open-ended. Jackson's brilliance was the product of audacity and maneuver, not numerical or technological superiority. He did not have more men or a better cannon; nor did he achieve the Confederacy's strategic goals by thrashing a succession of Federal armies. In fact, his battlefield record in 1862 would have better supported his relief for cause than elevation to corps command. Jackson won his battles in the minds of Union soldiers in the field and decisionmakers on Pennsylvania Avenue.

Nathan Bedford Forrest might have coined the phrase "put a scare in them." Stonewall Jackson embodied it. Jackson was also fortunate enough to be blessed with superiors willing to accept transitory tactical reverses if they contributed to the accomplishment of strategic ends. Robert E. Lee has been universally canonized in American military writings for his operational prowess, but seldom given credit for what may have been his greatest attribute: lack of a zero-defect mentality.

The same is not true today. Unwillingness to brook tactical failure or incur casualties has corrupted the ageold concept of offensive operations into the narrowly focused cottage industry of precision strike. The poorly defined concept of precision engagement has engendered in the minds of too many a onedimensional response to the infinitely more complex issue of truly achieving strategic objectives. At its core is the ill-conceived notion that the United States and its allies can intimidate, even defeat, adversaries with information superiority and smart weapons.

Why Precision Strike Is Insufficient

Physical punishment has never been enough to accomplish political or military ends. The Army of the Potomac was butchered at Fredericksburg and humiliated at Chancellorsville, yet had its finest hour at Gettysburg. Humans are a tough lot and have consistently risen to extraordinary levels in the wake of a physical thrashing. If the American Civil War seems a bit removed from today's events, consider Britons in the "blitz" or North Vietnamese during "Rolling Thunder." Both describe a human dimension worthy of study, but seldom considered.

Witness recent events in the Balkans. The air arms of NATO bombed a small, economically insignificant country for ten weeks and inflicted tremendous infrastructure damage, but provided little impetus to bring about a change in policy by the Slobodan Milosevic government. Thirty thousand sorties by more than a thousand aircraft left his army intact. In the absence of forces on the ground, Serb combat units had no reason to leave concealed positions, mass, and make themselves vulnerable to the air campaign NATO was conducting. In fact, evidence suggests it was only the maneuver of the Kosovo Liberation Army (a second-rate military organization at best) against Serb forces that caused the latter to become "visible" and vulnerable to effective air attack by NATO aircraft. Only then, as his tactical military forces began disappearing before his eyes, did Milosevic agree to come to the bargaining table. Save his army he must, and save his army he did; ironically, it was NATO that declared victory.

Milosevic understood that territory, however coveted, is useless without ground forces to control it and that, even if driven off "key terrain," an army in being need never admit defeat. Where there is no defeat, there is only unresolved crisis. This is not a new concept. Put another way, "the defeated state often considers the outcome merely as a transitory evil, for which a remedy may still be found in political conditions at some later date."[3]

While some would say NATO operations in Kosovo were a classic case of precision strike accomplishing the mission, history will likely judge them a 20th-century Chancellorsville. Clearly, NATO achieved a decisive and one-sided tactical victory, and if the goal of US strategy in the 21st century is to demonstrate tactical acumen at the expense of militarily challenged adversaries, then the standard may well have been set. Much like the air campaign itself, however, such thinking represents a shortsighted view of the operational art.

Combat operations serve no purpose if they become ends unto themselves. Time and Tomahawks notwithstanding, Clausewitz is as relevant today as he was a hundred years ago. The fundamental nature of war changes with neither the times nor the technologies used to prosecute it.[4] Recent US military interventions have occurred in environments of brutality and nonlinearity that more resemble the Thirty Years War than what we might expect from modern man. Reluctance to put the life of US soldiers on the line only exacerbates and accelerates the suffering of those we set out to help.

During the ten weeks of NATO air attacks, untold numbers of ethnic Albanians were murdered, over a million driven from their homes, and their country left a shambles.[5] When the smoke cleared, the Serb army was left to fight or brutalize another day. Recently, a former Air Force Chief of Staff challenged those who have asserted that the NATO bombing campaign failed to save ethnic Albanians from the atrocities visited on them by the Serbs. He noted that the murder of six million Jews during World War II "accelerated as Allied ground troops approached the death camps," but that "this unhappy fact does not prevent us from concluding, rightly, that we won the Second World War."[6] This very bad analogy overlooks two nontrivial facts: first, the World War II Allies' war aims were not focused on the death camps; and second, Allied ground forces had a still very much intact Wehrmacht to contend with in 1944 and '45. In contrast, NATO's goal was to stop the killing, and its ground forces never faced the prospect of locking horns with the likes of a modern-day Panzer Lehr. The issue of whether or not NATO "won the war" is yet to be resolved, but the entire Kosovo operation begs two simple questions: Did it help the victims of ethnic cleansing, and has the violence been curtailed? The answer is negative on both counts.

The world's only superpower sent the strongest possible signal that, while it is willing to conduct military operations in situations not vital to the country's national interests, it is not willing to put in harm's way the means necessary to conduct these operations effectively and conclusively. Not only has this message been transmitted to potential adversaries, it has also once again sounded the siren's song across America that military operations are high-tech and bloodless affairs. Arrogance spawned by a single one-sided "victory" is not the exclusive province of the Army of Northern Virginia, and our 21st-century Cemetery Ridge awaits us if we allow political expediency and transient technological advantage to become the determinant of successful military operations.

The United States has chosen to ignore Jackson's admonition that we "mystify, mislead, and surprise" our enemies. As long as America has lagers full of air- and sea-launched cruise missiles and assorted other precision munitions, it all too often also has an "on the shelf" military response. Diplomacy has become an

afterthought based more on consensus of the willing (NATO) to "respond" than take the time to "shape." This slippery slope will not go unnoticed by future enemies who are presumably paying more than cursory attention to what is becoming the new American way of war.

Eschewing the greater argument about vital interests and what the United States is willing to risk in order to protect them, the fact remains that success in military operations and the peace that follows can come only as the result of proficiency in fully integrated sea, air, and land operations. Technology does not, and never will, change that basic fact. To make such proficiency a reality, military forces must demonstrate operational and tactical competence enough to engender confidence in their strategic leaders. In the minds of current US decisionmakers, ground forces equate to slow response, high risk, and casualties. The advocates of precision strike beat this drum constantly.

Three things need to change. First, strategic decisionmakers must accept the fact that mission accomplishment might entail casualties. Second, the services must develop the doctrine, organizations, training, and equipment that will enable US forces to accomplish all missions quickly, effectively, and economically. The Army and Marine Corps, in particular, must demonstrate to the National Command Authorities that ground forces are a viable part of *economical* military operations. Bosnia and Kosovo have already proven they are a requirement. Third, military professionals must cease the philosophical gravitation of maneuver to the exclusive province of ground forces. Maneuver must engender the entire national decisionmaking psyche and be as psychological as physical. It goes to the very core of the oftcited, seldom-achieved "shaping" segment upon which the United States' national military strategy is founded. In the absence of such a mindset, a true strategic view and usable operational art for the 21st century cannot exist.

Strategic Maneuver

Successful operational maneuver can occur only in conjunction with a sound strategic counterpart. Successful maneuver at any level is derived from reserving options for yourself and denying them to your enemy. William Tecumseh Sherman would have called it putting your enemy on the horns of a dilemma, a philosophy which must transcend the battlefield.

Military operations, even at the lowest level, have profound strategic implications. Task Force Ranger in Somalia is a recent example. National-level policies and decisions have an equally profound influence on the military commander and can easily gore him on those same horns of dilemma. The fact that "war is a serious means to a serious end" should of itself caution senior leaders, in and out of uniform, from becoming the "irresponsible enthusiasts" Clausewitz warned against.[7] Technology-inspired panaceas which provide ad hoc tactical success may do so at the expense of long-term strategic flexibility. At the national level, flexibility can only be the product of a willingness to use all facets of the country's combined-arms capability.

Excepting the demise of the Soviet Union, one could make the case that the United States has not achieved a strategic victory since World War II. This, despite the fact that it has demonstrated limited operational and tactical acumen on a number of occasions. Even these successes will prove transitory if the current trends of casualty- and failure-phobia continue to gravitate to the tactical level. Mid-level commanders serving on the edges of America's empire are now routinely quoted as saying that force protection is their highest priority.[8] Such statements are a sad commentary; force protection is a commander's inherent responsibility, but it is never a *mission*, and accomplishment of the mission is *always* the highest priority.

Lack of willingness to be unpredictable and take risk precludes total victory at any level. Above all else, maneuver warfare is founded on those very principles. There is something to be said for the adage "nothing ventured, nothing gained." This is not to imply that US forces should be recklessly employed by either the National Command Authorities or rifle company commanders; however, if a man on the ground with a rifle is a required factor in the overall equation for success, then he should be employed. Statements to the effect that "if mission and force protection are in conflict, then we don't do the mission"[9] will continue to unduly restrict our forces as long as senior leaders tell us that the "well being of our people must remain our first priority."[10]

Joint Vision 2010 postulates that information superiority will enable the emerging concepts destined to characterize American military operations. Perhaps, but maneuver warfare is predicated on more than bumper stickers that postulate total knowledge of the enemy. Situational awareness encompasses such additional factors as familiarity with a well-defined end-state, appraisal of friendly capabilities, assessment of risk, and ability to adjust plans on the fly. Knowledge of the enemy is important but never perfect, and need only be good enough to allow decisionmakers to develop courses of action that pit friendly strengths against enemy weakness at the operational level. Operational planning doctrinally focuses on determination of the desired end-state and identification of the enemy's center of gravity and critical vulnerabilities at each of the levels of war.[11] Doctrine also tells us that planning must additionally include analysis of the *enemy's* desired end-state and *our own* centers of gravity and critical vulnerabilities.[12] Expediency has no place in the equation. Shortsighted solutions that play well in the media or pander to preconceived notions of public support generate long-term problems that become yet more difficult to solve.

Expedient solutions since the Gulf War have centered around the related issues of casualty avoidance and precision strike. These two concepts have become inexorably linked, particularly when the United States finds itself at odds with an adversary with any credible military capability. The result has been the notion that modern warfare is a bloodless, high-tech affair where the only national investment is in bombs (dollars) and not the lives of American citizens. The danger in this kind of thinking is insidious. There cannot be strategic maneuver when national policy becomes synonymous with casualty avoidance and precision punishment. This reactive approach to wielding the military option is attractive by virtue of its quantifiable success in the media and apparent lack of human cost, but it fails to address the ultimate human dimension of conflict. War is an interactive event that both sides try to win by adapting to the other's initiatives. The side that adopts the long view, remains flexible, and diligently applies lessons learned from short-term setbacks will ultimately accomplish its ends.

American military actions over the past several years have developed a predictable singularity. We bomb things that are easily identifiable and don't move: bridges, power grids, and the ubiquitous command and control center. Such targets are based less on an analysis of the enemy's center of gravity than on "do-ability" and media visibility. Precision-guided munitions are optimized for fixed infrastructure targets, not support of operational maneuver. In effect, the United States has reverted to a high-tech version of the famous Cold Warrior Curtis Lemay's "bomb them into the stone age" philosophy. The great irony is that General Lemay's proposed bombing of infrastructure in North Vietnam was labeled inhumane economic warfare and rejected, despite the fact that thousands of US troops were at risk on the ground. In the 1990s, with no ground forces at risk, the United States has routinely bombed infrastructure targets that had significant economic impact on combatants and noncombatants alike.

The results of precision strike against tactical formations have been less compelling, and the lessons of Operations Desert Shield and Desert Storm have not been lost on individuals and organizations unfriendly to the United States. Enemies now seek the urban battlefield and have relearned techniques of cover and concealment long atrophied during the Cold War. NATO's initial post-Kosovo battle damage assessment claims have been tempered by physical evidence suggesting that many very expensive bombs hit many very inexpensive decoys or nothing at all. Battle damage assessment aside, a sobering conclusion from all this is that the further the United States gets from major theater war, the greater the demand for expensive munitions which exist in finite numbers. Events since the Persian Gulf War would indicate that military operations other than war (MOOTW) generate rules of engagement that restrict commanders to the almost exclusive use of precision-guided munitions (PGMs). Based on PGM expenditures during the ten weeks of bombing in Kosovo, the "two nearly simultaneous major theater war" strategy seems more than a little suspect. The Department of Defense has requested \$1.4 billion in supplemental funding to replenish stocks of PGMs used during Operation Allied Force.[13]

The most precise instrument of war any country can produce is the man on the ground. As military operations gravitate toward the MOOTW side of the scale, US forces will encounter enemies who combine skill in tactical deception and concealment with the savvy to exploit fear of collateral damage and American casualties. Such enemies will require more than precision strikes to defeat them, and our military operations will require more than space or airborne sensors to assess them.

The battlefield of the 21st century will require forces on the ground, yet the United States is loath to put such forces in harm's way. As long as this remains the case, enemy commanders have no incentive to array their forces for conventional military operations. Unfortunately, this does not mean that these same forces cannot conduct ground operations that we justifiably find reprehensible. The well-publicized discoveries of mass graves by the initial NATO forces to enter Kosovo bear this out. Yet instead of examining this fact as a "deficiency," NATO declared victory and stood by while the media and politicians demonized the Yugoslav government for political purposes. Strategic leaders need to get beyond the rhetoric, look objectively at accomplishment of the desired end-state, and determine what could have been done differently to make the operation more effective in its totality. If stopping the bloodshed is one of the primary objectives of military intervention, then declaring victory should wait until it has truly been achieved. There is no victory in the Balkans.

Strategic Stumbling

The picture that begins to emerge is a United States quickly moving down the path of establishing a diplomatic and military precedent which describes a policy lacking workable options. Without options there is no maneuver, only a throttle that enables us to increase or decrease the level of punishment we mete out as our satisfaction with overall progress in a given situation waxes and wanes. Too little time is spent shaping and far too much responding.

The United States and its allies have become strategically hamstrung by a well-publicized aversion to casualties. There is universal agreement that the real issue is reluctance to incur casualties in situations not in the national interest, but since US forces are routinely employed on such missions, the argument is moot. This is not a new issue. Bismarck questioned the use of his Pomeranian grenadier in the Balkans more than a hundred years ago. The fact of the matter is that few nations have deliberately squandered their soldiers' lives in the quest for world tranquillity, or even dominance, and the United States is not the first to find itself confronted by the thorny dilemmas inherent in superpower status. It is probably worth remembering that "a great country can have no such thing as a little war."[14]

When US forces are employed, the whole world is watching, the whole world is judging, the whole world is learning. What the world is learning now is that the United States will not put ground forces in harm's way during the critical early period of intervention. When ground forces are ultimately employed as "peace" enforcers, they are locked in a secure enclave where they have minimal influence on post-hostilities. While it is a marvel of American culture that US soldiers can enjoy lunch at their sandbagged Burger King in Camp Bondsteel, Yugoslavia, one has to wonder what people whose homes have been destroyed must think. From the operational standpoint, it is intuitive that what goes on "outside the wire" will become more and more vague to America's peacekeepers the longer they remain in their self-proclaimed "metropolis."[15] Our allies call it Disneyland.[16]

Situational awareness comes from more than intelligence reports and overhead imagery, and an enclave mentality does more than protect US forces from the "destruction, anguish, and hazards" of the peacekeeping environment.[17] It monasticizes the peacekeepers to the point where their presence is little more than a mass casualty waiting to happen. Reverting to an enclave mentality, with soldiers conveniently centralized in a well-defined area, is an open invitation for indirect attack. The lessons of Beirut and Khobar Towers are still valid. Admittedly, both are worst-case scenarios, but both happened. Even in the absence of catastrophe, however, there is no development of overall situational awareness or kinship between these soldiers and the people they have been sent to help.

The real unintended consequence is even more insidious and damaging. The portrait of US ground forces becomes complete in the eyes of future enemies: too valuable to be risked in combat, too soft and coddled to bear the rigors of peacekeeping. The legacy of Stonewall Jackson's foot cavalry has been consigned to the dusty pages of US military history.

It all makes one wonder why our soldiers are there in the first place (probably the soldiers wonder as well). If the primary mission of US forces has become their own force protection, there is no justifying their leaving home in the first place, especially in view of the fiscal overhead incurred by operating in this manner. The cost of Camp Bondsteel was estimated in October 1999 to be \$32 million and rising.[18] Once

again, the employment of ground forces has been characterized by "overhead" and a lack of operational flavor.

Developing a force that is operationally capable and genuinely respected by its enemies ensures force protection; surrounding the force with concertina does not. Any nation's military leaders are responsible for providing forces that give decisionmakers the options they need to maneuver on the strategic battlefield quickly, effectively, and with the expectation that the loss of human life will be minimal. The Department of Defense has demonstrated room for improvement in all areas; yet the Joint Statement on the Kosovo After Action Review devotes scant attention to enhancement of ground forces in future operations. This, despite acknowledgment early in the paper that "military force could not stop Milosevic's attack on Kosovar civilians,"[19] at least not military force as NATO employed it.

In a National Security Seminar at the Army War College in June 1999, a civilian participant made the statement that he was never prouder of the United States than he was with the intervention in the Kosovo crisis. When asked if he would have felt the same way if American ground forces had been used to accomplish the mission more quickly to reduce the scope of refugee exodus and atrocity throughout Kosovo, he was not so sure.[20] His reasoning was that ground forces equated to friendly casualties. This hesitation of an American citizen is reflected in the hesitancy of our nation's leadership. The desire to do the right thing is tempered by the realization that to do what is right, and to do it right, implies casualties. Lessons learned from military operations need to extend beyond enhancing what we most recently did to what we must do in the future. The military landscape is rapidly changing, and buying more Joint Direct Attack Munitions or Joint Air to Surface Standoff Missiles is not necessarily the answer. Such weapons may well be part of the answer, but only a part.

Long-range precision strike will always be an option, but to truly put future adversaries on the horns of a dilemma, the additional dimension of equally precise combined-arms ground operations is an absolute requirement. The National Command Authorities must have at their disposal forces that provide options that are usable and cost-effective. Failure to do so consigns the United States to a single-dimension military option, and consigns US military forces to a powerful but in many cases inappropriate or even ineffective tool of national policy.

Operational Maneuver

Operational maneuver cannot--must not--wait for arrival in theater. Joint Publication 3-0 tells us that "the principal purpose of maneuver is to gain positional advantage relative to enemy centers of gravity in order to control or destroy those centers of gravity."[21] War is not about positional advantage; it is about defeating the enemy. Operational maneuver is not the first step in a scripted sequence of events designed to achieve victory. Effective military operations are not conducted point-counterpoint on a lacquered chessboard (or a flat screen display). Chess, unlike war, is a gentleman's game where the players enjoy perfect situational awareness and politely take turns moving their pieces. Combat is not a game. The winner hides his pieces and takes a dozen moves before the enemy gets even one. General Sir William Slim's sergeant major said it well when he counseled the then-young cadet, "There's only one principal of war. Hit the other fellow as quick as you can, as hard as you can, where it hurts him most, when he ain't lookin'."[22]

Operational maneuver must resonate with an ever-increasing cadence that achieves psychological advantage at the outset and enemy defeat at its termination. Mentally and physically, US forces must drive the tempo and create that specter of dominance and invincibility Stonewall Jackson understood so well. The United States and its allies are not going to intimidate future enemies by bombing them or deploying technologically advanced weapon systems to secure areas in theater. The 21st-century fighter will not be cowed by diplomatic or military signals, just as the bully on the block was never impressed with reason.

American military forces enjoy a profound geographical advantage from the outset in conducting operational maneuver. Their operations will be directed at enemies who are reached by coming from significant distance, frequently over water. The oceans and seas of the world should be viewed as high-speed avenues of approach and not as time-distance obstacles. US military forces are, by their nature, expeditionary. If they are uncomfortable with or unsuited for that role, they are irrelevant. To be relevant, military forces must be quickly employable and already possessed of the training and tools they need to

accomplish the assigned mission *immediately upon arrival*. Employing military units, however technologically advanced, with the notion of "training them up" in theater is as inefficient as it is dangerous. The deployment of Task Force Hawk to Albania in support of Operation Allied Force graphically illustrates the pitfalls.

The notion of a "lodgment phase," as described in Joint Pub 3-0 is outdated and requires reexamination in light of enemies who will seek to deny ports and airfields to US forces. It should come as no surprise that China, for one, has concluded that one of the United States' most exploitable vulnerabilities is its reliance on fixed bases in the region.[23] To predicate future military operations on secure entry facilities and conveniently located overseas bases breeds operational clumsiness and creates vulnerabilities. Such thinking is predictable and invites the very casualties that have become so integral a part of the national decisionmaking process. Ports and airfields are potential killing zones for military forces that tarry around them, particularly in the early stages of US intervention. This transcends facilities "in country," and includes those conveniently located elsewhere in theater. Future enemies will be able to reach out across strategic distances. It is a basic and asymmetric approach to warfare that is often alluded to but seldom taken seriously.

Focus must be on the enemy, not his facilities. From the moment the decision is made to employ military force, the process of setting the tempo and overwhelming the enemy begins. The fact that intelligence will be incomplete and our knowledge of enemy dispositions sketchy does not matter. If there is such a thing as information superiority, it is surely a chimera that will be attained incrementally only as the situation develops. It will not exist going in, nor can we wait to achieve it before commencing military operations. Colonel Chesty Puller might have overstated it a bit when he told his Marines on the eve of the Inchon landing that "we'll find out what's on the beach when we get there,"[24] but there's some validity to his cautionary advice. Intelligence is a constantly moving target that improves only as the situation develops.

Emotional baggage rooted in the sometimes archaic concept of "fire and maneuver" frequently drives us to wait for the one additional piece of information that will better enable us to accomplish the mission. The dogma that you cannot maneuver in the absence of fires is not only passé, but counterproductive to high-tempo operations. If your mission is to kill snakes, there are times when you're just going to have to kick the rock to find out whether one is under it. The key to success is replacing the fear of kicking the rock with confidence in your ability to strike effectively before being struck.

Fire and maneuver are neither sequential nor separate components of combined-arms operations. When our enemy disperses his forces to make them less vulnerable to the threat of air-, sea-, or ground-based fires, he has already reacted to the initial stages of our operational-level maneuver. This reaction is a mixed blessing from the US perspective. On the positive side, enemy military formations degrade their ability to conduct effective military operations by hunkering down in dispersed and concealed positions. This is a plus, however, only if we choose to exploit the situation and fully comprehend that there is also a negative side. By holding the sword of precision strike over our adversary's head, in many cases we will compel him to resort to a style of warfare for which we are ill-prepared and for which nonbelligerents on the ground pay a horrific price. When the United States and its allies pose little threat to the military units that provide tangible power and presence on the ground, enemy commanders are relatively free to conduct the small-unit, "police" type actions that UN forces uncovered the results of in Kosovo. The legacy of these depredations goes beyond purely altruistic humanitarian concerns. The resultant climate of reprisal and instability remains long after the precision strikes have ended and precludes mission accomplishment in the truest sense. Ongoing Albanian reprisals against the Serb population in Kosovo hardly describe the end-state NATO was looking for.

Winning at the operational level requires the destruction of the enemy's capacity and will to conduct *any* military operations. This equates partially to the physical destruction of military equipment and the forces that employ it, but much more to his cohesion and perceived ability to carry on. Because we are fighting an enemy who wants to preserve what we seek to destroy, US forces will find themselves with a window of opportunity in which to capitalize on his fear of precision strike. While dispersed and concealed, enemy forces are ill-prepared to conduct conventional military operations and are susceptible to the first canon of maneuver warfare: strike his gaps while avoiding his surfaces.

The conventional approach would describe gaps as isolated and vulnerable enemy formations that can be overwhelmed through a combination of operational and tactical surprise and effective fire and maneuver. Nothing new here. The difficulty (and current deficiency) is integrating operational and tactical maneuver. Traditionally, US forces have compensated for a lack of true operational maneuver in ground forces by using a phased approach. The notion of lodgment first, then "decisive combat and stabilization,"[25] is the antithesis of operational dexterity. It squanders the opportunity to exploit operational-level maneuver achieved *en route to enemy territory* and results in degeneration to a battle of attrition as both sides seek to mass combat power and sustainment in the vicinity of the lodgment. There is no place for a lodgment mentality in doctrinal publications or in the initial stages of future US military operations.

US maneuver elements must strike into areas of enemy strategic interest which are defended either lightly or not at all. The intent is to "penetrate the enemy system and tear it apart." [26] In some cases, this will include attacks on centers of gravity, but more often on what are generally referred to as critical vulnerabilities. The employment of ground forces will not wait for every command post, armored vehicle, and strongpoint to be identified and targeted. Such a capability obviously requires a tactical self-confidence that is shared by operational and strategic planners. Once on the ground, combined-arms maneuver units will aggressively seek out enemy formations with a combination of organic sensors (air, ground, electronic) and reachback to nonorganic assets. Enemy commanders will be placed on the horns of a dilemma. They can remain hidden, dispersed, and combat-ineffective, or they can begin to take the steps necessary to meet the threat presented by potent ground forces maneuvering throughout the battlespace, oftentimes between them and their sources of sustainment and reinforcement. The more they react, the more vulnerable they become, susceptible not only to the organic fires of the combined-arms maneuver force, but to the reachback fires from air- and sea-based platforms. The enemy's downward spiral begins and accelerates as an ever-increasing and well-directed tempo of operations takes away his options and overwhelms him.

Getting There

Unfortunately, such a capability does not exist today. Employment of US decisive force is predicated on forward-basing at best, benign ports and airfields at worst. Neither assumption reflects the realities of military operations in the 21st century, and both relegate employment of decisive force to the "too hard and too risky" category.

Solutions to the lodgment dilemma generally fall into two categories: deployment "from CONUS to combat," or to an intermediate staging base prior to commencement of military activities. Neither is the answer for ground forces. While the prospect of conducting combat operations directly from the continental United States is attractive philosophically, it is impracticable beyond small, specialized missions more properly categorized as raids. As the potential for combat operations in their truest sense increases, our ability to conduct them directly from the United States diminishes proportionally.

The US Army's ongoing Army After Next program, charged with looking at land combat in the 2025 time frame, began conducting strategic and operational-level wargames in 1997. It became evident early in the process that the concept of "CONUS to combat" was flawed and, if executed, in many cases forced strategic decisionmakers into unwelcome situations.[27] Army futurists are now looking more toward the use of intermediate staging bases in proximity to the area of military operations.

While a step in the right direction, this approach has problems of its own. Depending on erstwhile friends and allies to grant basing rights in the increasingly complex and dangerous world is a questionable proposition. Certainly, if they are proximate and available, US forces would be foolish not to use them. Given the propensity of future enemies to carry the war to wherever the threats to his success may be, however, America should remain mindful that it will take a very courageous nation indeed to allow US forces to launch attacks from its sovereign territory. The United States and its allies experienced this problem time and again during the closing years of the 20th century in Southwest Asia and the Balkans. The trend is not likely to change.

Few would dispute that the deployment of decisive force to a major theater war requires traditional entry points, a dependency that clearly describes a US critical vulnerability. Enemies of the future will regard access denial as a primary mission. To expect anything else is fanciful and dangerous. Given US reliance on afloat prepositioned equipment to compensate for a shortage of amphibious lift, both the Army's Afloat

Prepositioned Sets (APS) and Navy/Marine Corps Maritime Prepositioning Force (MPF) become at once indispensable and archaic. Diesel submarines, mines, and easily neutralized or targeted ports and airfields all describe serious threats to a capability that has served the United States well since the 1970s, but which requires a serious reappraisal. Reliance on sophisticated deep-water ports or in-stream offloads within tank main-gun range of the beach should be the stuff that causes strategic planners sleepless nights.

The best avenue of approach for ground forces may also be their best forward base. It is no accident that the Navy and Marine Corps regard seabasing as the cornerstone of future operational capabilities and are even now exploring the key issues of sustainment, fires, and command and coordination from the seabase.[28] Is such a configuration invulnerable to enemy attack? Absolutely not. Is a seabase less vulnerable to attack than a fixed land site and more responsive to a rapidly changing operational environment ashore? Absolutely. New strategic imperatives, operational requirements, and friendly critical vulnerability analysis necessitate new ways of thinking.

Conclusion

Maneuver is a strategic issue whose essence lies in the reservation of options for yourself and the denial of them to your adversaries--at all levels. It is not the exclusive province of the operating forces or tactical units. Yet it is the responsibility of these units to develop the capability to execute maneuver warfare and to give strategic leaders the confidence they need that these forces can fight and win effectively and economically. Strategic maneuver sets the tone and must begin with leaders who are willing to use all the tools at their disposal to achieve national objectives. These same leaders must not be intimidated by the risk of tactical failure--even casualties--as they pursue strategic success. The country will never produce another Stonewall Jackson if it doesn't first cultivate another Robert E. Lee.

The doctrine, organization, and training to support the quick, decisive, and temporary employment of US combat forces will follow, regardless of the level of war. Accomplish the mission, turn the peacekeeping over to coalition forces, come home.

If the situation then resurrects itself because of some misguided perception that America's "foot cavalry" has returned to its US bases and the coast is clear, let no future enemy fail to understand that we will be back quickly, economically, and just as decisively. The word will get out. Before long, enemies will come to understand that a US military response entails more than precision strike. Successful combined-arms operations, of which precision strike is a part, will create a true deterrent to those who would threaten the vital interests of America and our allies.

NOTES

- 1. Peter G. Tsouras, Warriors' Words (London: Arms and Armour Press, 1994), p. 121.
- 2. Jackson's forces numbered anywhere from less than 3,000 to approximately 16,000 during the period from the battles at Kernstown to Cross Keys and Port Republic. See James I. Robertson, *Stonewall Jackson: The Man, the Soldier, the Legend* (New York: Macmillan, 1997).
- 3. Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton Univ. Press, 1976), p. 80.
- 4. See Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War," *International Security*, 17 (Winter 1992/93), 59-90, for an in-depth discussion of the applicability of Clausewitz to the future battlefield.
- 5. Peter Finn et al., "Across Kosovo, Death at Every Turn," *The Washington Post*, 16 June 1999, p. A1.
- 6. Merrill A. McPeak, "The Kosovo Result," *Armed Forces Journal International*, September 1999, p. 62.
- 7. Clausewitz, p. 86.
- 8. Don M. Snider, John A. Nagl, and Tony Pfaff, *Army Professionalism, the Military Ethic, and Officership in the 21st Century* (Carlisle, Pa.: USAWC, Strategic Studies Institute, December 1999), pp. 1-2.
- 9. Ibi
- 10. William S. Cohen and Henry H. Shelton, "Joint Statement on the Kosovo After Action Review," 14 October 1999, prepared joint statement presented by the Secretary of Defense and the Chairman of the Joint Chiefs of Staff before the Senate Armed Services Committee. Hereinafter referred to as Cohen and Shelton.
- 11. US Joint Chiefs of Staff, Joint Pub 3-0, Doctrine for Joint Operations (Washington: GPO, 1995), p. 20.
- 12. See Dr. Joe Strange's "Centers of Gravity & Critical Vulnerabilities," *Perspectives on Warfighting*, Number Four (Quantico, Va.: Marine Corps Association, 1996). Dr. Strange provides an exhaustive discussion and analysis of these two vitally important considerations in strategic planning.
- 13. Cohen and Shelton.
- 14. Tsouras, p. 468. Attributed to Lord Arthur Wellesley, Duke of Wellington (1815).
- 15. R. Jeffrey Smith, "A GI's Home Is His Fortress," *The Washington Post*, 5 October 1999, p. A11.

- 16. Ibid.
- 17. Ibid.
- 18. Ibid.
- 19. Cohen and Shelton.
- The National Security Seminar is a week-long annual event at the US Army War College, during which non-DOD
 civilians participate with War College students in a full spectrum of formal presentations and informal discussions.
- 21. Joint Pub 3-0, p. IV-8.
- US Marine Corps, Marine Corps Doctrinal Pub 1, "Warfighting" (Washington: GPO, 1997), p. 69. Hereinafter referred to as MCDP 1.
- 23. Mark Stokes, China's Strategic Modernization: Implications for U.S. National Security (Carlisle, Pa.: USAWC, Strategic Studies Institute, 1999), p. 141.
- Robert D. Heinl, Victory at High Tide, The Inchon-Seoul Campaign (Annapolis, Md.: Nautical and Aviation Publishing Company of America, 1979), p. 77.
- 25. Joint Pub 3-0, p. III-18.
- 26. *MCDP 1*, p. 73.
- 27. The author has participated in a number of TRADOC-sponsored Army After Next wargames conducted at Carlisle Barracks, Pa.
- 28. For detailed discussions of Navy and Marine Corps development of seabasing as a future operational concept, suggested readings include *Operational Maneuver from the Sea, Ship to Objective Maneuver, Maritime Prepositioning Force 2010*, and *The MAGTF in Sustained Operations Ashore*, all available through the Marine Corps web site, http://www.usmc.mil.

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Chief Advocate For Jointness GLENN W. GOODMAN, Jr.

On 1 October, US Atlantic Command (USACOM) in Norfolk, VA was redesignated US Joint Forces Command (USJFCOM). Once primarily a maritime command, in 1993 its mission changed significantly when it was assigned the major new responsibilities of training and integrating multiservice combat forces based in the continental US (CONUS) to conduct effective joint operations overseas. It was also made DoD's joint force provider, dispatching appropriate CONUS-based forces to support the operational needs of the geographic commanders-in-chief (CinCs). In 1997, the Caribbean was transferred from USACOM's area of responsibility to US Southern Command's. In October 1998, USACOM was made DoD's executive agent for joint warfighting experimentation.

Admiral Gehman became USACOM's CinC in September 1997 after serving as the Vice Chief of Naval Operations for a year. He was a natural choice, having previously served as Executive Assistant to USACOM's CinC in 1990-91, as USACOM's Director for Operations in 1991-93, and as its Deputy CinC in 1994-96.

Name change from Atlantic Command to Joint Forces Command:

"Our new name highlights changes in our mission that have already taken place [such as the joint experimentation charter last year]. On 7 October, the new Unified Command Plan also made some minor revisions to our area of responsibility, taking away a few billion square miles of empty ocean [the Atlantic west of Africa as well as waters around Europe]. But our new name primarily reflects our move toward more functional responsibilities and away from being a typical geographic command.

"We are now clearly focusing on the full areas that come under the category of being the chief advocate for jointness among the military services. Those areas include joint training, doctrine, interoperability, and experimentation for the future, as well as the business of [influencing] joint requirements. The area of joint requirements comes into play only from the point of view that it doesn't do any good to go out and review training, or to come up with training regimes, or to look at doctrine or organizational matters and come up with conclusions, or to experiment with future capabilities, unless you can somehow make the changes take place. And the way you make the changes take place is by entering into the requirements process."

JFCOM's joint warfighting experimentation role:

"We have responded to the interest of both Congress and the Secretary of Defense, who wanted to satisfy themselves that there is an organized, methodical, and systematic way of looking at [joint-services] requirements that complements, and keeps pace with, individual service efforts that are examining new capabilities and new missions. We read all the time about how all the services are conducting experiments and trying new things. The question that arises is, where is the work being done in the joint world to ensure that joint requirements are being looked at for the future? We're now doing that work, and we also provide the overarching operational context in which the services can conduct their experiments. Otherwise, there would be five or six very aggressive enterprises all running along, optimizing their work for their own service requirements and sub-optimizing it for their joint requirements, when we all admit that any [overseas] operation we conduct in the future is going to be a joint-services effort.

"In October 1998, when we were assigned the joint experimentation responsibilities, we had no money and no people [to accomplish them]. In one year, we have come a long way. We ran a very aggressive start-up program in the first year using reprogrammed money, and now have a military and civilian staff and a long list of accomplishments. Starting in Fiscal Year 2000, joint experimentation is a regular programmed activity within our budget. So we've put the program on a good, solid basis that's recognized in the bureaucracy of Washington, DC, and we have produced a long-range plan that shows what we will be doing in the out-years.

"We're not a big organization, so we've had to focus our activities. We've decided to start with a large, integrating concept—Rapid Decisive Operations—and under that are nine supporting concepts.

Realistically, in the first year we will probably actively work on five or six of those, and they have to do mostly with organizing the joint activities of our own forces more efficiently. In other words, taking the 'fog of war' out of our side. We won't worry about adversaries yet; we're looking first at our own operations."

Joint experimentation goals:

"As a way of getting our hands around this very complex subject, we've had to build a construct, or business plan, which organizes our work in terms of near-term, mid-term, and long-term objectives. We're working on all three areas simultaneously and equally.

"Our near-term objectives involve capabilities that we currently have that we know we'd like to improve. Integrated air defense is a good example. We still have command and control problems, IFF [identification friend-or-foe] problems, and things like that. So we know we want to do better in those areas.

"We define our mid-term goals as implementing the concepts of Joint Vision 2010. The year 2010 sits just outside the Future-Years Defense Plan time frame. Our mid-term experiments will build joint capabilities with emerging technologies and evolutionary operational concepts. We don't know the answers to all the concepts of Joint Vision 2010, so a lot of work needs to be done.

"Our long-term goals involve the so-called revolution in military affairs—the joint force-after-next. We want to develop and explore revolutionary concepts and technologies. Here we are talking about future military capabilities that we only hypothesize right now, but we want to make sure, if there are [achievable] military capabilities out there that are currently just visionary and hypothetical, that the United States gets them first and that no potential adversary can steal a leap-ahead in technology on us and surprise us."

Ongoing joint experiments:

"We've gone from the 'crawl' stage to the 'walk' stage. We're not running, but we're now walking, in that we have some productive activity going on. One of the things that we're doing is providing joint oversight and joint conceptual help, as well as money, to some of what we consider to be the better service experiments, such as the Air Force's Expeditionary Force Experiments, the Army's Advanced Warfighting Experiments, and the Navy's Fleet Battle Experiments.

"We're doing unilateral work, that is, funded, sponsored, and run by us, in the area of attack operations against critical mobile targets—finding and destroying things like strategic surface-to-air missiles or Scud launchers. We know US forces must get better at doing that. We've already had experiments under way in that area. The first set looked at a couple of aspects of the problem, such as sensors and better weapons. The next set will likely address organizational and doctrinal aspects, that is, are we organized properly to do this or do we have too many layers, too many stovepipes, too many legacy organizations? Everyone loves our work in new and improved sensors and smarter, faster weapons—things like that—but when we start talking about doctrine and organizational matters, we may [ruffle some feathers].

"Joint theater missile defense is an area we were assigned to do several years ago by the JROC [Joint Requirements Oversight Council] long before joint experimentation was ever a DoD program. We were given the job of drafting, and winning approval for, the theater ballistic missile defense Capstone requirements document, which supercedes the individual services' operational requirements documents. One of the new requirements that we generated was that the services' various systems must be interoperable, and that costs money. So that's a case where we have actually affected the acquisition program.

"I think that's a good precedent. [Similarly], after we've done several years of work in other joint operational areas—once we've done the homework and have the analysis to know what is the best way for the joint world to conduct each one—we'll then go to Washington and try to get our recommendations approved and funded. Of course, money doesn't grow on trees; someone will have to give up something in order to pay for meeting new joint requirements. That's where the rubber meets the road in this business."

Defining joint interoperability requirements:

"As we began our work several years ago in being advocates for jointness, we quickly discovered that breast-beating and hand-waving were not sufficient in the technical world of program managers and budget people. We had to actually define what we were talking about. How much interoperability? What data rate, how many bits per second, how many errors per message, technical details like that. So it has taken us a significant amount of time to develop interoperability criteria. Of course, they vary by capability; they are different in the logistics world, for example, than for things like a single integrated air picture, which is much more technical and fast-moving.

"In the area of theater ballistic missile defense, for example, interoperability means that we must have a collaborative command and control system, so that if one of our anti-missile systems gets a kill or if it misses an intercept of an incoming ballistic missile, our other complementary systems will understand that the target has already been engaged or that it was missed and needs to be re-engaged. We also want to ensure that not everybody shoots at the first incoming missile; that we don't shoot our very expensive high-altitude missiles against low-altitude, short-range threats; and that if an incoming object is a decoy, then all our systems understand that it is a decoy.

"Interoperability also means that we must have collaborative missile planning systems, so that everybody understands what is covered and what is not covered and who is reinforcing and who is not reinforcing, such that when we position these assets, the theater commander has the coverage that he wants rather than, say, having the Patriot battery commander go pick out the nicest spot to place his battery, without keeping in mind that there might be an Aegis cruiser right next to him. These types of collaborative requirements were not previously provided for in either the Patriot or the THAAD or the Aegis theater missile defense systems.

"So we're now developing those interoperability criteria, which is a new contribution. We've already completed them, in some cases. That's one of the things we use our money for—to pay smart, technical people to help us define what joint interoperability means in each case in technical terms and how much it costs—so that our acquisition executives and the JROC can decide if they want to pay for it."

Why joint requirements are important:

"If we say that, in 2010, we want to be able to do precision engagement on the battlefield—or, in other words, we want to be able to hit moving enemy targets in real time in close proximity to our own troops—that then envisions that all of our ground, air, and maritime units have a common view at least of the Blue [friendly] Forces on the battlefield. If you ask, 'Is there any requirement in today's command and control systems for all the services to have a common view of the battlefield?', the answer is that there is not. [Today] each service builds its own system optimized to meet its own requirements, and then we make it interoperable afterwards when it gets in the field. We are never going to be able to do the kind of operations we envision in 2010 if we don't have at least a common view of the Blue side of the battlefield, and we are currently building systems today that will not allow us to do that. And that [deficiency] limits our joint capabilities today, too.

"That's an example of how we can look ahead and provide useful insights to the Defense Department that it can apply today to [new systems] that are currently on the drawing board or in testing."

Future joint experiments:

"At our current level of funding, we will be able to have a robust joint experimentation program in which we will conduct modeling and simulation-based experiments, war games, seminars, and research activities ourselves, and we will also be able to provide some funding for service experiments that appear to be not quite 'joint' to add the joint flavor to them so we can all get something out of them.

"But we envision that, at some point in time, we will want to conduct a major field trial of joint operational concepts that we have in mind, similar to a joint training exercise, but this would be experimentation, not training. A large-scale joint training exercise like Roving Sands costs on the order of \$40 to \$50 million.

That amount of money is not programmed in our joint experimentation budget right now. But we have a marker out there so that if we mature and it looks like we are getting smarter and are reaching conclusions that need to be tested, we will have a major field experiment in about 2004 in which we will take some of these operational concepts that we have modeled and wargamed and see if they really work out in the field. That would be something we'd have to program money for, and the services would need to support us with troops, vehicles, and aircraft."

Eliminating service redundancies:

"I believe that this is a target-rich environment, and it's my goal to demonstrate before the end of my tour here that I'm saving more money than I'm spending. Now, all redundancy is not bad. Some amount of redundancy and competitiveness and alternative solutions among the services is useful and good. But the first thing we do before we begin an examination of any capability area is a baseline survey. We identify every agency that's already working in that area, find out what they've already done, and read their reports. In the case of attack operations against critical mobile targets, we have found more than 45 other centers, agencies, commands, committees, and study groups that are working in this same area. We held a conference of all those people and, for most of them, it was the first time that they had met their counterparts.

"The question then arises, 'Among those 45, is there some consolidation that could be done?' If there is, then we can generate savings. So it is my anticipation that, by the end of Fiscal Year 2000, it will be very close in terms of whether or not we're saving as much money as we're spending, and from then on we should actually be saving the Defense Department money."

Interaction with the JROC and the DAB:

"The JROC is under the direction of the JSC vice chairman [and is composed of the service vice chiefs], so I will be invited to attend JROC meetings when they are discussing matters in which I have an interest. Also, I can ask to attend a JROC meeting if I want to do so. The same goes for meetings of the DAB [Defense Acquisition Board]. The deputy secretary of defense and the under secretary for acquisition and technology have both indicated that any time the DAB will address a joint program or a program in which we have expertise or an opinion, I will be invited to attend as a speaking member, and any time I see one that I think I should attend, I can ask to do so.

"We are now beginning the process of getting ourselves smart enough to attend one of those meetings. Once again, it doesn't do any good to just go to the JROC and beat your breast and cry crocodile tears about jointness unless you have analyses and data [to support your] argument that we ought to do things this way instead of that way. And we are just beginning. But I expect that this year you will see us attending DAB and JROC meetings, and I suspect that you will see instances where a program is scheduled to go to the DAB or JROC but the meeting is postponed because we have a problem with the program and the program manager wants to work with us to resolve it through a sort of 'out-of-court settlement.' I think you will start to see that happen, and that's good and healthy."

Role in implementing joint experimentation within NATO:

"There's a program within NATO called the Defense Capabilities Initiative, in which we are urging NATO very strongly to look at certain military capabilities that we're fairly certain it is going to need in the future. There are 58 of these Defense Capability Initiatives. One of them is concept development and experimentation. Under my NATO hat as Supreme Allied Commander Atlantic, I have specifically taken the lead in this area, which directly parallels my work in the US. I am able to leverage both sides. For example, I can feed things of coalition and allied interest into my US experimentation program, and I'm also able to glean information from the US program that is appropriate and very useful for NATO."

Successful joint task force (JTF) headquarters staff training:

"Thousands of officers have graduated from our Unified Endeavor exercises [which teach flag officers and their staffs how to function effectively as a JTF headquarters controlling a military operation in support of a

regional commander overseas—October 1996 AFJI]. Some of those officers are wearing four stars now, and many are wearing three stars. The insights that they gained are starting to bear fruit. Even during the Kosovo operation, we received calls from officers in command and control centers all over Europe who remembered training they had received here and requested information, mobile training teams, instructors, and other help. We had dozens of our people in Vicenza, Naples, Stuttgart, and other key locations, helping out behind the scenes."

Lessons in jointness:

"I believe that we have matured significantly in our thinking about how the joint world should do military operations better than we have in the past. Kosovo gave us a lot of joint insights, in addition to insights about precision-guided munitions and things like that. We gained a lot of procedural, doctrinal, and organizational insights too.

"To give just one example that we still have to explore, it's possible that the skills required in the joint world to execute the precepts and the doctrine envisioned in Joint Vision 2010 mandate a level of joint skills and a level of joint professionalism that we cannot attain by building ad hoc JTFs for each operation, which is currently our doctrine. It's possible that, in order to reach the level of expertise in targeting and precision engagement, mobility, information operations, and all the other things that we want to do in Joint Vision 2010, we may not be able to do it through ad hoc JTFs.

"Now, that doesn't mean that we should have standing JTFs. But it may mean that we need more functional experts like the JFACC [Joint Force Air Component Commander] concept, in which we train functional teams, and these previously trained expert personnel would then go to augment the JTF. It may be that in the areas of targeting and exploitation of sensor data and sensor-to-shooter operations, in which you want only a minute or two to elapse from the time you see a target through electronic means until you put a bomb on it, a level of expertise and coordination and precision is required that, maybe, an ad hoc team can't provide.

"That's a joint doctrinal issue, and it's going to take a considerable amount of work before we come to a conclusion about it. It's a good example of the kind of joint operational and doctrinal concepts that we're involved in looking at which have nothing to do with precision-guided munitions or electronic combat aircraft or weapon capabilities, yet it's an issue that has fundamental organizational implications."

Battles and Campaigns

Brilliant Cavalry Exploit

Tim DeForest

U.S. Grant, bogged down outside Vicksburg, needed a diversion to ease his way. He got just that from a music teacher turned cavalryman--one who hated horses, at that.

In the early months of 1863, Major General U.S. Grant's primary objective was Vicksburg, the last Confederate stronghold on the Mississippi River. If that city could be taken, the North would control the entire river, splitting the Confederacy down the middle. Before Grant could take Vicksburg, however, he had to get there, which was proving to be a very annoying problem.

Grant's three divisions were located well north of their target, on the wrong side of the Mississippi. Traveling directly downriver would require running Rebel batteries at Vicksburg, something Grant was hesitant to try. But all other endeavors to advance southward, including two attempts to dig canals bypassing Vicksburg and two attempts to force passage through the swamps and bayous east of the river, had failed miserably.

Finally, on the night of April 16, ironclads and supply-laden transports steamed past the Vicksburg guns. Confederate cannons blasted away at the steam-driven fleet, but only a single transport was lost. Another successful run was completed on April 22. Grant's infantry had already marched south, and with supplies and river transports now plentiful, the Union Army could finally cross the watery barrier.

A major part of Grant's plan was to distract the Confederate commander, Lt. Gen. John C. Pemberton, while he crossed the river and swung around to approach Vicksburg from the east. Major General William T Sherman played a part in the plan: his division remained north of Vicksburg, demonstrating against the Chickasaw Bluffs. The local Confederate commander sent a panicky message to Pemberton, claiming that "the enemy are in front of me in force such as never before been seen at Vicksburg. Send me reinforcements." In reality, Sherman represented only about a third of Grant's command and probably could not have taken the bluffs if he tried. (In fact, he had already tried and failed the previous December.) Nevertheless, Pemberton sent 3,000 troops that had been marching south to oppose Grant.

Another diversion, one that would prove wildly successful, was a cavalry raid launched into Mississippi from La Grange, Tenn., on April 17. It was the beginning of 16 days of nearly non-stop movement, widespread destruction and frequent battle. When it was over, Grant would accurately describe it as one of the most brilliant cavalry exploits of the war."

Grant had first considered such a raid as early as February 1863, suggesting a volunteer force of 500 be used. As his strategy evolved, the importance of the raid increased. By mid, March, the strength of the raiders had been dramatically enlarged and the volunteer stipulation had vanished.

The man assigned to lead the raid was 36-year-old Colonel Benjamin H. Grierson, a prewar music teacher from the Midwest who, in less violent times, had traveled to various small towns organizing amateur bands. Later he went into the produce business and, in 1860, wrote campaign songs for Abraham Lincoln. When the war began, Grierson enlisted as a private in the infantry. He very much wanted to do his share of the fighting on foot; while a child, he had been kicked in the face by a horse and still harbored a severe dislike for the equine creatures.

This was not to be. In May 1862, Grierson was commissioned a major in the 6th Illinois Cavalry. A man with little military training or experience--and a pronounced dislike of horses--would soon prove to be one of the most skilled cavalry leaders of the war.

The raid began at dawn on the 17th. Grierson rode south from La Grange with 1,700 men: Colonel Reuben Loomis' 6th Illinois Cavalry, Colonel Edward Prince's 7th Illinois Cavalry, and Colonel Edward Hatch's 2nd Iowa Cavalry, along with a battery of six 2-pounders. Grierson alone knew the extent of their orders, to penetrate deep into the Rebel-held state, cut Pemberton's supply line, and then return to Union lines by whatever route seemed best. To guide him, Grierson brought a compass and a pocket map of Mississippi.

They moved quickly, covering 30 miles on the first day. During the afternoon of the 18th, they crossed the Tallahatchee River at three separate points. A battalion of the 7th Illinois was the first to meet opposition. Crossing at New Albany, they encountered Southern troops attempting to destroy the bridge. The Illinoisans advanced and were fired on. They pressed forward, and the outnumbered Rebels were forced to run. The bridge was repaired and the crossing made.

Six miles farther up the Tallahatchee, Hatch's 2nd Iowa also met the enemy, numbering about 200. Hatch fought skirmishes that day and the next morning. Armed with Colt revolving rifles, Hatch's men emerged victorious, taking a number of prisoners.

After a night of torrential rains, the command re-formed on April 19 and continued south to Ponotoc, where they burned a mill and again skirmished with Confederate soldiers. Dawn of April 20 found the Northerners 80 miles inside Confederate territory, with Grierson forming his men for inspection. He culled out 175 men suffering from dysentery and saddle galls. Calling themselves the "Quinine Brigade," these men escorted the prisoners back through Ponotoc that night, in the hopes of convincing the Confederates that the entire command was returning to Tennessee. Grierson himself continued south with the two Illinois regiments, while the 2nd Iowa and a 2-pounder broke off and turned eastward the next morning, with orders to cut the Mobile & Ohio Railroad.

Hatch's men arrived at Palo Alto that afternoon, drawing Confederate cavalry away from Grierson. Hatch was met by Lt. Col. C.R. Barteau's 2nd Tennessee Cavalry. A skirmish ensued, and the Iowans' revolving rifles again gave them a decided advantage. Hatch retreated north along the railroad, with Barteau in close pursuit. He destroyed the rails at OkoIona and Tupelo. Barteau caught him again near Birmingham on April 24. After a two-hour battle, Hatch retreated across Camp Creek and burned the bridge behind him. Barteau, his own men exhausted and his ammunition low, gave up the pursuit.

Hatch returned to La Grange on April 26, his diversion within a diversion a roaring success. He brought with him 600 horses and mules, with about 200 able-bodied civilians to lead them, and claimed 100 Confederate casualties while losing only 10 men himself

Grierson, in the meanwhile, had not been idle. Hatch had drawn away what little cavalry the Confederates had to field in northern Mississippi (most had been detached to General Braxton Bragg in Tennessee), and Grierson's 950 remaining men could gallop south without worries of pursuit from the rear.

They entered Starkville about 4 p.m. on the 21st, capturing and destroying government property. just south of town, Grierson detached another unit to operate independently. The 7th Illinois' Company B, under Captain Henry Forbes, moved east, then galloped south down the Mobile & Ohio Railroad. They raided Macon, and despite the tiny size of his command, Forbes demanded that the town of Enterprise surrender to him. Not surprisingly, Rebel troops there refused and Forbes moved on to rejoin Grierson at the Pearl River.

By now, the Confederates were desperate to stop the Union raiders. Thanks to Hatch, Forbes, and the Quinine Brigade, Pemberton was receiving confused and exaggerated reports of Grierson's strength and position. Lacking sufficient cavalry, he was diverting more and more infantry from Vicksburg and Grand Gulf, where Grant was preparing to cross. An infantry brigade marching to Vicksburg from Alabama was halted at Meridian. Three regiments and supporting artillery were sent to Morton against the possibility that Grierson might turn toward Jackson, Pemberton's headquarters. Routes north and northwest were blocked by troops at Okolona, Canton and Carthage. Troops as far away as Port Hudson, La., were mobilized against the hard-riding former music teacher.

All was to no avail. It was swift-footed cavalry against slow, plodding infantry. It was impossible for the Confederates to effectively close in on Grierson's men.

Leaving Starkville, Grierson moved south toward Louisville, Miss. His Illinoisans pushed through a swamp--"a dismal swamp nearly belly-deep in mud," as Grierson later described it--and swam their horses across streams. He detached a battalion to destroy a large tannery and shoe factory. The battalion succeeded, doing an estimated \$50,000 in damage.

They pressed on, still moving, with no road visible, through the swamp and water of the Nuxubee River bottom, arriving at Louisville after sunset on the 22nd. Grierson threw out two battalions as pickets, bottling up the citizens

to prevent any information about his route from getting out. Still, he showed real concern that Southern civilians and their property be protected, as the orders to the pickets included instructions to "drive out stragglers, preserve order, and quiet the fears of the people." Considering the behavior of many Union soldiers regarding the South during the war, such concerns were not unfounded. Grierson, though, could later write with justifiable pride that "they [the Southerners] were protected in their persons and their property." His men passed through Louisville without incident.

They soon struck another swamp and lost several horses to drowning. By midnight, they had reached a plantation 10 miles south of town, halting there until daybreak. They moved past Philadelphia, resting again until 10 o'clock that night. Two battalions of the 7th Illinois then moved on, ordered to pass through Decatur and hit the Southern Railroad at Newton Station, a major supply junction due east of Vicksburg. Grierson followed with the main column an hour later.

Preceding everyone, including the two point battalions, were nine men clad in Confederate uniforms. These volunteer Illinoisans, under the command of Sergeant Richard Surby, had been designated the "Butternut Guerrillas" and were to prove their value as scouts again and again during the raid. This day they seized a telegraph station, preventing a warning of Grierson's approach.

Grierson arrived at Newton Station around 6 a.m. The advance battalions seized the hamlet and captured two trains. The main column soon joined them. Here was property of legitimate military value, and Grierson had no qualms about laying waste. Two locomotives, 25 freight cars filled with commissary stores and ammunition (including artillery shells intended for the garrison at Vicksburg), were burned, along with additional stores and 500 muskets found in town.

A battalion from the 6th Illinois rode east, destroying bridges, trestleworks and telegraph wire. Seventy-five prisoners were taken, but were soon paroled. Several men found--and inevitably helped themselves to--a supply of whiskey, but all were ready to move out by 2 p.m.

The Federals continued south, soon reaching Garlandville. Here they were met by shotgun-wielding civilians, "many of them," wrote Grierson, "venerable with age." The Illinoisans were fired upon and one man was wounded. A quick charge broke up the untrained Southerners, capturing several.

According to Grierson, the prisoners were apologetic, "acknowledging their mistake, and declared that they had been grossly deceived as to our real character. One volunteered his services as a guide and upon leaving us declared that hereafter his prayers should be for the Union Army." Grierson used this as a sample of the attitudes he encountered among civilians during the raid, describing the "hundreds who are skulking and hiding out to avoid conscription, only to await the presence of our arms to sustain them, when they will rise up and declare their principles; and thousands who have been deceived upon vindication of our cause would immediately return to loyalty."

To a point, the attitudes of the citizens of Garlandville must be taken with a grain of salt. They were, after all, surrounded by heavily armed soldiers whom they had very recently shot at and were thus liable to be disagreeable. Still, such dissension did exist in the South throughout the war. Poverty, food shortages, government policies that unfairly favored large plantation owners over poor farmers, destruction of home's and livelihoods--all this was stripping away loyalty to the Confederacy from many Southerners. The people of Garlandville had been willing to fight to defend their homes, but once they discovered the raiders meant them no harm, the obligation to bear arms against them disappeared. This was not really, as Grierson implied, due to any latent loyalty to the Union, but was rather part of the quite human desire to keep a roof over one's head and a moderate amount of food in one's stomach.

The raiders rode another 12 miles, stopping that night on a plantation belonging to a Dr. Mackadora, 50 miles from Newton Station. Newton had been the primary tactical objective of the raid. After leaving there, Grierson had complete discretion as to his route and final destination. The ride south through Garlandville had been to find a spot to rest and forage. His men would not be on the move again until the morning of the 26th. In the meantime, the Butternut Guerrillas were out gathering information about Confederate troop dispositions.

One of the scouts, dressed as a civilian, turned north, back toward the Southern Railroad, to cut the telegraph and perhaps burn a bridge or trestlework. Seven miles from the tracks, he ran into a regiment of Rebel cavalry from

Brandon searching for Grierson. They were riding directly toward the Mackadora plantation, but the quick-thinking scout bluffed them. Claiming to have seen the raiders recently, he sent the horsemen galloping off in the wrong direction.

Grierson soon learned that Pemberton had been reinforcing Jackson and points east with infantry and artillery. He decided to move southwest, crossing the Pearl River and hitting the New Orleans, Jackson & Great Northern Railroad at Hazelhurst. From there, he would flank Confederate forces and eventually join Grant at Grand Gulf.

Pemberton, though, had finally guessed correctly regarding Grierson's intentions. He ordered Maj. Gen. John Bowen, commander of the Grand Gulf garrison, to detach seven Mississippi cavalry companies to intercept the raiders. This, in turn, further weakened Bowen, who would soon be meeting Grant's far superior force in battle. Pemberton was in a no-win situation. He could hardly allow a thousand enemy troops to romp around behind his lines, but the only way to stop them was by diverting men from strategically vital areas. By now, there was more than a division's worth of troops scattered about the state hoping to stop Grierson. This, of course, was the primary objective of the raid, beyond damaging Pemberton's supply line.

Rested and reprovisioned, the raiders set out again at 6 a.m. on April 26. They crossed the Leaf River, burning the bridge behind them. Arriving at Raleigh, they captured the county sheriff and confiscated \$3,000 in cash, and then stopped for the night at Westville.

On April 27, the Butternut Guerrillas were again dressed in Confederate uniforms. Moving ahead of the main column, they seized a ferryboat on the Pearl River, presenting Grierson with an easy method of crossing. Reunited here with Forbes' B Company, the raiders moved on to Hazelhurst. Here a string of boxcars was burned, but the flames spread to nearby buildings and suddenly the whole town was in danger of going up. Grierson set his men to work alongside the townspeople, fighting to save Hazelhurst. A hard rain fell that night, helping to contain the blaze. It was not until well after dark that the Illinoisans could move on. Now their course was due west, toward Grand Gulf.

They continued west on the 28th. A battalion from the 7th Illinois was detached to double back to the railroad, destroying rails, telegraph wire and government property. The main column stopped at a plantation that afternoon, but the break did not prove restful. Without warning, the pickets were fired upon and Rebel horsemen charged forward, their sudden attack panicking many of the Illinoisans.

Grierson led a counterattack, and the Southerners, consisting merely of two understrength companies, were pushed back. The Federals kept pushing, driving the Rebels through the nearby town of Union Church and occupying it that night. The detached battalion rejoined them there.

The attackers were part of Colonel Wirt Adams' command, the Mississippi cavalrymen detached from Grand Gulf. The bulk of Adams' men were west of Union Church, waiting to ambush Grierson. A Butternut Guerrilla again saved the day, riding ahead in disguise and speaking with some of the Mississippians. Warned of the ambush, Grierson changed his plans. He made a brief demonstration to the west, then doubled back to the east. His final destination was now Baton Rouge. His men would have to ride an extra 100 miles, but the decision was unavoidable. Adams pursued, staying on Grierson's tail as far south as Greensburg, La.

Five hundred armed citizens and conscripts awaited the raiders at Brookhaven, a town astride the Great Northern Railroad 20 miles south of Hazelhurst. The raiders charged into town, quickly ending resistance. The town proved to contain a "camp of instruction"--what would nowadays be called boot camp. Prisoners were paroled and the camp, along with the railroad and the telegraph was destroyed. Once again, flames jumped onto civilian buildings and once again, despite the loss of precious time, Grierson's men helped to save a town. The raiders turned south, riding eight more miles before making camp at a plantation.

Elsewhere on the 29th, William Sherman was carrying out his demonstration near Chickasaw Bluffs. Farther south Union gunboats spent six hours bombarding Grand Gulf in preparation of Grant's crossing. But the Confederate positions remained intact. Grant was forced to move again, intending now to cross at undefended Bruinsburg.

The raiders continued south on April 30, destroying bridges, water tanks and trestleworks, and burning the depot and 15 freight cars at Bogue Chitto Station. They reached Summit as sunset neared. Grierson ordered the destruction of

25 freight cars and a large cache of government sugar, but spared the depot itself. He did not want to risk a fire again spreading into town, and he could not afford to lose more time while his men fought the blaze.

Grierson ordered his men to remount--some were a bit unsteady in the saddle after discovering a supply of rum--and made six more miles before camping. On May 1 they turned west, then south, making a "straight line for Baton Rouge, and let speed be our safety," as Grierson phrased it. The raiders were to cover 76 miles in the next 28 hours.

They neared Magnolia and later 0syka, but both towns were bypassed because they contained enemy troops. About noon, they reached Wall's Bridge across the Tickfaw River. Three companies of the 9th Tennessee Cavalry greeted them there.

Grierson's lead company suffered eight casualties (accounting for nearly all the battle losses he suffered throughout the raid), but the Illinoisans pressed their attack against their outnumbered foe. The Confederate pickets were captured, then Grierson's artillery rumbled up and shelled the enemy position across the river. A charge swept the bridge and sent the Tennesseans running, leaving a number of dead, wounded and captured comrades behind.

"The enemy were now on our track in earnest," wrote Grierson. Captured dispatches told him that Rebel troops were closing in from all sides. He continued to gallop south, riding all that night, pushing his exhausted men to their limits. They crossed the Amite River at Williams' Bridge at midnight, two hours ahead of a heavy column of infantry and artillery.

By now, the Confederates had plenty else to keep them occupied. Grant's troops crossed the Mississippi on May 1 and were moving up to take Grand Gulf from the rear. Bowen moved his 6,000 available troops to Port Gibson, intercepting Grant. But the unfortunate Bowen, stripped of his cavalry and having received no reinforcements, was outnumbered 4-to-1. He fought all day, inflicting a disproportionate number of casualties, but was inevitably forced to retreat and abandon Port Gibson. Grant, at last, had a secure bridgehead on the east side of the Mississippi.

Grierson's men reached Sandy Creek at dawn on May 2, surprising and capturing a Southern cavalry unit camped there. The camp, with 150 tents, plus guns, ammunition and documents, was destroyed.

The raiders kept going, surprising another cavalry unit at Roberts' Ford across the Comite River. After a brief skirmish, 40 Rebels were captured along with their horses and equipment. They forded the river, with many of the horses forced to swim across the deep water.

The men reached their limit just six miles short of Baton Rouge. Grierson called a halt, letting them sleep alongside the road. Grierson himself wound down by playing a piano found in a nearby plantation house, but was interrupted by a picket shouting that they were about to be overrun by Rebels coming at them from the west.

Grierson guessed the identity of the approaching men and rode out to meet them. As he suspected, they were Union cavalry from Baton Rouge, riding out to meet the raiders. Grierson's exhausted and filthy troops rode into the Louisiana capital at 3 p.m., greeted by cheering soldiers and civilians alike. They paraded around the public square, then found a magnolia grove south of town where they could simply collapse and catch up on two weeks' worth of sleep.

Grierson's raiders had traveled more than 600 miles in 16 days, virtually without rest and often limited to one hastily eaten meal per day. One hundred Confederates had been killed or wounded and another 50D had been captured (most of whom were later paroled). The raiders destroyed more than 50 miles of railroad and telegraph, 3,000 stand of arms and thousands of dollars worth of supplies and property. A thousand mules and horses were also captured. In addition, they had tied up virtually all of Pemberton's cavalry, one-third of his infantry, and at least two regiments of artillery.

All this was accomplished at a cost of only three dead and seven wounded. Five men too sick to continue had been left behind, and nine men, presumed stragglers, were missing. The 7th Illinois' surgeon and sergeant major stayed behind with a mortally wounded officer at Wall's Bridge. Added to Hatch's losses, the casualties numbered 36, only about 2 percent of the total command. Grierson was quite justified when he later remarked, "The Confederacy is a hollow shell." Rebels in Mississippi, as everywhere else in the South, were spread too thin to do their jobs.

Grierson suddenly and uncomfortably discovered he was a hero. "I, like Byron," he wrote his wife, Alice, "have had to wake up one morning and find myself famous." He was sent by steamboat to New Orleans, where he encountered "one continuous ovation." His picture was featured on the covers of *Harper's Weekly* and *Leslie's Illustrated*. He was breveted to brigadier general and later major general of volunteers.

Grierson continued to serve with distinction, commanding first a division, then a cavalry corps in Tennessee. Despite his continuing distrust of horses, he remained in the Regular Army after the war, battling Indians as a colonel with the 10th U.S. Cavalry. He retired as a brigadier general in 1890 and died in 1911.

Following the raid, Grant continued to advance eastward. joined by Sherman's division, he now had 40,000 men in Mississippi. Pemberton had 30,000, but many of them were scattered across the state and he lacked time to concentrate his forces. Bowen was forced to abandon Grand Gulf, and Grant was virtually unopposed as he marched to Jackson, burning that city, and then swung west to besiege Vicksburg. He advanced with a supply line--Grierson had helped to demonstrate that troops could live off the land, appropriating food from farms and plantations as they progressed. It was a lesson dramatically learned and daringly taught--that others would study in the flame-darkened days to come.

Sarasota, Fla., writer Tim DeForest ranged west for this effective account of Grierson's cavalry raid. For further reading, see Grierson's Raid, by Dee Brown, or Volume 3 of Battles and Leaders of the Civil War.

Disaster at Desert One: Catalyst for Change JOHN E. VALLIERE

A military raid is . . . a high-risk venture that operates on the outer margins of the possible, relying on skill, daring, and a goodly measure of luck. When a raid succeeds, it acquires almost magical qualities and endows its authors with the badge of genius. Hence the appeal. When it fails, it invites ridicule and the second-guessing of armchair strategists.

- Gary Sick, All Fall Down

The failure of the mission in 1980 to rescue American hostages held in Tehran is well known. Few can forget the tragedy vividly pictured by a broken propeller resting on the dry lake bed at a place forever known as "Desert One." As America awoke on the morning of 25 April of that year, it was faced with defeat, sadness, and-most of all questions.

The disaster immediately raised doubts about US military capabilities and the state of readiness of the armed forces.... The seeming ineptness of the operation stood in stark contrast with successful rescue operations conducted with little loss of life by the Israelis at Entebbe and by the West Germans at Mogadishu. . . . To some analysts and journalists, the episode demonstrated that the Defense Department was incapable of mounting a combined assault, especially in distant territory. In distant territory.

The questions and doubts were only reinforced four months later when the JCS released a declassified version of the report of the Special Operations Review Group analyzing the failure. The so-called *Holloway Report* revealed serious deficiencies in mission planning, command and control, and interservice operability. The Holloway group provided a catalyst for efforts to reorganize the Department of Defense, as finally realized in the 1986 Goldwater-Nichols legislation.

The Planned Operation

The first phase of the operation, the only part carried out, involved the rendezvous of a planned eight US Navy RH-53D minesweeping helicopters and six US Air Force C-i 30 cargo planes at Desert One. This part of the plan, codenamed Eagle Claw, was not a simple operation. To make it work many different elements had to come together. It was, indeed, a "high-risk venture" operating on "a goodly measure of luck." That is true of many strategically important but necessarily daring military operations.

The C-130s brought fuel for the helicopters and the rescue force itself-Colonel Charlie Beckwith's US-based Special Forces, some additional US Army Special Forces from Europe, and assorted military, civilian, and Iranian helpers. The C-i 30s were to arrive first. The helicopters, flown by US Marine Corps pilots led by Lieutenant Colonel Edward Seiffert, would arrive next, having launched from the carrier *Nimitz* in the Persian Gulf at nightfall.⁵

After refueling the helicopters, which would then fly on to "Desert Two" where the daylight hours would be spent in hiding, the C-130s would depart. Once cloaked again by darkness, the rescuers would be driven into Tehran in locally procured trucks and assault the US Embassy. With the freed hostages, they would next be flown in the helicopters to an abandoned Iranian airfield at Manzanych. Waiting there would be US Air Force C-141s and MC-130s ready to fly everyone out.

The complex plan relied on extended low-level flights by all participating aircraft to avoid detection. Using knowledge of the somewhat limited though modern Iranian radar system, routes were planned to exploit gaps in the coverage. These gaps existed at low altitudes, allowing the helicopters and the C-130s to arrive at Desert One virtually undetected.

It all unraveled when mechanical failure struck the helicopters and when the Marine pilots encountered weather conditions far worse than anything they had been led to expect. Two helicopters failed to reach the Desert One rendezvous (one was abandoned en route, the other forced by equipment failures and a thick dust cloud, a "haboob," to return to the *Nimitz*), and a third arrived at the refueling site with a massive failure of its hydraulic system.

Colonel Beckwith's recommendation to abort at that point was quickly approved by Washington. The attempt had already failed when tragedy struck. During the abort a helicopter hit a fuel-laden C-130, killing eight. From there the

recriminations and questions begin.

Prologue

President Jimmy Carter decided, almost immediately after learning hostages had been taken in Tehran, that military options had to be available. NSC staffer Gary Sick later said, "The possibility of military action always lay just beneath the surface of events and served as a counterpoint to roller-coaster negotiations." The White House expected the military action to attempt a rescue or retaliate or both. The President appointed National Security Advisor Zbigniew Brzezinski to "coordinate and oversee the development of military courses of action." President Carter described in his diary his guidance to the military:

We want it to be quick, incisive, surgical, no loss of American lives, not involve any other country, minimal suffering of the Iranian people themselves ... sure of success, and unpredictable. No one will know what I have decided... except Fritz [Vice President Mondale], Zbig [Brzezinski], Harold [Brown, Secretary of Defense), David (Jones, Chairman, Joint Chiefs of Staff], and Cy [Vance, Secretary of State].

The JCS Chairman, Air Force General David C. Jones, was the key link between the White House and the joint task force charged with the mission, JTF 1-79. General Jones, acting virtually as a unified combatant commander, linked the White House to the JTF commander. The Chairman and his assistant, Lieutenant General John S. Pustay, also linked the President and the rest of the Chiefs. Planning a rescue attempt was initially ill-received.

General Jones. disclosed. . . that when the idea of the rescue was originally broached, the Chiefs considered it infeasible. As the planning continued, however, they decided that the problems, which had initially been viewed as insurmountable, were solvable. The Chiefs thus maintained that they had agreed to the presidential proposal only after a long, hard look.¹¹

What hasn't been reported is how the Chiefs reacted to the alternatives proposed by the White House. Gary Sick refers to "a campaign of escalating pressure, up to and including the mining of Iranian harbors." While the Joint Chiefs of 1990-91 made it clear that the legacy of Vietnam forced them to reject gradualism in the case of Iraq, such was not the case in 1980. Various punitive measures up to and including mining the Straits of Hormuz and Iranian ports were viewed as integral to the rescue attempt. This part of the plan, apparently developed separately from Eagle Claw, was dropped when President Carter became concerned about the potential for excessive collateral damage. 13

General Jones quickly formed a planning cell for the rescue mission within the organization of the Joint Chiefs. This planning cell was augmented by two officers from the rescue force flown up from Fort Bragg. (An existing contingency plan was rejected, but its choice of rescue force was incorporated.) On 12 November 1979, JTF 1-79 was formed under Major General James B. Vaught. The *Holloway Report* outlines General Vaught's planning guidance:

A forcible rescue was very much a contingency plan, only to be implemented if all other alternatives failed. . . . On the other hand, a sense of urgency was impressed on [Commander, JTF 1-79) and his staff at the very outset: that an *immediate operation could be required*. . . . All planning and preparation required *maximum* [operational security] because the sine qua non of the concept was to place the ground rescue force at their final assault position with total surprise. . . . Those overriding and, at times, conflicting realities were central to some of the early decisions regarding the selection of a JTF staff, holding the JCS [contingency plan] in abeyance, and the compartmentalization of various preparatory functions.¹⁴

The planning process would be continuous right up to mid-April 1980 when the President was briefed and the deployment of the participants was put into motion. This high-level planning was being done within the organization of the Joint Chiefs at the Pentagon (the Unconventional Warfare Branch of the Special Operations Division). Just how involved were the Chiefs in the operation? This operation was not delegated to any other command; JTF 1-79 worked within the organization of the Joint Chiefs itself and took its orders from the Chairman. Ultimate decisions were made by President Carter, General Jones, and one or two others. Unified commands (European and Pacific Commands) were bypassed; they did not even send representatives to participate in planning and coordination until December. The Joint Task Force was virtually a subset of the organization of the Joint Chiefs; participants couldn't tell them apart.¹⁵

The planning and the concurrent training climaxed between mid-March and mid-April 1980:

[In mid-March 1980] Brzezinski met with Brown and Jones for what he described as a "very comprehensive review of the rescue plan." He came away convinced that the mission had a reasonable chance to succeed.... On 22 March 1980, only one month away from D-Day, in the wooded informal atmosphere of Camp David, Carter received his senior advisors. Present were Vance, Mondale, Brown, [CIA Director Admiral Stansfield] Turner, Jones, [Press Secretary Jody] Powell, Brzezinski, and [Assistant National Security Advisor David] Aaron. After General Jones described in detail how the rescue would be accomplished, Vance, according to his own and Brzezinski's account, advised against any military action, an opinion that Carter tacitly dismissed. ¹⁶

On 15-16 April, [Major General Vaught] conducted a two-day meeting in the Pentagon to review the plan with commanders, affirm command and control matters, evaluate force readiness, review contingencies, and make an overall assessment of mission success should it be executed on 24 April. On 16 April, the Joint Chiefs of Staff approved the plan. That evening, the President approved the plan.¹⁷

With presidential approval, the plan began to move. Marine pilots moved to join their helicopters aboard the *Nimitz;* C-130s moved to Masirah; and Delta moved first to Egypt and then on to Masirah. The stage was set.

Recrimination, Blame, and Catalyst

Americans awoke on 25 April to learn of the President's speech in the wee hours of the morning in which he announced the rescue attempt and accepted personal responsibility for its failure. President Carter had made the only statement he could. He was, after all, the Commander in Chief-he was responsible for Eagle Claw, successful or not. Almost immediately, however, the military (at least elements and individuals), the media, and, indeed, the American people began a search to assign blame.

Admiral Holloway's investigating board took the official look at the failed operation. It identified 23 specific issues to analyze based on concerns the members developed during their inquiry. Several of these issues form the nucleus of the criticism still leveled against the operation, primarily in the areas of command and control and security issues. Colonel James Kyle, the on-scene commander at Desert One, focused in his 1990 book on five fatal flaws (listed here in his order of priority):

- 1. The busted weather forecast
- 2. Poor use of communications equipment and flawed command and control
- 3. Questionable pilot abort decisions
- 4. Absurd tactical restrictions
- 5. Flight planning factors (the sidelight issue)'8

Several alleged faults seem to recur in the literature, despite their lack of validity. Primary among these allegations are the selection of helicopters and the over-involvement of Washington in the mission's execution. The Navy RH-53D was the only helicopter available with the capability to carry out the desired mission. While the Air Force's Pave Low HH-53s would have provided marvelously modern avionics, there were simply too few of them in the inventory. Additionally, they would have provided less payload capacity. Second-guessing here is simply uneducated. ¹⁹

The other great myth of Eagle Claw is the lasting image of the micromanaging Jimmy Carter exercising total control from the White House. None of the participants backs this up. Certainly the rescue attempt was the national effort of the day-the President wanted to know what was going on, but he was not over-controlling. Gary Sick tells us, "Once the decision was taken to proceed with the mission, [President Carter] left the details in the hands of his military specialists." In a retrospective a year after the Desert One failure, Benjamin Schemmer of *Armed Forces Journal International* related this story of the final White House planning session on 16 April 1980:

At one point in the briefing . . . Brzezinski asked, "How can we talk to the commander if we need to?" Carter cut the question off abruptly: he told Brzezinski, "We won 't!" He turned [to the Task Force Commander] and said, "I know you'll be busy. Your mission comes first. If you have time to tell us what's happening, that would be nice. But don't feel you have to give us play by play status reports. I will not second guess or interfere." Carter also emphasized that

he would follow the chain of command: the President to the Secretary of Defense to the Chairman, Joint Chiefs of Staff, to the Joint Task Force Commander. The Task Force Commander, he said, should not concern himself with *any* other counsel. . . . Carter's vow not to "interfere" was . . . a striking contrast to his image as a President obsessed with detail-wont, it was said, to micromanage national security issues in particular. ²¹

Operational Security and Command and Control

Eagle Claw's besetting flaws fell in two areas, operational security and command and control. Let us begin with the former, using as point of departure a subsidiary issue-the lack of a centralized, integrated intelligence task force to support the JTF. The *Holloway Report* felt that an intelligence task force run by the Defense Intelligence Agency would have eased the burden for Major General Vaught and his J-2 (intelligence officer). The board saw the J-2 as overburdened with evaluating intelligence as opposed to interpreting it. This led to faulty reports reaching the operators. In turn, this contributed to some crews overestimating the Iranian radar threat and the JTF as a whole overestimating the Iranian signals intelligence capability. These exaggerated estimations resulted in unnecessarily tight emissions control policies for the rescue force and lower en route altitudes flown by the aircraft (especially the helicopters) than might have been required.²²

The tendency to overestimate Iranian intelligence and intercept cap-abilities sprang from the mission 5 overriding concern with operational security. Paul Ryan described the situation thus: "The White House priority on maintaining secrecy characterized the operation from the start. Clearly secrecy is vital to a covert raid, but. . . excessive security fatally flawed the mission. ²³ White House operatives felt themselves justified in the concern they demonstrated over security. Indeed, the secrecy vital to the mission's success was a natural concern of the Pentagon as well. Lieutenant General John Pustay relates that White House leaks at this time were incessant and even at the Pentagon they were frequent. ²⁴ If security is the sine qua non of special operations and Washington was not secure, how did operational security become an albatross about Eagle Claw's neck?

The shortest answer would be compartmentalization. Compartmentalization, the act of restricting each participant's knowledge to his or her portion of the operation, led some people to have information that simply didn't get passed to the operators who needed it.

The most glaring example concerns data that weather forecasters had gathered on the dust storms (the "haboob") common in Iran. These were quite different from the dust storms encountered in the American desert. Instead of settling as soon as the wind dies down, the fine Iranian dust lingers for hours-often a hundred miles away from the storm that raised it. This was known to mission weather forecasters, and they provided a weather annex for the plan that included the information. But this annex was not provided to the helicopter pilots. The C-I 30 pilots knew of it, but the crews who would spend the longest in the murk did not. Even worse, the traditional relationship between forecaster and pilot was broken. Intelligence officers briefed the aircrews on weather conditions-the forecasters were in a different compartment.²⁵

Security affected the crews' reactions to weather in other ways. Neither weather reconnaissance nor pathfinding aircraft were used to aid the helicopters. Satellites provided an incomplete weather picture to helicopter pilots using visual map-reading as the primary navigational tool. Whether dedicated reconnaissance aircraft or pathfinders would have helped is open to discussion, but a simple radio call from the C-i 30s that flew through the haboob to get to Desert One ahead of the RH-53Ds would have. Helicopter number 5, the crew that became disoriented in the dust and returned to the *Nimitz*, would not have aborted if the crew had known where the dust ended or that Desert One itself was clear. The radio call wasn't made because a virtually 100-percent radio silence had been ordered by the planners. Ryan reports that "there were technical means to enable the transmission of information to the C-130s and to helicopters en route without likelihood of compromising the mission. ²⁶

Operational security considerations drove command and control decisions as well. Command and control is, perhaps, the area of greatest concern to analysts of Eagle Claw. We've already addressed a related myth, the "overcontrolling White House." Indeed, it was the higher echelons of the chain of command that the *Holloway Report* found "ideal." From the President to Major General Vaught the "wiring diagram" is clean unusual, but clean. "Further down the operational chain, command relationships were less well defined and not well understood."²⁷

The JCS chose to "ad hoc it" when they began planning a rescue attempt. Security was again a driving motive. Changing the operations of several regular units would have alerted trained (e.g. Soviet) observers. More than just

security led planners away from the existing contingency plan. The ad hoc approach was seen to be quicker to an operational capability. The President wanted a capability to react "the next day." General Jones routinely established special organizations to speed priority tasks. Further, the existing contingency plan "didn't seem to be that relevant" to the situation at hand.²⁸

The results of the ad hoc organizational approach were many. ("Unfortunately, with all the new people on board, orderly planning did get sidetracked on occasion."²⁹) The most controversy surrounds who ended up where in this organization of many parts. There is even a considerable question as to "who was where when" in the chain of command.³⁰ Attempts to diagram the chain of command are frustrating. Different observers saw different things. Even when the best opinions are put together, the page is littered with dotted lines of coordination and instances of one unit responding to two lines of command. To further complicate matters, a revised chain of command was put into effect just days before the operation took place. While no explicit evidence exists as to why most of the mid-April changes were made, they seem to formalize existing de facto arrangements.

Statements by the participants deny confusion over who was in charge. Neither Kyle, Beckwith, nor an anonymous C-130 pilot makes any reference to such problems at Desert One.³¹ The *Holloway Report*, however, implies otherwise:

Unhappily, no one had foreseen that deafening noise and swirling dust would make command and communication at Desert One very difficult. None of the key personnel (Kyle, Beckwith, and their deputies) wore any insignia or marks for easy recognition. Thus, when they issued orders to the Marine pilots (who might not have seen them before), there were questions as to their identity. Subsequent testimony confirmed that staff planners were wrong in their belief that personal recognition would be adequate for the operation.³²

Marine Lieutenant General Charles Pitman, despite his denials of any confusion, paints a picture of training supervision for the helicopters that was anything but clearly defined. While the *Holloway Report* portrays bim as being "in charge of the helicopter force," the then-colonel now says, "I was not in charge of the helicopters, I was a liaison for General Jones and Lieutenant General Pustay." He goes on to say that since Air Force Major General Phillip Gast was spending much of his time at Yuma, "I *assumed* the two-star was *probably* in charge." ³³

Helicopter crew selection and performance remain the most controversial element of Eagle Claw's history. The ad hoc nature of the planning was supposed to yield an operational capability quickly. But based on earlier studies and the training conducted by US Air Force *HH-53* pilots, the Holloway board concluded, "Teaming carefully selected pilots of all services, with a heavy weight on [USAF Special Operations Forcesi/rescue and USMC assault experience, would *most likely have produced the most competent crews at an earlier date.*" ³⁴

Marine helicopter pilots wouldn't be ready as soon as their Air Force counterparts. This has led observers to assume that interserv ice rivalry played a major role in the choice of the Marines. Former JCS Chairman David Jones denies this, adamantly asserting that the operations at Desert One had nothing to do with service parochialism. He claims it is an unfair accusation that the various services were trying to get into the act. His former assistant, Lieutenant General Pustay, refutes this somewhat. While he denies any explicit deal-cutting, he admits to an implicit notion that "it would be nice to give everybody a piece of the pie." He emphasized that this in no way interfered with the execution of the mission.³⁵

Once the Marine pilots were selected, their training program was crucial to mission success. All those intimate with Eagle Claw emphasize that the long-range, nighttime helicopter mission required developing an entirely new capability for the US military. Of course, all the other units had important roles and capabilities to learn as well. The JTF commander and his deputies had the responsibility to make all this come together. The fuzzy chain of command contributed to a less-than-perfect training program:

Training was planned and conducted on a highly decentralized basis within an informal component command structure that does not appear to have been clearly established.... Coordination and supervision were performed in part by two officers who were advisors [Major General Gast and Colonel Pitman] to [Major General Vaught], yet retained responsibilities related to their primary office of assignment outside of JTF. 36

The senior officers of JTF 1-79 were obligated to ensure that training yielded the operational results desired. Clearly

they failed. The failure is not simply attributable to interservice rivalry, but to an inability to understand the mindsets of the services. In choosing the Marines to participate, the Joint Chiefs and JTF were also choosing, in effect, the operational experience of the Marines. Equipment failures occurred during training. One of these included a blade failure indication (a "BIM" light) just as happened to helicopter 6 en route to Desert One. Many writers, including Colonel Kyle, say the data available indicates helicopter 6 could have completed the mission. Colonel Kyle also questions the decision to abort helicopter 2 after its hydraulic problem. He describes how Navy pilots would have handled some of these problems in ways leading to mission success.³⁷ In *Best Laid Plans*, David C. Martin and John Walcott point to the gap in knowledge:

What Seiffert had not known was that there had never been a confirmed blade crack in a PH-53. He did not know that because he was a Marine used to flying CH-53s. . . . But after nearly 40,000 flying hours with the RH-53, not one crack has been found"I' m not going to stand here and tell you had I known that I would have changed the abort criteria," Seiffert said. "I will tell you that had I known I may have changed the abort criteria, or I would have recommended to my superiors that they change the abort criteria." General Vaught .concluded flatly, "We should have said. . . we will not terminate without other indications [of blade failure] such as vibrations.³⁸

While criticizing the Marines, Colonel Kyle points out that the key problem lay not with the lead pilot, Lieutenant Colonel Seiffert, but rather within the JTF command structure itself: "The JTF should have appointed one individual as the single authority for directing flight operations." This aviator would have been responsible for making decisions on aborts.

As Lieutenant General Pitman points out, this simply didn't happen. No one questioned the BIM abort during training. ⁴⁰ No one asked, "What if this happens during the mission?" The Holloway group showed how readily available the information was. To ask "What if. . . ?" is taught to military officers as vital to operational success. To not have investigated mechanical malfunctions is a command and staff failure. When the Marines were signed on to the JTF, so was their experience. They clearly demonstrated during training how they would apply that experience. Had someone raised the question, a reasoned set of emergency procedures could have emerged.

The command decisions of JTF 1-79 were flawed, not the pilots. Gary Sick puts it very well: "The fact that each of the helicopter crews-acting independently and without radio contact with the mission commanders-chose to proceed despite the virtually impossible flying conditions was a tribute to their courage and determination."⁴¹

Mission Plan Review

Ultimately, this leads to the last problem I shall highlight-the lack of an independent review of the mission plan. The Joint Chiefs themselves were the final reviewers of the plan. None of these individuals had specific special operations experience, nor, certainly, could they devote extended periods of time from their busy schedules. An independent review might not have changed anything, but it seems likely it would have at least highlighted how far from the normal way of doing things this plan went.

Prolonged ad hoc arrangements often result in tasking from different sources and can cause confusion at the operating level. These situation arrangements may hinder preparation and can impact on overall cohesion of effort. . . . Basic JCS [contingency plan] methodologies and/or existing unified/specified command procedures make full provisions for compartmentalization. [Operational security] can be, and has been, preserved when appropriate steps are taken. Thus, the entire preparation phase could have been accelerated and overall readiness enhanced.

The ambiguities of Eagle Claw planning were its downfall. The questions that should have been asked were not because of the ad hoc, and thereby confusing, nature of the organization. Eagle Claw failed subtly. None of the individual mistakes made was so vital that one can sit in judgment a decade later and say, "If the JTF (or the JCS or whoever) had only done this right, Desert One wouldn't have happened." But painstaking examination of the plan by experts not involved in preparing the plan would certainly have enhanced prospects for a successful outcome.

The Future

It is still too early to tell where the reforms embodied in the 1986 Goldwater-Nichols legislation will take the US military. In 1963 observers could only begin to see what Robert MeNamara was doing with the greater powers of the Secretary of Defense following 1958's reforms. What is already clear is that the failure at Desert One helped to change the way the United States military does business-routinely and when we're at war. The test of the reforms

comes in war. One night in 1980 we were at war with Iran and our old system failed. No one can say for sure that today's system would succeed, or that we would do anything radically different, though more recent successes give grounds for optimism. Desert One became a label for justifying change, change needed even before Eagle Claw. Retired Lieutenant General Pitman, however, injects a sobering note. Pointing out that Eagle Claw itself was the way of the future, he cautions, "I bet you when we go again, there will be no better cohesiveness. These [special operations forces don't really train together. "43 General Pitman uttered these words on 22 February 1991, five days after the commencement of the air assault phase of Desert Storm.

Colonel James Kyle titled his book about Eagle Claw *The Guts to Try*. Our nation indeed had the guts to try in 1980. The Goldwater-Nichols reformers coupled this spirit with improved operational means. One hopes that in seeking a better defense system we haven't reformed out those guts. The Bible tells us there is no greater love than to lay down one, 5 life for friends. Eight men did that night. Maybe that won't be necessary next time. But regardless, when the mission beckons, we've got to have the system, the soldiers, and the guts to try.

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NOTES

- 1. Paul B. Ryan, *The Iranian Rescue Mission: Why It Failed* (Annapolis, Md.: Naval Institute Press, 1985), p.3.
- 2. The report was named for retired Chief of Naval Operations Admiral James L. Holloway III, who headed the review group at the behest of the JCS. The declassified report (cited in this paper as *Holloway Report*) was serialized in three issues of *Aviation Week and Space Thehnology; 15* September 1980, pp. 61-71; 22 September 1980, pp.140-44; and 29 September 1980, pp.84-91. This serialization was used in my research.
- 3. In reality, the C-i 30s were three EC-130s whose command and control "capsules" had been replaced by fuel bladders and three MC-130s from the US Air Force's special operations force.
- 4. The mission is most often referred to simply as "Desert One." The planning for the rescue operation was code-named Rice Bowl; the operational phase carried out by Joint Task Force (JTF) 1-79 in late April 1980 was Eagle Claw.
- 5. The "Marine" pilots were a mixed force primarily from the Marine Corps, with Navy and Air Force pilots added in. Lieutenant Colonel Seiffert is a Marine.
- 6. The European-based Special Forces team would simultaneously rescue the Americans being held in Iran's Ministry of Foreign Affairs.
- 7. Gary Sick, *All Fall Down: America's Tragic Encounter with Iran* (New York: Random House, 1985), p.282. Sick was a serving Navy officer assigned to the white House at the time.
- 8. Rvan. p.12.
- 9. Jimmy Carter, *Keeping Faith.' Memoirs of a President* ~ew York: Bantam Books, 1982), p.461.
- 10. Lieutenant General John S. Pustay (USAF Ret.), interview, 5 February 1991.
- 11. Ryan, p.96.
- 12. Sick, p.290, emphasis added.
- 13. Pustay interview, 5 February 1991.
- 14. Holloway Report, p.69, emphasis added.
- 15. Holloway Report, pp.68-70, and A Participant, "The Iranian Hostage Rescue Attempt: A Pilot's Perspective," US Air Force Air Command and Staff College paper, 1982, p.25.
- 16. Ryan, pp.47-48.
- 17. Holloway Report, p 69.
- 18. James Kyle with John Robert Eidson, *The Guts to Try* New York: Orion Books, 1990) p 327.
- 19. *Holloway Report*, p.143. Colonel Charlie Beckwith, commander of the ground rescue force, indicates he had no problem with the selection of the RH-53 as the helicopter of choice in his book, *Delta Force*, written with Donald Knox (New York: Harcourt Brace Jovanovich, 1983), p.216. Authors commending air-refuelable helicopters are similarly mistaken. See Kyle, p.31.
- 20. Sick, pp.300-01.
- 21. Benjamin F. Schemmer, "Presidential Courage-nd the April 1980 Iranian Rescue Mission," *Armed Forces Journal International*, May 1981, p.61. This account was confirmed in a 5 February 1991 interview with Lieutenant General Pustay who was present at the 16 April briefing. He feels the white House involvement was not excessive in either planning or execution of Eagle Claw. Beckwith cites Carter as *the* example for other Presidents to follow (*Delta Force*, p.258). Lieutenant General Charles Pitman (USMC Ret.), in a 22 February 1991 interview, offers another side of the story. There *was* a plan to carry out the mission with only five helicopters-a plan Delta had practiced. It eliminated some "extra" personnel (drivers, extra door gunners, anti-aircraft Stinger teams, etc.). The President was told the minimum number of helicopters for the planned mission was six; he was not told of the alternate plan. As a result, he accepted Beckwith's recommendation to abort. According to Kyle (p.291), "Seiffert and Beckwith swear they never heard of such a plan. If this truly was a viable alternative, then we all should have known about it."
- 22. This is one cause of Kyle's "Absurd Tactics Restrictions." He feels the helicopter pilots remained far too low because of an erroneous piece of intelligence data received. See *The Guts to Try*, pp.337-38.
- 23. Ryan, p.12.

- Pustay interview, 5 February 1991. The FBI frequently had to include Pentagon officials as witnesses when investigating leaks from National Security Council meetings.
- 25. Holloway Report, p.144, details the problem of weather information. The report contains repeated references to operational security.
- 26. Ryan, pp.75-76. The relationship between these elements and Colonel Kyle's allegations of "poor use of communications equipment" and "questionable pilot abort decisions" is clear. The inability and reluctance to talk to each other severely degraded execution on the night of 24 April. Lieutenant General Pitman said only one or two radio calls from the C-i 30s would have made a huge difference. Interview, 22 February 1991. Colonel Kyle gives a view of his thought process, and why a radio call was not made, in *The Guts to Try*, pp.248-52. Throughout the book he describes the various elements of the story-esires for security, lack of practice with SATCOM radios, missing and incompatible encryption systems, etc.
- 27. Holloway Report, p.91.
- 28. Lieutenant General Pustay interview, 5 February 1991, and Pitman interview, 22 February 1991. See also Kyle, p.34.
- 29. Kyle, p.57.
- 30. See Holloway Report, pp.70-71.
- 31. Kyle, The Guts to Try; Beclc'vith, Delta Force; and A Participant, "The Iranian Hostage Rescue Attempt: A Pilot's Perspective."
- 32. Ryan, p.81.
- 33. Pitman interview, 22 February 1991, emphasis added. Lieutenant General Pitman stressed his role as liaison and logistics coordinator, while adding that he and Colonel Kyle were given "deputy commander"titles *after* returning from the mission. He also pointed out that many VIPs visited training sites and offered suggestions, further confusing the command structure.
- 34. *Holloway Report*, p.144, emphasis added. Lieutenant General Pitman says he picked the crews based on his belief that they would offer the earliest capability. In hindsight, he would have used Army pilots based on their qualifications with night vision goggles. Interview, 22 February 1991.
- 35. General David C. Jones (USAF Ret.), interview, 30 January 1991, and Pustay interview 5 February 1991. Lieutenant General Pitman sides with General Jones: "It wasn't a plot to use all the services.
- 36. Holloway Report, p.140.
- 37. Kyle, pp.329-39.
- 38. David C. Martin and John Walcott, Best Laid Plans: The Inside Story o fAmerica '5 War Against Terrorism (New York: Harper & Row, 1988), p.34.
- 39. Kyle, p.332.
- 40. Pitman interview, 22 February 1991.
- 41. Sick, p.301. Colonel Kyle joins Colonel Beckwith in questioning the determination of the Marines. But if pilot drive and determination were truly missing, not one RH-53D would have made it to Desert One. As a pilot with a great deal of low-level flying time, I have nothing but admiration for the six Marine crews who pulled off their flight through the Iranian haboob. The Holloway board tried to exonerate these men; to continue to focus on them is an injustice.
- 42. *Holloway Report*, p.71. Major General Vaught did try to overcome risks by establishing a 'murder board' within the JTF. The results of this three-man group included changes and improvements, but Colonel Kyle admits the murder board probably should have come from outside the JTF. See Kyle, p.142 (notes).
- 43. Pittrian interview, 22 February 1991.

The Relevance of Kasserine

MARTIN BLUMENSON

That military history, if studied carefully, offers lessons to practitioners of the art of war has become a commonplace statement. It is so generally accepted that nothing more, apparently, needs to be said. The proposition stands.

What is far from evident is how the process of translating meaning from one age to another actually works. How does an individual go about the business of transferring insights gained from a battle that has already occurred to an engagement that is in the mind's eye, a confrontation that may erupt in the future?

Discovering useful information in the past that may apply to the present is tricky and anything but easy. The changing nature of war, the rapid pace of technology, the tumultuous development, international relations, as well as the constant transition of societies, all make the relevance of the past hard to grasp.

Furthermore, historians, who have the task of explaining what happened, usually bring prejudices of one sort or another to their work. They may admire and favor, sometimes quite unconsciously, an adversary or a leader.

The simple fact of standing in the present and looking back on events may prompt misperceptions of motivation, intent and simple mental set among the participants.

Before historians start their research, they know how the activity under investigation came to an end and what the outcome or result was. Therefore, to explain a defeat, they tend to magnify the obstacles. To make a victory understandable, they minimize the difficulties. This, of course, distorts the truth.

Finally, many details of an action are lost to later generations. Historians try to piece together a plausible account, and the extent of their success depends in large measure on their honesty and skill in interpreting fragmentary records.

Although all of this complicates the problem of learning from the past, history remains valid as guidance to those who must make decisions and act today and tomorrow.

Without a sense of what transpired earlier, the current soldier is at the mercy of his habits and emotions, his bias, his individual views and his personal experience, all of which may be too narrow or simply irrelevant to the situation at hand. A product of the present, he may lack the balance and foresight that come from acquaintance with a long historical vista.

A knowledge of past issues and events, if used with caution and a tight rein on jumping to conclusions, can be meaningful and helpful. Close reading and sound analysis stimulate ideas and broaden options.

Certain features transcend local limitations of date and geography and are worthy of consideration, study and thought. They are what may be called constants of warfare. They remain and persist, not only in the conflicts of antiquity but also in the struggles of modern times.

Gen. George S. Patton Jr. realized this when he was a cadet at West Point. Writing in his notebook to himself, he said:

In order for a man to become a great soldier ... it is necessary for him to be so thoroughly conversant with all sorts of military possibilities that whenever an occasion arises he has at hand without effort on his part a parallel. To attain this end ... it is necessary... to read military history in its earliest and hence crudest form and to follow it down in natural sequence permitting his mind to grow with his subject until he can grasp without effort the most abstruce [sic] question of the science of war because he is already permeated [sic] with all its elements.

How does a reader actually proceed to find the eternal truths? Specifically, what can an engagement remote in time, technology, place and international setting tell military persons today?

The series of lethal meetings known as the battle of Kasserine Pass, for example, fought in Tunisia in February 1943, is a story rich in detail and drama. Briefly, German and Italian troops drove American and French forces from the Eastern Dorsal mountain range 50 miles across the Sbeitla plain to the Western Dorsal, where the Allies stopped the attack and prevented the Axis from expanding a tactical triumph into a strategic success.

What are the constants of that encounter?

The first constant for soldiers is and has ever been the terrain. The natural routes of advance, the naturally strong defensive positions, the location of the roads and bridges in central and southern Tunisia determined in large part how the action unfolded.

The two mountain ranges, the passes through them, the Sbeitla plain between them and the roadnet joining them shaped the flow of events. Close attention to a map of the battleground clearly shows how the conformation of the ground prompted the logic of both the attackers and defenders and imposed on them the choice of objectives.

Ruminating on other battlefields strengthens the perception of how natural and man-made features influence military behavior. Reflecting on potential battle sites may bring an appreciation of corridors requiring blockage, convenient areas for reserves, good jump-off points, vital objectives and the like.

The constants of logistics and communications are hardly less important. Sparse lines of communication, primitive road and rail networks, long distances, shortages of transportation and awful weather inhibited the Allied forces in Tunisia. For the Axis, the Mediterranean shipping vulnerable to Allied air bombardment was a handicap. These were facts of life for the adversaries, and no amount of generalship could overcome them.

Participants in future wars will find themselves similarly constrained by implacable and uncontrollably factors. Casting one's mind ahead to potential war environments will enhance intimations of reality.

It is perhaps a law of warfare that armies usually fight with inadequate supplies and defective signals. The tyranny of logistics denies units what they deem to be enough resources to engage in a battle or a campaign. Often, after the event, what seemed to be too much turned out to be insufficient.

To be aware of these conditions is to be forewarned. Being alert to these almost certain exigencies is, by itself, already a preparation.

The modernity of weapons and equipment is another constant, and the Americans and French in North Africa suffered. The American Stuart light tanks and Grant mediums-armed with 37-mm guns and, in the case of the latter, a low-velocity 75-were simply too weak against the German Mark IV Special with a high-velocity 75 and the Mark VI Tiger with its 88-mm main gun, or even against the more numerous Mark IIIs with long-barreled 50-mm guns.

Not until increasing numbers of the newer Shermans with 75-mm main guns were delivered could the Americans begin to stand up to the Axis forces with some degree of equality.

The French were also underequipped and underarmed, both quantitatively and qualitatively. Their materiel had undergone no improvement since their defeat in the spring campaign of 1940. Lacking the up-to-date means of making war, they were unable to counter the superior weight and firepower of the German and Italian machines.

Soldiers in the field rarely dictate the nature and capabilities of their arms. What they have available depends on the national will, manufacturing establishment and the research-development procurement system. It is a sobering thought.

There are many kinds of intelligence, mechanical and human, and all have an important place in military operations. In Tunisia, just before the battle of Kasserine Pass opened, the intelligence officers of Allied Force Headquarters overrelied on or perhaps misinterpreted "Ultra" information which ran counter to what other intelligence sources were saying.

Patrols, air reconnaissance, prisoner of war interrogations and other measures indicated an Axis buildup in the south. Ultra radio intercepts pointed to the north, and the defensive precautions and dispositions toward that direction. When, the Germans and Italians struck in the south, they achieved surprise and overwhelmed the French and Americans.

The lesson is simple and fundamental, yet it is worth repeating. The unexpected in warfare is a constant hazard, and this applies to more than intelligence.

Leadership is always a constant in warfare-the competence of military professionals to act and react in situations fraught with emergency and stress and to make right decisions expeditiously. Whatever the state of the art, wherever warfare has taken place, leadership has mattered.

It is instructive to compare Field Marshal Erwin Rommel, who commanded the Axis forces in Tunisia, with Maj. Gen. Lloyd R. Fredendall, who commanded the U.S. II Corps. Rommel was sure in his strategic and tactical vision, a heroic figure to his troops and a man of great will.

Fredendall was vague and imprecise in his orders, usurped the functions of his subordinates, robbing them of initiative and responsibility, and without personal knowledge of the terrain, commanded from the rear by telephone, radio and liaison officers. The events exhausted him mentally and physically, dispirited him and rendered him incapable of action.

A function of leadership is the ability to understand and appreciate the time and space factors in a war. The speed of maneuver and the size of the battlefield have escalated in frightening fashion over the course of history.

Napoleon astonished his opponents by his lightning movements and by the scope and daring of his operational concepts. So did the Germans in 1939 in Poland, in 1940 in Western Europe and again in 1943 in Tunisia.

Several American commanders at Kasserine were unable to adjust to the new conditions, what is sometimes called the response in the compression of threat reaction time. For the most part, they were older officers who had fought in World War I and whose views were still set in those terms of an earlier age.

Constantly astounded by how fast things were happening, they lacked the quickness to evaluate the situation, decide on a course of action and execute a proper response in the abbreviated time interval available to them. What seemed distant to them was, in fact, immediate. They were deficient, slow, ponderous and unable to cope, and their troops suffered defeat.

The acceleration has continued since World War II. Urgent crisis appears and requires the mental agility to reach instantaneous decision.

Mature officers who were brought up in an older tradition and are somewhat set in their ways are perhaps less capable of meeting this challenge than younger men. On the other hand, Gen. Patton one of the oldest of the senior American commanders in World War II, proved his ability to stay up with his times.

Kasserine Pass was a clash between two coalitions, Allied and Axis. Alliance warfare is always delicate. Partners are usually, if not always, unequal in strength.

Differences of language and customs, history and habit, culture and upbringing, doctrine and geography complicate and strain the relationship.

So do national interests, the desire for prominence and publicity and the wish to dominate. Coalition warfare, or interoperability as it is sometimes called, is circumscribed by a special kind of courtesy that inhibits unified, cohesive and quick action.

In World War II, the Allies had the better system. To a large extent, it was the result of prior experience in War I.

In March 1918, rather late in the war, Marshal Ferdinand Foch of France became the Supreme Allied Commander. Although his authority was limited and he functioned more by persuasion than by direction, he brought a unified outlook to the national forces on the Western Front.

Complementing this rudimentary command structure, the Supreme Military Council, a committee representing participants, sought to integrate the logistical aspects of a coordinated effort.

The Allies built on that experience shortly the Pearl Harbor attack and the entrance of the United States into World War II. The Anglo-Americans set up specific machinery to regulate the military partnership.

At the top, British Chiefs of Staff f and the American Joint Chiefs of Staff, the principal military advisors to the Prime Minister and the President, formed themselves into a single committee known as the Combined Chiefs of Staff. They were receptive to the wishes of their two political leaders, and they translated those wishes into military terms.

They laid out the strategy for the Prime Minister's and President's approval. They allocated resources to the various theaters of operations, and they were the corporate bosses of the theater commanders in each case, a British or American Supreme Allied Commander who had far more authority than Marshal Foch ever had.

During "Torch," the North African invasion in November 1942, there was thought of Appointing French General Henri Giraud the Supreme or perhaps the Deputy Supreme Allied Commander. This was not feasible, for Giraud was, quite simply, outside the Combined Chiefs of Staff system. He was not bound to comply with the desires of the Prime Minister and the President.

Since the end of the war, the publication of memoirs and diaries has revealed much bad feeling and bickering on the part of some British and American officers toward each other. Gen. Mark Clark, in the privacy of his journal, recorded his disgust at being, he said, "caught in the British empire machine."

Gen. Patton, also in his diary, more "than once regarded Gen. Dwight D. Eisenhower as being more British than American, and Field Marshals Sir Alan Brooke and Sir Bernard L. Montgomery constantly questioned Eisenhower's competence. Reading these accounts provokes wonder at how the Anglo-American alliance survived.

The fact is it flourished. It was the strongest coalition in the history of warfare. Despite grumbling on the part of disenchanted individuals, despite real and serious divergences of approach to strategy and policy, the partnership and the machinery that ran the military side functioned well and on every level.

The proof is the wonderful interoperability achieved at the Kasserine and Sbiba, passes, where French, British and American troops together halted the Axis forces, thus preventing a tactical triumph, that is, a battlefield victory, from becoming a strategic success, that is, a situation compelling the Allies to revise their political goals.

Had Rommel been able to gain Le Kef or Tebessa or to throw the Allies out of Tunisia-which he came close to doing he might well have changed the course of the war. In that case, the Allies would have had to renounce their political aims in North Africa and in the Mediterranean area, at least for some time.

The Axis lacked a formal machinery to mesh the efforts of Germany and Italy. Perhaps the basic reason was the absence of such experience among the Central Powers in World War I, when Germany and Austria tried to link their operations in *ad hoc* and intermittent fashion.

German and Italian coordination in North Africa was carried out by liaison officers and diplomats, No formal alliance structure existed to allocate resources.

The Fuehrer and the *Duce* met personally from time to time to discuss strategy and policy, but in these conferences, Hitler talked compulsively and interminably while Mussolini, who believed that he understood and spoke the German language so well that he dispensed with interpreters, listened. There was no meeting of the minds. The two dictators directed parallel wars.

There could be no real equality, no sharing of goals and methods. Italy depended on Germany for much of her war material, the corrupt Italian government often misused resources, and the Italian forces, except for a few elite and first-rate units, were generally inferior when compared to the Germans. Many Italian soldiers lacked good equipment and sufficient supplies, and they were less than enthusiastic to fight for a bankrupt system.

Yet Hitler admired Mussolini, whom he regarded as his political mentor, and he permitted Mussolini certain privileges. North Africa was an Italian theater of operations, with an Italian theater commander under the authority of *Comando Supremo* in Rome.

Both Rommel in southern Tunisia and Gen. Juergen von Arnim in the northern part of the country were subordinate to the Italian chain of command. Although the Italians deferred to the Germans, they insisted on German adherence to Italian authority, and in this, Hitler supported them.

Hitler's liaison officer in Italy was Gen. Enno von Rintelen, whose title was "German General at the Headquarters of the Italian Armed Forces." His function was to convey German views to the Italian high command.

Field Marshal Albert Kesselring was also in Rome, and as the senior German officer in Italy and North Africa, he exercised administrative control over the German troops in the area. In addition, he acted as a *de facto army* group commander in Tunisia and tried to coordinate the offensive actions of Rommel and Arnim.

Because Kesselring needed to have Comando Supremo's acquiescence to his ideas and permission to carry them out, the Axis command at the top in North Africa was slow and hesitant.

As a result, Rommel was hampered. He was prevented from moving as rapidly as he wished. Perhaps this, in the end, denied him a strategic triumph.

A striking observation emerging from the Kasserine battle was the ability of the Axis forces, and particularly the Germans, to encircle allied troops. They pinned down by frontal attack the French defenders at the Faid pass and then surrounded them with units coming up from the Rebaou pass.

They marooned the American units on Djebels Lessouda and Ksaira by striking quickly to close off escape routes. Creating a pocket in which to trap and destroy the opponent seems to have been a natural mode of operations. This tendency was at work in the so-called "Hutier" tactics in 1918 and in the campaigns of 1939 and 1940.

The activity is implicit in *blitzkrieg*. It may derive from national doctrine or tradition, perhaps from outlook. The Russians also used this pattern of attack, aiming to cut up and to surround German troops-as, for example, Field Marshal Friedrich von Paulus's Sixth Army at Stalingrad.

The American method appears to be different. Maj. Gen. William T. Sherman's march through Georgia during the Civil War turned into a giant strategic pincer, but the intent seems to have emerged at the conclusion rather than at the inception of the movement.

In World War 1, Gen. John J. Pershing planned the battle of St.-Mihiel, designed to eliminate a salient, as an encirclement. The Germans escaped the trap. The MeuseArgonne offensive, the major American action, was a frontal attack.

Eisenhower's habit in Europe in the next war was much the same. His broad-front strategic envisaged attacks all along the line.

In France in the summer of 1944, the Germans at Mortain created a perfect opportunity for the Allies to surround

and destroy them at Argentan and Falaise and again at the Seine River. Gen. Eisenhower, Field Marshal Montgomery and Lt. Gen. Omar N. Bradley were unable to pull off the maneuver, perhaps because of a lack of interoperability and inability to synchronize the Allied armies, perhaps because of a conflict of objectives or because to them, the operation was unorthodox doctrine.

When the Americans sought to trap Germans at Montelimar in the south of France shortly after the invasion, they failed. During the Battle of the Bulge, when the Allies stopped the Ardennes counteroffensive, presumably they could have cut off the salient at its base; they preferred to do other wise.

Part of the syndrome—if there indeed is to be a syndrome—is the nature of the objective. According to Gen. Karl von Clausewitz, the proper military objective is the enemy forces. When the Germans entered Paris in 1940 and the Russians seized Berlin in 1945, the war had been won on the battlefield. Hanoi raises an interesting speculation, but certainly Saigon proves the case.

The air-ground connection has been an important constant in the twentieth century and continues to be vital. At Kasserine, the Axis forces used air power far more efficiently and effectively than the Allies.

Part of the explanation was the German penchant for developing tactical power before the war, that is, forces to support the ground components, while the Allies were generally more interested in strategic bombing.

Part of the reason lies with better Axis arrangements for coordinating ground and air units in North Africa, perhaps a result of experience.

Much of the American problem with air was because of Fredendall. His supporting air commander established his headquarters near Fredendall's and relations between the two staffs were good; but instead of giving guidance for the air support he wished, Fredendall allowed the air forces free rein. This of course, was an abdication of command responsibility, a relapse into fuzziness or an unwillingness to do some hard thinking.

The relationship between the air and ground services is difficult because of a basic difference in outlook. Airmen and ground soldiers are raised in different environments, each with its own culture, set of beliefs and doctrine.

All the good will in the world, all the agreements signed, sealed and delivered in advance, and all the cooperation mutually promised before the event may well disintegrate at a time of real threat. The kind of air power delivered will depend on who is in overall control, an air force commander or a ground force officer.

An important constant in warfare is the readiness of the troops for combat, the state of their training and their familiarity with their weapons. The American soldiers were hardly prepared for Kasserine, in large part because of the degeneration of the American military establishment during the interwar years.

Rapid demobilization after World War I reduced the regular Army to 130,000 men on I January, 1920. In 1939, when World War II started in Europe, there were 210,000 regulars, but not a single division was prepared to fight.

The point is-the U.S. Army lacked the time to bring up and to equip a modern fighting force. Expanded and modernized overnight, the Army improvised and rushed its training programs. There was insufficient lead time to develop adequate weapons and equipment.

Kasserine blooded the Americans on the European side of the war, and it was a rude awakening to the rigors of combat. They made many mistakes, but they recovered quickly and impressed everyone with their willingness and ability to learn and to improve. Whether they will have enough time in the future to do so or whether they are ready now for the vicissitudes of warfare is, of course, a vital question.

These, then, are some of the lessons emerging from a study of the battle of Kasserine Pass, certain constants that have relevance in any environment and time frame. They may be helpful. More to the point, they may serve as a demonstration of how one goes about extracting and distilling meaning.

There is a personal interaction between the reader and the printed page. The student applies his particular intelligence and experience to the history he digests. As he seeks to enlarge his comprehension, he should be skeptical of the record presented and test his perceptions often.

He should remember that historians furnish the scenario and suggest reasons for the way parts of the past unfolded, but in the end, military professionals must go beyond the findings of historians and discover the proper linkages to the realities of the present and the potential realities in the future.

First Naval Battle of Guadalcanal DAVID H. LIPPMAN

War-worn and weary, Commander Tameichi Hara stumbled off the bow of his destroyer *Amatsukaze*. The Japanese destroyer skipper had just fought the hard Battle of Santa Cruz. He desperately needed some rest. Instead, he would face his greatest ordeal yet.

By October 1942, Japan and the United States had worn each other down in the South Pacific. United States Marines held Guadalcanal's vital Henderson Field but were ringed in by Japanese soldiers. Both armies were devastated by malaria and supply shortages.

At sea, the picture was equally grim. Japan had just lost 74 planes at Santa Cruz, but the United States had lost the aircraft carrier *Hornet*, and her sole remaining flattop, *Enterprise*, was badly damaged. American planes ruled "The Slot" and Ironbottom Sound off Guadalcanal by day, but Japanese ships dominated them by night. Both sides were stalemated, gasping for breath.

In his spartan sea cabin aboard the super battleship *Musashi* at Guam, Japan's Admiral Isoroku Yamamoto, commander of the Combined Fleet, spewed out a stream of orders intended to allow the fleet to regain the initiative with typical daring.

Since Yamamoto had only one available carrier, *Junyo*, he turned to his crack battle-cruiser force. The plan was simple enough: A convoy of troops, backed up by his battleships *Hiei* and *Kirishima*, would steam down The Slot to Guadalcanal. The troops would land and reinforce the army there, while the warships would shell Henderson Field, smashing the air base and its planes.

Kirishima and *Hiei* were fine ships. Built in 1912 and 1914, respectively, they displaced 37,000 tons and were among Japan's oldest yet fastest battlewagons, able to race along at 30 knots. When Emperor Hirohito went to sea, he always rode aboard *Hiei*.

Key to the plan were special 14-inch shells loaded in the magazines of *Hiei* and *Kirishima*--Type 3 shells, originally designed for anti-aircraft work. Each shell's casing had a bursting charge that would scatter 470 individual incendiary submunitions across an area. These could shatter the parked planes on Henderson Field, but were useless against steel warships. One heavy cruiser and 10 destroyers, including Hara's *Amatsukaze*, would take part.

Soon after *Musashi*'s mimeograph machines cranked out the orders, Rear Adm. Hiroaki Abe hoisted his flag aboard *Hiei*. Abe, a veteran destroyer skipper, had escorted Japan's elite carriers from Hawaii to the Indian Ocean. But he had a reputation for timidity. And his hard-working crews were exhausted. Still, the Japanese had key advantages-well-trained crews, coordinated tactics, and the Type 94 Long Lance torpedo, which outranged American fish.

Hara was aware of all these factors as he returned to his 2,490-ton destroyer. *Amatsukaze* left Truk on November 9 and met up with Abe's force near the Shortland Islands on the 12th. The force headed south in tight formation.

Meanwhile, the Americans were not idle. Japan had changed its naval codes, but U.S. code-breakers quickly went to work. Yamamoto had cut his orders on November 8. On the 9th, those orders, decrypted and translated, were on Vice Adm. William F. Halsey's desk in Noumea, French New Caledonia. America's aggressive commander of the South Pacific theater moved with his usual speed. Figuring that the best defense was a good offense, Halsey countered Yamamoto's reinforcements with troops of his own, the 182nd Infantry Regiment, and a strong naval escort. Then he handed the ball over to Rear Adm. Richmond Kelly Turner, the equally aggressive deputy in direct command at Guadalcanal.

Early on the morning of November 12, the Americans won the race to reinforce Guadalcanal when eight U.S. transports steamed into Ironbottom Sound. The Japanese hit back at once. Their land-based 11th Air Fleet flew down The Slot and into a wild battle. The sky was filled with color--yellow flame, black smoke and white spray--as Japanese planes pressed home their attacks. In eight minutes of action, the Japanese lost 11 bombers and one fighter. The Americans lost three fighters, took a hit on the destroyer *Buchanan* and another hit on the heavy cruiser *San Francisco*--resulting in 5 dead and 7 wounded on *Buchanan* and 24 dead and 45 wounded on *San Francisco*.

Meanwhile, Abe's ships plowed south at 25 knots. Thick clouds gathered rapidly and unleashed a tremendous downpour. The fleet slowed to 18 knots, a high speed for such rain. Japanese crews found it exhausting. Hara thought it the worst rainstorm he had seen in his long career.

At 10 p.m. on the 12th, the Japanese closed in on Guadalcanal. On *Hiei*, Abe pored over charts. He needed to pop out of the rain to bombard Guadalcanal, so he ordered a simultaneous 180-degree turn by five destroyers. Two destroyers did not get the word. The order was repeated. The ships made the turn, and the Japanese formation broke up. The van arc of five destroyers was now divided into a section of two and another of three, a poor grouping.

Hara wondered why Abe did not form a battle line. Then, just after 11 p.m., Hara's lookout shouted, "Small island, 60 degrees to port, high mountains dead ahead." Hara peered out from his bridge. The rain had just cleared. Ahead lay the mountains of Guadalcanal, barely visible against a dark background of clouds. Hara, shaking with excitement, sounded general quarters.

The Americans had had a busy day, too. Turner, drawing ships from his own convoy escorts, organized a scratch team of five cruisers and eight destroyers to face the Japanese. Turner next had to choose between Rear Adms. Norman Scott and Daniel J. Callaghan, the two senior officers present, to lead Task Force 67.4, the new force. Scott had commanded an American task force at the Battle of Cape Esperance and had won that battle. Callaghan had spent the campaign pushing paper at Noumea. But Callaghan was senior in rank to Scott by 15 days, so Turner gave command to Callaghan, with Scott serving as a supernumerary.

Around 10 p.m. on the 12th, Callaghan's force moved northwest in single column, the destroyers *Cushing, Laffey, Sterett* and *O'Bannon* leading. Next came the light cruiser *Atlanta* with Admiral Scott aboard, then Callaghan's flagship, *San Francisco*. The cruisers *Portland, Helena* and *Juneau* followed.

Behind *Juneau* sailed four more destroyers, the brand-new *Fletcher* bringing up the rear. Callaghan's formation was poor. His ships with the newest and best radar systems were in the formation's center or rear.

Callaghan, an austere and deeply religious officer, apparently planned to cross the Japanese "T." Or he may have planned to have his rear and van destroyers make flank attacks. Whatever his plan was, he did not tell his subordinates.

Meanwhile, the Japanese formation was a mess. The destroyers *Yudachi* and *Harusame* led the way. Behind them was the cruiser *Nagara* and the battleships. To starboard were the destroyers *Inazuma*, *Akatsuki* and *Ikazuchi*. To port sailed *Yukikaze*, *Amatsukaze* and *Teruzuki*. Behind the force, maneuvering to port were three more destroyers, *Asagumo*, *Murasame* and *Samidare*.

The clock turned over at midnight, and on ships all over Ironbottom Sound watch officers wrote in the new date on their deck logs: Friday, November 13.

A few minutes after 1 a.m., Abe, hearing no contact reports from his scattered ships, ordered his battleships to prepare to shell Henderson Field. Gunners, already at action stations, pulled levers, and Type 3 shells came rumbling and squealing up ammunition hoists into the breeches of the 14-inch guns.

At that moment, the Americans were closing in on a nearly reciprocal course at 20 knots. At 1:24 a.m., *Helena*'s SG radar picked up the enemy from 13.5 miles (27,100 yards) away, heading right for them. *Helena* was not the lead ship, *Cushing* was, and her less efficient SC radar had not picked up Abe's ships.

Callaghan turned his ships due north. His radar picture was not clear. He called *Helena* on voice radio to find out what was going on, but the frequency was jammed by ill-disciplined chatter from other ships.

At 1:42, *Cushing* saw *Yudachi* and *Harusame* to port, just 2,000 yards off, and events spun out of control. *Cushing* swung to port, and Commander Thomas M. Stokes, commanding the destroyer group that *Cushing* headed, asked Callaghan, "Shall I let them have a couple of fish?" Callaghan was indecisive. He ordered Stokes to stand by to open fire, then to head north. The three destroyers behind *Cushing* veered left, and so did *Atlanta*. Callaghan asked *Atlanta*, "What are you doing?"

"Avoiding our own destroyers," answered *Atlanta*'s Captain Samuel P. Jenkins. Then *Cushing* turned north again and picked out *Nagara*. Now the Americans were about to pass around and between two Japanese battleships.

The Japanese were having their own difficulties. *Hiei* and *Kirishima* were ready to open fire on Guadalcanal when *Yudachi* signaled Abe: "Enemy sighted."

Abe roared, "What is the range and bearing? Where is *Yudachi*?"

The admiral's own lookout answered, reporting that he saw four black objects ahead to starboard and 9,000 meters away.

Yudachi was in trouble, too. Her captain, Kiyoshi Kikkawa, later admitted he was being overcautious after a fiasco in an earlier battle. This night, Abe's moves left *Yudachi* out of position and lost. Kikkawa blundered into the American column, unready to fire, not knowing where the Americans or the other Japanese ships were. Kikkawa conned his ship back and forth, trying to find the other Japanese ships and the enemy, then headed into battle.

On *Hiei*, a shaken Abe, his voice faltering, ordered his men to switch from Type 3 shells to armor-piercing ordnance. The gunners tore Type 3 shells out of the breeches and hurled them out onto the decks while crews in the magazines scrambled to load armor-piercing shot. *Hiei*'s signal officers screamed hysterical orders over the radio to the Japanese ships, ignoring security measures.

Amatsukaze was calm, however. Hara told his men: "No sweat, boys. We are well prepared to engage when the distance is down to 3,000 meters."

Crucial minutes passed as the two forces raced toward each other at a combined 40 knots, neither group alert, neither ready to fire. Callaghan realized he was surrounded by Japanese ships and signaled, "Odd ships fire to starboard, even ships fire to port." This incredible order took no account of his ships' varied armament. Light cruisers armed with 6-inch guns were ordered to swap broadsides with Abe's battleships, armed with 14-inch guns.

On *Hiei*, an exasperated Abe did not know where his ships were. He turned on his searchlight and pinned *Atlanta* 5.000 meters ahead.

Atlanta opened fire on the enemy searchlights, firing at barely 1,600 yards. She fired on three enemy destroyers, scoring hits on Akatsuki. The damaged Japanese ship hit back with a slew of torpedoes that blasted Atlanta's thin armor and exploded in the forward engine room. Shells from Akatsuki started fires on Atlanta's upperworks.

With her engine room flooded, the burning *Atlanta* drifted away from the action, taking on water. The battle now became what an American captain called "a barroom brawl after the lights went out."

The point of the American column was the destroyer *Cushing*, and she was headed for *Hiei*, which was 1,000 yards to port. *Cushing* swung to starboard, spewing six torpedoes at the battleship. All missed. *Cushing* then opened up with 5-inchers and machine guns. The torrent of tracers and shells cascaded all over *Amatsukaze*. Hara was transfixed by the fireworks display, but his ship was untouched.

Meanwhile, *Hiei* fired a 14-inch salvo, and *Cushing* was blasted by 10 major hits. The destroyer lay hopelessly crippled under enemy machine-gun fire that cut down sailors at their posts. Helpless, the ship was abandoned.

Behind *Cushing* came *Laffey*, which sprinted by the two Japanese battleships, spraying *Hiei* with more shells and machine-gun fire. One bullet cut down Captain Masakane Suzuki, Abe's chief of staff; another wounded Abe. But *Laffey*'s torpedoes failed to arm, and bounced off *Hiei. Laffey* ran into three Japanese destroyers. One, *Teruzuki*, slammed a torpedo into *Laffey*, and the American ship's stern blew off. *Kirishima* put a 14-inch shell into *Laffey*'s boiler room, and her skipper, Lt. Cmdr. William E. Hank, ordered the crew to abandon ship. As the U.S. bluejackets jumped into the water, *Laffey* exploded, killing many on the ship and in the water, including Hank.

The next American ship was *Sterett*, and she tangled with *Nagara*. The Japanese blasted *Sterett*'s helm control. *O'Bannon*, right behind, pulled even with *Sterett*, fouling her gunsights. The Japanese then shot out *Sterett*'s radar and radio antennas.

A Japanese destroyer appeared 1,000 yards off *Sterett*'s starboard bow. *Sterett* launched a torpedo. The enemy ship sank instantly. The target was probably the destroyer *Akatsuki*. With her torpedoes gone, half her main guns knocked out, a fire aft, and one-fifth of her crew casualties, *Sterett* staggered east and south, out of action.

O'Bannon was next, and she could not score a hit. Behind her was San Francisco, busy firing 8-inch shells at Yudachi. San Francisco's skipper, Captain Cassin Young, a Pearl Harbor survivor, ordered his ship to switch targets to another destroyer. The main battery director did not see the disabled Atlanta drift into San Francisco's line of fire, and seconds later shells from San Francisco smashed through Atlanta's superstructure, killing Admiral Scott.

On San Francisco's bridge, Callaghan watched the chaos and ordered his ship to cease fire. Incredibly, the message was sent out on the general circuit, "Cease fire own ships."

The U.S. forces were incredulous. *Portland*'s captain, Laurance T. DuBose, signaled back, "What is the dope, did you want to cease fire?" Callaghan broadcasted, "Give her hell," and "We want the big ones! Get the big ones first!" Good lines, but vague orders.

Meanwhile, the Japanese were regrouping, too. *Amatsukaze* broke out of the confusion and tried to find a target. Hara saw some American ships, which then disappeared into the Guadalcanal coastline. Hara looked at *Hiei*. The big ship's mast was burning.

Hiei was battling with *San Francisco*. *Hiei*'s initial salvos were Type 3 shells, which exploded instantly when they hit the cruiser's thin hull. The shells wrecked gear on the upper decks and killed anyone in the open but did little other damage.

But soon *Hiei*'s gunners loaded armor-piercing shot. *Hiei*'s third salvo blasted *San Francisco*'s bridge. The cruiser's navigator, Commander Rae E. Arison, was hurled over a bulwark and down two decks, where he landed on a 5-inch gun. The crew of the gun, mistakenly thinking Arison was dead, in turn tossed him unceremoniously onto the deck, flinging ejected hot shell cases after him.

On *Helena*, Lieutenant William Jones watched *Hiei* batter *San Francisco*. Every time a shell hit *San Francisco*, Jones saw sparks from the stack shoot hundreds of feet in the air. Another shell slammed into *San Francisco*'s bridge, throwing men over the side. The next salvo was devastating. The first shell killed Captain Young; the second exploded on a girder, which fell on Callaghan, killing him and all but one member of his staff. Another shell killed the acting executive officer, Commander Jerome C. Hubbard, and the regular exec, Commander Mark Crouter, who had been wounded earlier that day in a Japanese air attack and had refused to leave the ship.

Command fell upon Lt. Cmdr. Bruce McCandless, who found the damaged flagship staggering south, battered by 45 hits, with most of her guns silent, 25 fires burning, and 500 tons of water aboard.

But he could not pull the ship out. Other ships did not know Callaghan and Scott had been killed. If *San Francisco* retired, so might the whole force, and that would mean total defeat. McCandless ordered his battered ship west, back into battle. Then McCandless inspected the navigating bridge. Bodies lay strewn everywhere amid twisted metal. Water poured from punctured cooling systems, and the ship's broken siren wailed.

Lieutenant Commander Herbert E. Schonland, the damage-control officer, who was senior to McCandless, now arrived on the bridge. He was fully occupied with saving the ship, so he left McCandless with the conn. McCandless continued to sail west, but eventually he brought the battered heavy cruiser out of the battle.

The ship's crew battled her damage. Boatswain's Mate 1st Class Reinhard Kepler helped save the ship from fire. Schonland, using flush valves, kept her afloat. Kepler, Schonland, McCandless and Callaghan were awarded the Medal of Honor. No other U.S. ship earned as many as four medals in one engagement.

Behind *San Francisco* was *Portland*, in her first night battle. Her Captain DuBose, who had angrily queried Callaghan's cease-fire order, had swung *Portland* north to chase a target when a torpedo hit her at 1:58 a.m. The hit sheared off the starboard screws and bent her shell plating so that *Portland* was locked into a starboard circle.

Just as *Portland* completed her first loop, *Hiei* turned up and the two ships traded salvos. *Portland* claimed hits. *Hiei* steamed by, and *Portland* found herself surrounded by American ships, without a target, circling helplessly.

Next came *Helena*, equipped with modern radar. She found the Japanese destroyer *Akatsuki* and shot out her searchlight. *Akatsuki* hit back, inflicting only minor damage, although one of its shells did cause a clock to stop on *Helena* at 1:48 a.m.

Helena's gunnery officer saw a Japanese battleship steam by barely 300 yards off. He phoned the firing bridge, "There's a Japanese battleship on our port quarter."

The firing bridge replied, "We know it," but before *Helena* could fire, the Japanese steamed off into the dark. *Helena* wound through a group of burning and exploding ships, looking for enemy vessels. She sustained only slight damage.

Juneau followed. She was hit early by a torpedo that struck her port side in the forward fireroom. The central fire control was knocked out. Unable to move, she fired a few rounds, some of them seemingly at *Helena*, then staggered out of battle.

Meanwhile, on *Amatsukaze*, Hara found several American ships to starboard. He closed to 3,000 meters, wondered why the enemy did not shoot back, and fired eight torpedoes. He then swung hard to port and watched as cruiser *Yudachi* charged the American ships.

The ships were the four tail destroyers of the American column, *Aaron Ward*, *Barton*, *Monssen* and *Fletcher*. *Aaron Ward* tried to avoid the battered *Sterett* and found herself under Japanese searchlights. She collected nine direct hits, which shattered her director control, radar and steering. Within 10 minutes she coasted to a halt. Behind *Aaron Ward* was *Barton*, which saw enemy searchlights pick out *Aaron Ward* and fired at the lights. After seven minutes of battle, *Barton* stopped to avoid a collision. As she stopped, she was hit by one of *Amatsukaze*'s torpedoes. Hara watched two pillars of fire rise over *Barton*. Hara's crew gave their skipper a roaring ovation. Hara spun the helm and took off to find another target.

On *Barton* all was chaos, but only for a few seconds. Sixty percent of her crew died as she quickly sank; the torpedo had hit her main fireroom, and then another enemy torpedo had struck her forward engine room.

Behind *Barton* was *Monssen*, under Lt. Cmdr. Charles E. McCombs. After watching *Barton* sink, McCombs engaged two enemy destroyers in the dark. Then star shells burst overhead. McCombs wondered if they were from an American vessel. He figured they were, and lit his recognition lights. They attracted two enemy searchlights and a wall of gunfire--37 hits in all. "Abandon ship" was ordered at 2:20 a.m.

Last in line was *Fletcher*, a big, new destroyer with new radar. Her crew watched *Barton* "disappear in fragments" and *Monssen* sink. *Fletcher* staggered through the chaotic ocean, firing at a variety of ships, including *Helena*, and, incredibly, emerged unscathed.

The Japanese side was also confused. *Nagara*, with her distinctive three funnels, attracted a lot of American attention but took no major hits. *Akatsuki*, on the other hand, battered *Atlanta* but drew fire from at least five American ships and was sunk.

The luckless *Yudachi* committed the same error as *Monssen*, lighting her recognition lights, which invited a flurry of American shells. *Yudachi* was left dead in the water at 2:26 a.m.

Hara had a rough night, too. After sinking *Barton*, he headed north, then saw a ship head directly toward him in the dark. It was closing quickly. *Amatsukaze* swung to starboard and barely avoided a collision. Hara could not recognize the intruder. He first thought it was a Japanese destroyer tender, wondered what it was doing in the midst of a battle, and then realized it was an American cruiser.

Hara howled, "Open fire!" and launched his last four torpedoes at point-blank range, but he was too close. The torpedoes failed to arm, and all four fish bounced off the enemy hull.

The American ship was the damaged *San Francisco*, spewing flame and smoke, unable to fire back. Hara ordered his guns to maintain fire and finish her off. While *Amatsukaze*'s crew cheerfully banged away, the American cruiser *Helena* came charging up unnoticed.

Warrant Officer Shigeru Iwata shouted the alarm at the top of his lungs, and Hara stood frozen, watching *Helena* race in. Two American shells slammed *Amatsukaze*, nearly throwing Hara off the bridge. He was deafened by the noise and staggered to his feet.

Hara then saw Iwata lying on the deck. A piece of shrapnel had killed him instantly. Hara was extremely upset. He had trained Iwata.

Hara's ship was now looping to starboard, and he shouted orders to his helmsman. The hydraulics had failed. *Amatsukaze* was blazing, and the executive officer had been hurled from the ship.

Firefighters went into action, and engineers managed to reconnect the rudder. Hara got help from destroyers *Asagumo, Murasame* and *Samidare*, which pounced on *Helena*, driving her off. *Amatsukaze* sustained 37 hits and lost 43 killed.

Hiei was in trouble, too. As the largest target, she took 85 hits. None could penetrate her main armor belt, but they battered her light armor and ordinary steel. All light flak guns were destroyed and her communications knocked out. *San Francisco* put an 8-inch shell through *Hiei*'s rudder, flooding the main steering compartment.

On Guadacanal, the ground troops of both sides had grandstand seats. Marine Private Robert Leckie wrote: "The star shells rose, terrible and red. Giant tracers flashed across the night in orange arches...the sea seemed a sheet of polished obsidian on which the warships seemed to have been dropped and immobilized, centered amid concentric circles like shock waves that form around a stone dropped in mud."

It was an awesome display of shot and shell, terrifying to those involved in it, and no one seemed more terrified than Abe. *Hiei* was damaged, Abe's chief of staff lay dead, and he himself was wounded. At 2 a.m., Abe canceled the bombardment mission and ordered his ships to withdraw. Abe's bosses agreed. At 2 a.m., *Kirishima* radioed Truk a report of a "severe mixed battle" in which both sides suffered damage. At 3:44, Yamamoto radioed back. The reinforcement of Guadalcanal and the bombardment were postponed.

As *Hiei*'s signalmen began flashing lights across the water, Captain Gilbert C. Hoover of *Helena* was trying to contact anyone senior by radio. He rapidly discovered that he was the ranking officer of a shattered task force. At 2:26 a.m., he barked orders for the American ships to withdraw.

Now both sides battled for salvage and survival. At 3 a.m., *Asagumo* and *Murasame* found *Yudachi* lying motionless with fires raging forward. The ship was beyond saving, so the crew was removed. Yet *Yudachi* did not sink.

Hiei got some help, too. Five destroyers joined the big ship. Crewmen put out fires, but Hiei's rudder was jammed at full right. Flooding prevented access to damaged equipment. Her skipper, Captain Masao Nishida, puzzled over the situation. Some junior officers, full of Bushido spirit, urged him to beach Hiei, shell the airfield, then send the crew ashore to join in a ground assault. While heroic, this gesture was not Nishida's idea of sound tactics. He was convinced his ship could be saved.

At dawn, a lot of crippled ships lay drifting about Ironbottom Sound, *Hiei* foremost among them. At 6:18, her lookouts saw a target more than 14 miles away. *Hiei* trained her 14-inchers and straddled *Aaron Ward*. American planes distracted *Hiei* while the tug *Bobolink* dragged *Aaron Ward* to Tulagi Harbor by 8:30.

Portland was still circling helplessly, but she picked out *Yudachi* 12,500 yards off. And *Portland*'s guns still worked. Her sixth salvo hit *Yudachi*'s after magazine, and she exploded and sank.

Bobolink came to help *Portland*, but DuBose sent her to aid *Atlanta*. *Portland* streamed her anchor, tried engine combinations, and finally got power. *Bobolink* returned and shoved *Portland* at 2 knots to Tulagi. She arrived at 1:08 the next morning.

Atlanta lay drifting, burning and listing from 49 hits that had made her foremast topple over to port. Miraculously unhurt, Captain Jenkins organized bucket brigades to quell fires. Everyone lightened the ship by jettisoning torpedoes, ammunition and excess gear.

Atlanta was still drifting toward a Japanese-held shore. Crewmen hurled out the starboard anchor to stop the drift. The hardworking *Bobolink* and other vessels came to help. By 2 a.m. the ship had been pulled away, and many oil-covered Americans had been hauled out of the water.

Atlanta was clearly doomed. Halsey gave Jenkins discretion to act, and at 8:15 p.m. demolition charges went off and Atlanta sank. Her crew joined 1,500 other shipwrecked Americans at Lunga Point.

Other American ships were steaming south, exhausted, the remains of Callaghan's task force, Hoover in charge. The force suffered another tragedy on the way home. The cruiser *Juneau* was torpedoed and sank, going down with 683 sailors. They were additional casualties in a battle that cost 170 from *Atlanta*, 165 from *Barton* and 145 from *Monssen*; two American cruisers and four destroyers--a grand total of 1,439 American sailors lost, including two admirals.

Back at Ironbottom Sound, life was still hard for the Japanese, too. Hara's *Amatsukaze*, riddled with hits, limped home. *Hiei* was fighting for her life and facing repeated air attacks.

American planes flew off Henderson Field at dawn on November 13 to hit the crippled battleship but had little success. Determined to sink *Hiei*, Halsey ordered his only carrier, the damaged *Enterprise*, to move in.

Enterprise really was not ready for this battle. She only had one operating elevator, which slowed flight operations, and many of her damaged bulkheads were not repaired. She had no watertight integrity in case of enemy attack.

No matter. At 8 a.m. on Friday the 13th, *Enterprise* was 280 miles south of Guadalcanal. Air Officer Commander John Crommelin sent in 15 Grumman TBF Avenger torpedo planes under Lieutenant Al "Scoofer" Coffin. They were to attack *Hiei*, then fly to Henderson Field.

Crommelin was worried. He had no idea if Henderson Field was American-held after the vicious battle, and his planes would not be able to abort back to *Enterprise*. His eyes were wet as he briefed his aviators.

Coffin's Avengers swung in on *Hiei* at 11:20 a.m., right on time. The sky was full of black smoke, tracer fire and buzzing planes. *Hiei* fired back with everything she had, even Type 3, 14-inch shells, unfired in the previous night's surface battle. The Avenger pilots saw the big shells fountain in the sea in an even row several miles astern.

The Avengers flew at full throttle just over *Hiei*'s burned and scorched decks. Seconds later, three torpedoes hit, causing explosions. But *Hiei* remained afloat.

Coffin flew to Henderson Field and found a friendly reception from Marines and Seabees. While Coffin's aviators dined on gummy Australian bully beef and Spam, other American squadrons hit *Hiei*, including some Boeing B-17 high-altitude bombers. These ran into Japanese fighters and shot down three, while pouring in three more bomb hits.

The damage was not great, but the constant attacks disrupted Nishida's efforts to save his ship and prevented *Hiei*'s crew from placing collision mats over shell holes in the steering machinery compartments so they could be pumped out.

At 8:15 a.m., Abe transferred to the destroyer *Yukikaze* and ordered *Hiei* towed to the Shortlands. By now Abe was exhausted and devastated. At 10:20 a.m., he ordered Nishida to beach his ship on Guadalcanal. Nishida pleaded with Abe to rescind the order. Abe did. But at 12:35, Abe again ordered *Hiei*'s crew removed. Once again, Nishida got the order canceled.

At 1:30 p.m., Coffin's planes took off again to hit *Hiei*. Once again they torpedoed her, dropping their fish half a mile from the wounded battleship. Three torpedoes hit, but only one exploded. Coffin's planes returned to Guadalcanal safely.

Coffin's afternoon attacks were the last straw for Abe. He again ordered *Hiei* abandoned. Nishida pleaded his case, but Abe was adamant. When an erroneous report came to Nishida of engine damage on *Hiei*, Nishida gave up. *Hiei*'s Kingston valves were opened, and the crew assembled forward. After three banzais, the ensign was lowered and everybody scrambled down floater nets over the side onto waiting destroyers. Nishida made sure the emperor's portrait was saved.

By 6 p.m., *Hiei*'s crew--minus 300 dead--was off the battleship. At 6:38, Yamamoto signaled Abe not to scuttle *Hiei*. Yamamoto figured the ship could divert American attention long enough for the convoy of troops to arrive after all.

It was too late. *Hiei* was listing 15 degrees to starboard and sinking slowly by the stern. The Japanese ships dipped flags and retired. *Hiei* sank sometime during the night, the first battleship Japan lost in the war.

Abe returned home minus two destroyers, a battleship and 552 dead sailors, claiming victory. Certainly he had scored an impressive tactical triumph, sinking two American cruisers and four destroyers, but Yamamoto was furious.

Hara wrote later, "Strategically the enemy had won because the Abe force failed to deliver a single incendiary shell to Guadalcanal airfields." Abe and Nishida faced a secret court of inquiry. They offered no defense for their actions or their mistakes. Both were forcibly retired, allowed their pensions but barred from public office.

Second-guessers were at work on both sides. Callaghan and his sailors had shown ample determination and valor, but closer inspection revealed that Callaghan's moves were highly questionable. Admittedly, Callaghan's team was an ad hoc force, but he made no real battle plan. He did not communicate with his subordinates and wasted one, Scott. Orders like "Give them hell" made good copy, but were not sound tactics. Callaghan did not use radar well, relied on one radio channel, which broke down, and wasted time.

Abe's mistakes were just as great. Not expecting a surface battle, he loaded the wrong ammunition. He wasted time in the engagement, too, deploying his ships poorly. Worst of all, he had lost his nerve and fled at the moment the American defenses failed, thus snatching defeat from the jaws of victory.

None of this affected Hara, who was still struggling to bring home his crippled *Amatsukaze* on the morning of the 13th. By 3 a.m., Hara had his wounded ship doing 20 knots, but *Amatsukaze* was skidding around like a wounded man. Ten men handled the rudder. Hara personally took the conn. He had to shout into the voice tube to be heard, and sweat poured down his face.

At dawn, three American planes swooped in on Hara's ship. *Amatsukaze* fired back with her only working gun. The Americans dropped their bombs early and flew off. A few minutes later, a ship steamed up. Hara, afraid it was American, realized the only thing he could do was ram it. But the intruder turned out to be the Japanese destroyer *Yukikaze*.

Yukikaze was en route to help Hiei and asked Hara if Amatsukaze needed assistance. Hara said no and headed north, plodding at 20 knots and zigzagging. Hara fretted about American submarines and airpower, but none appeared.

At 3 p.m., *Amatsukaze* crossed paths with a naval squadron under Vice Adm. Takeo Kurita, which was heading south. Kurita's sailors manned the rails to cheer *Amatsukaze*. Hara did not take the cheers. He felt responsible for *Amatsukaze*'s 43 dead.

It was time to do something about that. The bodies were wrapped in canvas and dropped into the sea amid snappy salutes, mournful bugle calls and Buddhist ritual.

Last came Warrant Officer Iwata's body. Suddenly Hara left the bridge--the first time since sailing on the 9th--and placed his uniform jacket around Iwata's body. "Rest in peace," Hara said to his friend and protégé.

As Iwata's body was committed to the ocean, the sun set, flaring red on the horizon. *Amatsukaze* headed north. Hara, exhausted, stumbled into his bunk. The battered destroyer and its crew were out of the game.

But the game was not over yet. The Americans had blunted Japan's drive on Guadalcanal, not turned the tide. That night, the Japanese would try again.

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Patton and His Staff During the Battle of the Bulge

PAUL G. MUNCH, LTC, US Army

THE TACTICAL skills and attributes required of a commander to be successful on the modem battlefield have been greatly debated, but the need to maximize the potential of a staff to increase the command's chances of success has been largely ignored. This remains a paradox since a commander's staff is an integral part of the command element and a vital key to success on an increasingly complex battlefield.

It is also surprising from a historical stand, point, since most successful commanders have recognized the importance of their staffs. For instance, when Field Marshal Sir Bernard L. Montgomery was asked to list the attributes of a successful general, the first item on his list was "Have a good chief of staff." 1

Like Montgomery, George S. Patton Jr. also recognized the importance of his staff: After the war, he suggested "no one man can conduct an army, but that the success of any army depends on the harmonious working of its staff and the magnificent fighting ability of the combat officers and enlisted men. Without this teamwork, war cannot be successfully fought."2

If an efficient and effective staff element is key to a commander's success, it would be helpful to study the workings of a successful staff. In this regard, few staffs can match the accomplishments of Patton's Third Army staff during the Battle of the Bulge. Although overshadowed by the flamboyance of its commander, the Third Army staff was key in turning the tide against the German offensive.

The Third Army Staff

Prior to the Battle of the Bulge, not many officers shared Pat ton's enthusiasm for his staff. But, the staff's performance during the Battle of the Bulge would change many minds. For instance, Omar N. Bradley later stated:

"Indeed, I had once agreed with the observation of another senior commander who said, 'Patton can get more good work out of a mediocre bunch of staff officers than anyone I ever saw.' His principals were almost without exception holdovers from the Sicilian campaign where their performance could be most charitably described as something less than perfect. However, five months in Europe had seasoned that staff and the greatly matured Patton succeeded in coaxing from it the brilliant effort that characterized Third Army's turnabout in the Bulge."3

If so much of the Third Army's success depended on its staff as Patton and Bradley suggested, how did Patton effectively use his staff to enhance his army's success? More important, what can we learn from Patton's handling of his staff?

Command and Staff Relationship

Much of the Third Army's success can be attributed to a strong mutual trust between Patton and his staff. Patton once told General Dwight D. Eisenhower, "I don't need a brilliant staff, I want a loyal one."4 He got what he wanted.

Upon assuming command of the Third Army during early 1944, Patton replaced most of the senior staff officers with either the veterans who had served with him in Africa and Sicily or with cavalrymen he had known before the war. They were totally loyal and carried out his orders in an unobtrusive and highly efficient manner. He, in turn, trusted, rewarded and backed them to the hilt.

Their unobtrusive manner sometimes concealed their talent. Brigadier General Hugh J. Gaffey, the chief of staff who pulled them together was considered a "staff officer of genius and a tank expert." 6 Both Gaffey, who departed to command the 4th Armored Division during early December 1944 and Gaffey's successor Brigadier General Hobart R. Gay, "were equally competent in the exercise of their intricate craft; both were in the mind of their master: they would be asked to do what lesser men would think impossible and achieve it." 7

At the staff-section level, many considered Colonel Oscar W. Koch, the G2, the most penetrating mind in the US Army's intelligence community. Likewise, some suggested that Colonel Walter J. Muller was the "ablest

quartermaster since Moses."8

Patton set high standards and demanded excellence, timeliness and hard work from the entire staff. He told them:

"I've won in battle and I'm going to win again. I won because 1 had good commanders and staff officers. 1 don't fight for fun and I won't tolerate anyone on my Staff who does ...It is inevitable for men to be killed and wounded in battle. But there is no reason why such losses should be increased because of the incompetence and carelessness of some stupid son-of-a-bitch. I don't tolerate such men on my Staff."9

All of the staff members knew the high standards expected of them, but they also worked with a sense of purpose. The staff worked around the clock to get a job done, but when the work was done, they relaxed. There was no compulsion to look occupied or to take part in "busy work...if a staff officer did not perform to expectations, he was removed.10

Although he had chosen most of the senior member of his staff and felt comfortable with them, Patton remained distant from the main body of the staff. He preferred to lie apart from them with a few members of his command group.11 Such an approach had double benefits. Patton was afforded the opportunity to relax, thoroughly think through current problems and plan future operations. It also prevented him from interfering with the operation of his staff and getting involved with too many details. (It is interesting to note that in earlier staff assignments, Patton had received several poor efficiency reports.

Patton's distance allowed him to maintain a predictable and organized relationship with his staff. He had a daily meeting at 0700 with the chief of staff, the heads of sections and General Otto P. Weyland of XIX Tactical Air Command.12 During these informal, open forum meetings, as at other times, he promoted open and frank dialogue between his staff and himself. The resulting discussions promoted constructive criticism and provided Pat ton an excellent sounding board to formulate and develop his plans. 13

Once he had reached a decision and issued an order at these meetings or elsewhere, he was adamant.14 To eliminate misunderstanding, he normally issued orders directly to his subordinates but required that short, written orders reach the subordinate prior to his carrying out the order. He suggested that army orders not exceed a page and a half of typewritten text and that they could usually be done on one page with a sketch map on the back. These orders would tell what to do, not how to do it. 15

In addition to his 0700 meeting, he also had a more formal general staff meeting everyday at 0800 and 1700. These briefings had a twofold objective; to keep him and the staff informed of the most current plans and operations, and to knit all of the staff sections together. These were short briefings, never lasting over 20 minutes After he was informed of the latest intelligence, personnel, logistics and air data, he asked questions or advice of his staff members outlined that day's actions and left for the frontline areas. Upon his return, he was briefed on the day's events. 16

In the forward areas, Pat ton gained a true feel for the situation. Likewise, he required one officer from each staff section to go forward each day and visit the corresponding officers of the next lower echelon. These visits provided better information for staff actions and promoted a bond of understanding and solidarity between all elements of the Third Army that was unequaled elsewhere.17 The line and staff knew each other well and functioned on that.

By the fall of 1944, the Third Army staff was a smooth running organization. The relationship of Patton to his staff is instructive He strengthened the strong mutual trust between himself and his staff with an established command-staff relationship and effective two-way communications. To this relationship, the staff added competence, efficient staff procedures and an effective working relationship between the various staff levels within the Third Army. The staff proved its worth during the Battle of the Bulge.

Foreshadowing the Battle

When the Germans launched their offensive on 16 December1944, Patton's Third Army had been on the offensive since 8 November. When they finally captured Metz on 13 December, Patton would proudly state that this was the first time Metz had been taken by assault since the year 641. Intent on retaining the initiative, the Third Army was now poised to break through to the Rhine River. The ground attack was to commence on 19 December

The Allied command had been surprised by the German's attack. Bradley initially thought it might be a spoiling attack to force a halt on Patton's advance into the Saar.19 In any event, he called Patton on the evening of 16 December to direct the release of Patton's 10th Armored Division to General Courtney H. Hodges' First Army. Patton protested. He felt it would hurt his chances to reach the Rhine, but Bradley was firm. Patton ordered the 10th Armored Division north.

While this was Patton's first official notice of the Germans' Ardennes offensive, he had anticipated the attack and, on 12 December, had even directed his staff to make "a study of what the Third Army would do if called upon to counterattack such a breakthrough." 20

Patton's intuition about the German offensive in the Ardennes area was based on the solid information being collected and analyzed by Koch. During November, the G2 section identified a number of German units leaving Westphalia and Third Army's front. Koch believed they were regrouping somewhere. On 23 November, he wrote in his daily periodic report: "This powerful striking force, with an estimated 500 tanks, is still an untouched strategic reserve held for future employment" and concluded they might be used for a "coordinated counteroffensive."21

Through early December, Koch continued to pursue information on this possible threat. On 7 December, he warned of "enemy reserves with large Panzer concentrations west of the Rhine in the northern portion of 12th Army Group's zone of advance." Two days later, Koch informally briefed Patton on the possibility of a German attack and their capability to mount it. On the 11th, Koch again warned, "Overall, the initiative still rests with the Allies. But the massive armored force the enemy has built up in reserve gives him the definite capability of launching a spoiling offensive to disrupt Allied plans."22 Koch's predictions ran counter to most other higher headquarters. Others were predicting only minor counterattacks. "Counteroffensive" and "counterattack" are distinctive terms meaning different things: ULTRA (the higher level intelligence) intercepts were unavailable to confirm either view due to the German secrecy surrounding the offensive.23

While visiting several division headquarters on 12 December, Patton decided definitely to place the 6th Armored and the 26th Division in the III Corps near Saarbrucken, because, if the enemy attacked me VIII Corps of the First Army, as was probable, I could use the III Corps to help by attacking straight north, west of the Moselle River."24 That day Patton directed his staff to make a study of what the Third Army would do if requested to counterattack a breakthrough to the north of Third Army.25

Four days later during his normal morning meeting, still unaware that the Germans had begun their attack through the Ardennes an hour earlier, Patton was briefed on the "translated" intercepts from the previous evening. They indicated the German armored concentration around Trier was breaking up and moving to an unknown destination. The Germans had also just gone on radio silence. Patton was convinced that the attack would be through the Ardennes, 26

He asked Gay, his chief of staff, and Colonel Maddox, his 03 (operations and plans), how they were progressing on the study that he had ordered on 12 December. After they updated him, he made his instructions more specific. "I want you, gentlemen, to start making plans for pulling the Third Army out of its eastward attack, change the direction 90 degrees, moving to Luxembourg and attacking north."27

As a consequence of the Third Army's aggressive staff work, Patton was not overly surprised by Bradley's phone call during the evening of the 16th. He was disappointed that he could not continue his offensive toward the Rhine, but not surprised by the German offensive. The continuing analysis and planning by his staff and Patton's recognized tactical intuition had allowed him to anticipate the offensive and even draw up contingency plans.

The Battle

During their normal morning briefing on the 17th, Koch reported that the Germans were continuing their attack on VIII, Corps in the First Army's area, but they also appeared to be moving into the area fronting on Third Army's own XX Corps. 28

Patton thought it over for a moment, then said, "One of these is a feint; one is the real thing. If they attack us, I'm

ready for them, but I'm inclined to think the company will be up north. VIII Corps has been sitting still a sure invitation to trouble."29

The extent of the breakthrough became clearer on the 18th, the third day of the offensive. It was serious. General Hasso von Manteuffel's panzers had smashed through the 28th Division to overrun Troy H. Middleton's V111 Corps reserves; Further north, two regiments of the 106th Division had already been encircled, and the remainder of the division was desperately hanging on at St. Vith. The situation did not look good.

While somewhat ad hoc, reinforcements were on the way. The 7th Armored Division from Lieutenant General William H. Simpson's Ninth Army was being rushed south to strengthen the northern shoulder. To the south, the timely arrival of Patton's l0th Armored Division had helped steady a weak right shoulder, and elements of that division raced to reinforce the 9th Armored Division at Bastogne. In addition, the 82d and 101st Airborne divisions were enroute to the area from Reims. 30

At 1030 on the 18th, Bradley summoned Pat ton, Koch, Maddox and Muller (Third Army 02, 03 and 04, respectively) to his headquarters at Luxembourg. The severity of the situation was greater than Pat ton had anticipated. He quickly volunteered to halt the eastward attack of the 4th Armored Division and concentrated in near Longwy. Patton also offered to remove the 80th Infantry Division from the line and start for Luxembourg in the morning, and suggested the 26th Infantry Division could be alerted to move within 24 hours. 31

That evening at 2300, Bradley called Patton to ask him to attend a scheduled 1100 conference the following morning at Eisenhower's Verdun headquarters. Patton called a staff meeting for the following morning and went to bed. 32

Patton started his staff meeting by saying that the Third Army's plans had changed. The offensive toward the Rhine had changed. "We're going to fight but in a different lace. Also, we are going to have to move very fast." 33

With that guidance to his staff, Patton departed for the conference with Eisenhower. After the war, Patton would suggest that considering that between 0800 and 0915, "We had a staff meeting, planned three possible lines of attack, and made a simple code in which I could telephone General Gay which two of the three lines we were to use, it is evident that war is not so difficult as people think.

At Verdun, the mood was somber. After a briefing on the overall situation, Eisenhower began to speak;

"George," he said to Patton, "I want you to go to Luxembourg and take charge."

"Yes. sir."

"When can you get there?"

"Now."

"You mean today?" Eisenhower asked.

"I mean as soon as you have finished with me here."

There was a pause.

"When will you be able to attack?" Eisenhower continued.

"The morning of December twenty-second," Patton said, "with three divisions." 36

Colonel Charles R. Codman, Patton's aide, described the reaction:

"There was a stir, a shuffling of feet, as those present straightened up in their chairs. In some faces, skepticism, but through the room the current of excitement leaped like a flame. To disengage three divisions actually in combat and launch them over more than a hundred miles of icy roads straight into the heart of a major attack of unprecedented

violence presented problems which few Commanders would have undertaken to resolve in that length of time." 37

Within the hour, the details of the counterattack were settled. Patton phoned the code number to Gay and started toward the battle in Luxembourg. He was confident that his staff would take the necessary actions to start the 4th Armored Division moving to Arlon by way of Longwy, the 80th Division to Luxembourg via Thionville and place the 26th Division on alert pending specific order to move.

During the course of the battle, Patton was almost continuously at the front consulting with his commanders and observing the progress of the battle. Despite the complexity of the movement and battle, brilliant staff work allowed Patton to remain at the front and control the battle almost entirely by telephone.38

Within two days, the Third Army was a full participant in the battle. A week later, the Germans were stopped at their high-water mark. The Third Army had been a key element of the Allied success.

The effort of the Third Army staff between 18 and 23 December is impressive. Under the mounting pressure of the Ardennes offensive, Patton's staff worked overtime to assure success. For instance:

- Maddox's 03 section changed tl1e army from a three-corps front, running north to south, to a four corps battle line, split in two. One ran east to west in the Ardennes; the other ran north to south in the Saar.
- Colonel "Speed" Perry, who had served as Patton's guide into Palermo, moved hundreds of combat and supply units in 133, 178 motor vehicles, traversing more than 1.6 million miles.
- Muller and his G4 section established an entirely new supply system, set up scores of new depots and dumps and shifted 62,000 tons of supplies in just 120 hours, working around the clock.
- Colonel Elton H. Hammond's signalmen constructed a vast new communications network, using some 20,000 miles of field wire, and kept it going under extreme winter conditions in the face of vicious enemy interference.
- Koch's 02 section prepared and distributed hundreds of thousands of new maps and terrain analyses of the changed battle area, drew up estimates of the enemy situation and kept the order of battle up to the minute.39

The performance of the Third Army staff during the Battle of the Bulge assured success and more than justified Patton's confidence in them. One commentator would later suggest Patton "demonstrated over and over his ability to articulate critical points arid places and to drive his staff not only to the limit but seemingly beyond the limit of human endurance." In the final analysis it was his direction of staff officers which made possible coordination within his army and its spectacular victories."40

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Rescue at LZ Albany

BRENT SWAGER

The Ia Drang campaign provided the U.S. Army a remarkable--if dangerous--opportunity to demonstrate the merits of its newly developed airmobile tactics. The infantry, no longer restricted to the slow pace of marching into battle, could be inserted by helicopter at a moment's notice wherever they were needed.

An extensive training period ostensibly prepares pilots for combat flying. But flying in and out of Vietnam's hot LZs, where dust, heat and the enemy worked in concert to bring down the fragile aluminum birds, it took a good pilot with nerves of steel and a special sense of duty. Major Willard Bennett, commander of Charlie, or C, Company, 229th Aviation Battalion (Assault Helicopter), 1st Cavalry Division (Airmobile), was just such a pilot, with the ability to think and react adeptly in the most intense combat situations. On a November 1965 night, while flying over the hell that the Ia Drang Valley had become, Bennett put on an airmobile show that the grunts on the ground would never forget. No portion of the Army's airmobile training taught guts--pilots like Bennett provided that.

"I never worried about getting shot and killed--whether that was because I was young or we were so well-trained I couldn't say," Bennett recalled. "Getting shot in combat was just not something I really worried about. Flying in and out of hot LZs just came with the job." What Charlie Company's commander worried about instead were the underpowered and occasionally unreliable engines of the Bell UH-1D Hueys and the equatorial heat that could sap the strength of American flying machines.

"The Huey I flew on my first tour couldn't carry a very big payload," Bennett said. "Generally with a crew of four, we could only lift five or six guys. You had to get a running start most of the time to get airborne, and so they required a larger landing zone. By my second tour all that had changed--the engines were much more powerful and much more reliable."

Bennett's Charlie Company was normally attached to the 2nd Battalion of the 7th Cavalry, ferrying the infantry to and from combat zones, supplying water and rations and, when it became too hot for the medevacs, ducking in for the wounded. Months before the Ia Drang campaign, Bennett was awarded the Distinguished Flying Cross for making an emergency night flight to an American forward artillery base on the mountain of Dak To, where a shell had cooked off and exploded in the barrel of a howitzer, critically wounding 17 men. When medevacs were turned back by dense fog that night, Bennett not only led his flight but also refused to turn back as long as U.S. troops remained in the field crying for help. Improvising in the air, Bennett called for troops on the ground to shoot flares from LZs along the way. Using this ingenious method, he navigated his way safely through the mountainous terrain to evacuate the wounded.

Many historians claim that the 230 American lives lost during the fighting at LZs Albany and X-ray versus the loss of more than 1,000 NVA soldiers by body count and 1,000 more estimated killed was a decided victory. Other scholars, however, claim the lessons taught were largely ignored and America was lured deeper into a war it could not win. If the fighting and its results proved to be a historical and military paradox, so did the enigmatic, 34-year-old major commanding Charlie Company.

As a student at Colorado A&M (now Colorado State University), Bennett had enrolled in the Reserve Officers' Training Corps (ROTC) to avoid the Vietnam draft. After graduation, having earned an artillery commission, he was sent to Fort Sill in Oklahoma, where he ran into a fraternity brother stationed there for Army aviation training. "He was really sold on the program," Bennett said, "and it sounded good to me too.

"The program required an additional year's commitment, but I was young and wasn't sure what I wanted to do with my life just yet. Besides, I had just gotten married, and the extra \$100 a month the Army was paying aviators looked awfully good just then."

Bennett received his fixed-wing rating and soon was sent on temporary duty back to helicopter school. After qualifying in helicopters, he was assigned to Korea and, later, Japan. Much to his surprise, both Bennett and his wife, Vonnie, fell in love with military life.

After he returned from the Far East, Bennett's talents as a helicopter pilot were tapped to try out the Army's new concept of air mobility. He was assigned to the 11th Air Assault Test Division at Fort Benning, Ga., in 1964 for 18 months of crucial trials. The purpose was to examine and test theories in helicopter warfare. Satisfied with the evaluations of the 11th Air Assault Division, renamed the 1st Air Cavalry Division (Airmobile), the Army mobilized the unit for war. Major Willard Bennett was assigned command of the 229th's Charlie Company and deployed with the division to Vietnam.

Although Charlie Company had been thoroughly trained in the Army's brand-new airmobile tactics, no training could completely prepare a pilot for the murderous skies over Vietnam. Bennett's role over the Ia Drang Valley may be considered a minor one in the grand scheme of the campaign, but to the severely wounded who were desperate for medical attention, and to the beleaguered troops surrounded and running low on ammo, a fearless chopper pilot was the answer to many prayers. The genesis of Bennett's mission occurred when Lt. Col. Harold Moore brazenly took his understrength battalion and confronted the enemy deep in his own territory.

The ball began rolling on November 14, 1965, when Moore, a hard-charging Kentuckian and West Point graduate (class of '45), mobilized the 1st Battalion of the 7th Cavalry, 1st Cavalry Division (Airmobile), and moved them to a position at the foot of Chu Pong, a 2,400-foot mountain in the Ia Drang Valley, deep in NVA-held territory. There, dense tropical forests gave way to tall grass and red clay. Intelligence reports of a large enemy base camp in that area had Moore and his boss, 3rd Brigade Commander Colonel Thomas Brown, eager to seek out the enemy.

The 7th Cavalry, perhaps best known for its "Last Stand" at the Little Bighorn River, was about to fight against a vastly superior enemy force in the Central Highlands of Vietnam, much the same way Lt. Col. George Armstrong Custer had made war in 1876 in Montana Territory against disproportionate odds.

As in much of the Vietnam War, geography played a major role in the battle. Due to the physical features of the area, the best possible landing zone--designated LZ X-ray--was a large clearing located at the base of the mountain. The LZ offered inviting open fields of fire to any NVA entrenched in the high ground overlooking the LZ. Although it was a gamble to land troops in such a place, Moore decided to chance it.

On the morning of November 14, Boeing-Vertol UH-34 Chinooks positioned 12 guns--two batteries of 105mm howitzers--6.2 miles east of LZ X-ray. The artillery began firing on the LZ as well as two other clearings to help create a diversion. As soon as the barrage was lifted, helicopter gunships further prepped the site with .30-caliber machine guns and 2.75-inch rockets.

Thirty-one minutes later, it was show time. Moore's battalion of 28 officers and 429 enlisted men began to land at X-ray eight Hueys at a time. Moore alighted from the first wave of choppers with Bravo, or B, Company, commanded by Captain John D. Herrin, who took his company north and west up a ridgeline toward Chu Pong. The choppers continued to rattle in, dropping troops, ammunition and rations until C, D, E and A companies were on the ground and dispersed. Herrin's Bravo Company, moving up the heavily jungled ridgeline, was the first to make contact. Hearing frantic calls over the command net, the deafening sounds of RPG-2 shoulder-fired rocket-propelled grenades, Chicom hand grenades and a cacophony of AK-47 small-arms fire, Moore quickly realized he had found what he came looking for--in spades.

"My battalion," Moore recalled, "had come looking for trouble in the Ia Drang; we had found all we wanted and more. Two regiments of People's Army of Vietnam [PAVN] Regulars--more than 2,000 men--were resting and regrouping in their sanctuary near there and preparing to resume combat operations, when we dropped in on them the day before. General Man's [NVA Brig. Gen. Chu Huy Man] commanders reacted with speed and fury, and now we were fighting for our lives."

In the jungle valley surrounding LZ X-ray, the leaders of the 325-B Division of the PAVN were no doubt astounded to learn they had at last lured a battalion of the U.S. 7th Cavalry into the jaws of a vicious ambush. General Vo, however, faced a problem when Moore's battalion bent but would not break. The shattered battalion regrouped and fought fiercely--sometimes resorting to entrenching tools, rifle butts and bayonets but refusing to let the jaws of the enemy snap shut. The 2nd Platoon of Captain John Herren's Bravo Company had been cut off and was being systematically chopped to pieces by the enemy while Captain Ray LeFebvre's Delta Company had taken casualties and killed 25 NVA within 10 minutes of landing on X-ray.

LZ X-ray was heating up for helicopter pilots, too. Major Bruce Crandall, who commanded the 16 helicopters assigned to the mission, recalled: "I saw a North Vietnamese firing at us from just outside my rotor blades. After taking on wounded, I pulled pitch [lifted out] in a hurry. I had three dead and three wounded, including my crew chief, who was shot in the throat." The situation was perilous for the troops crammed inside the birds. "I started to unhook my seat belt when I felt a round crease in the back of my neck," LeFebvre remembered. He had been grazed. "I turned to my right and saw that my radio operator had been hit in the left side of his head. I grabbed the radio and jumped out....I fired two magazines of M-16 ammo at the enemy, then I was hit."

For the most part, the free-for-all on the ground at X-ray on the 14th did not yet involve Bennett's unit. "My company was normally supporting the 2nd Battalion of the 7th Infantry," Bennett explained. "We picked up the infantry and would make air assaults into the jungle with them. That morning we put in Bravo Company [2nd Battalion, 7th Cavalry], and although we'd taken some rounds, no one got shot down.

"We had very little to do with X-ray," Bennett continued. "I think I got in there on the second morning--the day they got napalmed." The NVA had thrown everything it had at the 7th and, although ravaged (Charlie Company lost all five of its officers and 57 of its 102 enlisted men), the survivors, with the help of Army and Air Force aviators, held the thin line and refused to accept defeat.

Air Force Lieutenant Charlie Hastings, the forward air controller, called in help. "On the second morning, I used the code word for an American unit in trouble and received all available aircraft in South Vietnam for close air support. We had aircraft stacked at 1,000-foot intervals from 7,000 feet to 10,000 feet, each waiting to receive a target," Hastings remembered. With the enemy so near and artillery and aircraft being called in closer and closer, perhaps an unfortunate mistake was inevi-table: An Air Force North American F-100 Super Sabre accidentally dropped two canisters of napalm into the melee, hitting American troops, before Hastings could call them off.

"We went in after the napalmed guys," Bennett said. "The LZ was shrouded in early morning mist or fog, and the guy we came for was burned black, without a stitch of clothing on. He was a big man, a Pathfinder, and he was screaming and screaming. I don't think he made it."

Additional reinforcements, the 2nd Battalion of the 5th Cavalry led by Lt. Col. Robert Tully, marched in from LZ Victor, two miles distant, and the NVA melted into the tall grass and mountains, leaving some of its 2,000 dead behind on the battlefield.

On November 16, after the battle had ended, the 2nd Battalion of the 7th Cavalry, led by Lt. Col. Robert McDade, landed at LZ Columbus, three miles away. McDade led three companies--Charlie, Delta and a headquarters company. Tully's and McDade's battalions were sent to relieve Moore at X-ray. Before handing over his position, Moore made good on the promise he had made to his battalion back at Fort Benning to never leave a man on the battlefield and never permit a single man to be listed as "missing in action."

Lieutenant Rick Rescorla, 2nd Battalion's Bravo Company commander, recalled that a few hours earlier, after beating down a last attack: "Colonel Moore, in our sector, was rushing up to clumps of bodies, pulling them apart. 'What the hell is the colonel doing up there?' Sergeant Thompson asked. I shook my head. Later we saw him coming back at the head of men carrying ponchos. By 10:30 a.m. Colonel Moore had found what he was looking for. Three dead American troops were no longer missing in action; now they were on their way home to their loved ones."

With the battle at X-ray seemingly finished, McDade and Tully settled in for a long, uneasy night with their companies on 100-percent alert. Sporadic gunfire from around the perimeter ensured that no one slept. McDade and Tully received orders to pull out of X-ray at 9 the next morning. Twenty-four B-52s from Guam had been ordered to bomb the sides of Chu Pong--American troops would have to put two miles between themselves and the impact area.

Both battalions set out on November 17, with Tully in the lead. McDade would follow Tully to a point, then break away toward a different clearing, designated YA 945043 on the map--LZ Albany.

While Colonel Tully had been in command of his battalion for 18 months and knew the personalities and capabilities of his men intimately, Colonel McDade, a veteran of WWII and the Korean War with three Purple Hearts and two Silver Stars, had had his command for less than three weeks. It had been a decade since he last

commanded troops. Most of his men hoped the march would be little more than a stroll in the sun, but the specter of Custer was about to revisit the 7th Cavalry.

Tully moved out in the lead with two companies up and one back. "We used artillery to plunk a round out 400 yards or so every half-hour," said Tully, "so we could have a concentration plotted. That way, if we ran into problems we could immediately call for fire."

About 2,000 meters into the march, as planned, McDade's battalion turned northwest while Tully's continued on toward LZ Columbus, reaching the objective just before noon. The terrain McDade found himself traversing was mostly knee-high grass and felled trees, which did not offer the overheated, exhausted battalions much visibility--25 yards at most. Soon the terrain got much worse, with chest-high elephant grass and thick vegetation. Several huts along the way were searched and fired. In retrospect, it may have been the thick smoke that alerted the enemy. The triple-canopy jungle forced the battalion together and pushed the flankers closer toward the sides of the column.

As Alpha Company, with McDade, was moving into the Albany clearing and the rest of the companies were stretched thin for 1,000 yards behind, enemy rifle fire erupted. The 2nd Battalion had run smack into the enemy-soldiers from the NVA's 8th Battalion, 66th Regiment; 1st Battalion, 33rd Regiment; and headquarters of the 3rd Battalion, 33rd Regiment. Lieutenant Larry Gwin, of Alpha Company, recalled: "I was out in the grass away from the trees when it started. The rounds were so fast and furious overhead they were knocking the bark off the trees. I ran to them. One round struck the tree I was crouched next to, about an inch over my head....Then I heard the sickening whump of mortar fire landing where I had seen our 2nd Platoon disappear."

A deadly struggle, just as fierce as the one at X-ray, began to take shape. McDade hastily organized a pe-rimeter and tried to sort out what kind of hornet's nest his battalion had stepped in. In short order he would discover that, as he remembered: "We were getting fire from three sides. We were getting it from up in the trees, and from both sides. A guy got hit next to me, and I grabbed his machine gun. I braced myself against an anthill. Then we got hit by mortars. It was zeroed in right on us. I looked around and everybody was dead. The commo sergeant, Sgt. 1st Class Melvin Gunter, fell over hit in the face, dead. The same mortar round that killed Gunter put shrapnel in my back and shoulder. They were closing in for the final assault. I was shooting, trying to break a hole through them, but didn't know which way to go. I went the wrong way, right into the killing zone. I found stacks of GIs."

With McDade's battalion scattered and pinned down in the tall elephant grass, the battle eroded into several small skirmishes. Charlie and Alpha companies lost a combined 70 men in the first minutes. Although Bravo Company was hastily brought in by helicopter as reinforcements, the situation was grim. The battle raged all afternoon and into the night, with the 2nd Battalion largely outnumbered, outmaneuvered and barely hanging on. As night fell, the perimeter tightened and the enemy crept in close. Ammunition began to run low, and the wounded needed medical attention soon if they were going to survive.

Back in Pleiku, the operations officer knelt and shook Bennett's sleeping form, then quietly informed the Charlie Company commander about the calamity at LZ Albany. "He summed up the situation by informing me that the guys at X-ray had walked out only to get totally ambushed near LZ Albany," Bennett recalled. "The fighting was hand to hand in places, and the guys were really sounding desperate for help over the radio. 'The wounded aren't going to make it,' he told me. 'And they're crying for ammunition.'"

"The medevac guys wouldn't go in," Bennett added. "It was too hot for them. That happened from time to time. I told him I'd fly it and asked him to get another crew to go with us. He went to wake up Jackie Murphy, my co-pilot."

As was his custom, Bennett flew lead with Captain Ken Jayne as his wingman. As the helicopters thundered through the black night sky, the battle over Albany could clearly be seen. "The sky over the battle zone was in total chaos," Bennett remembered. "Artillery was firing, there were Air Force A-1s zooming in and out, dropping ordnance, rockets, tracers, flares--the whole thing was brilliantly lit up.

"As we got closer, I didn't think we were going to be able to find the LZ; the lights were blinding, the tracers coming from every direction. The radio was full of crackling garbage. And the sky--the sky was an absolute mess. The parachute flares would arch up high and then float down, and there were so many of them I kept thinking one of them was going to go through the rotors and that would be it.

"Finally, a guy on the ground started blinking a pocket flashlight, and one of us picked it up." Bennett recalled sending a brief, intense radio message: "Blink three times if that's you...now five times...okay, we've got you...we're coming in on your light.' We followed that thin red beam of light in almost like an instrument approach, until we touched down."

If the troubled sky above the LZ was filled with gunfire, the contested ground at Albany was equally dangerous. As the rotors continued to turn, tracer fire lit up the area, and the battle began taking on a new intensity. The NVA now had two American helicopters as prime targets.

"My crew chief and gunner, as normal, kicked off the ammo and hopped out as soon as we touched down, to help bring in the wounded," Bennett said. "There were no stretchers or anything that night; they just pulled in the wounded and stacked them like cordwood in the cargo bay." The crew chief and gunner were both awarded the Bronze Star with V for Valor for the night's actions.

The enemy began to walk a fierce mortar barrage through the LZ, and Bennett pulled pitch and executed a short hop to another spot, followed by Jayne. "It just seemed like the thing to do," Bennett said in retrospect. "My crew chief and gunner were still on the ground and had to wade through the tall grass and continued loading wounded. The mortars were falling all over the place. Right about then, [the] fuel warning light lit up." Amid the fierce mortar barrage, the clatter of rounds punching holes in the aircraft and the confusion of the radio and cries of the wounded, he made a quick calculation. "I knew that when the fuel panel started to flicker yellow, that meant we only had 20 minutes of fuel left," he recalled. "If we beelined it back to Pleiku, that was probably close to 15 minutes." Bennett coolly eyed the flickering yellow lights and waited as the battle raged on around him until the wounded were dragged aboard.

"We loaded everybody we could," Bennett said. "We'd be lucky on a hot day to get away with five to six people on with a crew of four, but I think we must have gotten more that night."

Finally Bennett and Jayne (who would also be awarded the Silver Star for the night's actions) lifted their groaning Hueys up and out of the tiny LZ. "Together, I think we got out 14 to 15," Bennett said.

Now Bennett's attention focused on the fuel warning lights. He raced back to Pleiku and sat down on the main air strip, where an aid station was located. "I gave the order to shut down the helicopters right there," said Bennett. "I knew if we lifted off and tried to hover over to our area, we would never make it."

It was 0200--only two hours had passed since Bennett had been shaken awake. It would take another 34 years before the Army would award Bennett a much-deserved Silver Star in 1999 for his gallantry that night in the Ia Drang Valley.

The battle at LZ Albany added the names of 151 Americans to a growing list of those killed in Vietnam. Another 121 were wounded. The LZ was abandoned the next day. One American, reported as missing in action, was recovered four days later when he waved down a passing helicopter.

In terms of numbers on a chart, the Ia Drang campaign was an American victory, but for commanders like Bennett, the victory was bitter. More than 300 American dead had soured the taste of success.

Brent Swager interviewed Army Colonel Willard Bennett at his home in St. Petersburg, Fla. Suggestions for further reading: We Were Soldiers Once...and Young, by Lt. Gen. Harold G. Moore and Joseph L. Galloway (Random House); "Ambush at Albany," as told by S. Lawrence Gwin, Jr., Vietnam Magazine (October 1990); and "Death in the Ia Drang Valley," by Jack Smith, Saturday Evening Post, January 28, 1967.

Conflict in Korea: Reluctant Dragons and Red Conspiracies

COLONEL ROD PASCHALL, US ARMY RETIRED

While much of what has been written about the Korean War in the last fifty years has been colored by political agendas and a lack of critical information, recent scholarship helps place the first conflict of the Cold War in its proper context.

No other twentieth-century conflict has created more disagreement among historians or been the subject of more widespread public ignorance than the Korean War. But thanks to some recent revelations, that unhappy condition is slowly changing for the better. Anyone who doubted the need for a more accurate, widely accepted description of the 195053 armed struggle had only to read the August 13, 1998, edition of the Washington Post, where the conflict's beginning was characterized as an attack on North Korea by United States forces. Fortunately, how the Korean War came about and why it took such a bloody course is now beginning to emerge.

Much of the reason for the widespread ignorance is that until the early 1990s, almost four decades after war's end, two opposing interpretations of the conflict shared library shelves throughout the world. Western historians generally agreed on the conflict for about fifteen years after the cease-fire. During that period, several scholarly works dealt with the origins, conduct, and effects of the war. All but one claimed that North Korea's June 1950 assault on South Korea was planned and that it was supported by both the Soviet Union and the newly installed Communist regime to the north--the People's Republic of China (PRC).

Historians started to challenge this "Red Conspiracy" theory in the late 1960s when dramatically different interpretations began emerging. These revisionist studies of the war claimed that China was not only uninvolved in North Korea's invasion of the south but had made an unsuccessful attempt to resolve the conflict diplomatically at the outset of fighting. These studies, all built around a "Reluctant Dragon" thesis, agreed with the version of the war then being bandied about by the Chinese government. The newer interpretation held that Mao Tse-tung reluctantly accepted belligerency only after General Douglas MacArthur had thrown back the North Korean invasion and pressed United Nations troops to the Yalu River, threatening China's borders in the fall of 1950.

Starting in 1992, a third wave of Korean War histories and historians arrived. Most were American-educated Asians who could read, write, and speak Chinese, Korean, or both. In sharp contrast to the earlier works, the third wave's thesis was soundly based on previously unavailable documents--not mere interpretation--namely a flood of declassified U.S. government papers and official histories that began to become available in the 1980s. These historians also drew upon newly available memoirs and official papers from the archives of the former Soviet Union and the People's Republic of China. These included approximately five hundred previously secret wartime diplomatic messages the Russian government gave South Korea in 1994. The Asian-American historians also conducted interviews with Chinese and Soviet participants. Not surprisingly, their work is far more convincing than that of earlier Korean War historians, who for the most part had only public U.S. and South Korean sources from which to work.

The third-wave historians tell us much about the underlying causes of the military confrontation that characterized most of the Cold War from 1950 until 1989. Specifically, we are now aware of the extent of collusion among Moscow, Pyongyang, and Beijing in creating and prosecuting the Korean War. We know what the Communist leaders thought about the possibility of American military resistance to the North Korean invasion. The date of China's decision to enter the war has been identified, and its aim in doing so is now known as well. We have enough information to comprehend what Chinese military leaders expected to result from their army's battlefield collision with American troops. And, we now know their reactions after that first clash occurred. The mystery of the "November Lull"—the pause in combat between the first Chinese-American encounter and the full-blown and violent struggle a month later—is finally solved. And, we have learned much about Communist strategy from October 1950 until the 1953 cease-fire. Combining this new information with what we already knew about U.S. decisions, we have a much clearer understanding of one of the most important conflicts of the twentieth century.

Contrary to assertions in Max Hastings' *The Korean War*, the single best-selling history of the conflict, the Soviet Union, North Korea, and China's leaders were deeply involved from the conflict's beginning. Hastings claimed China's entry was provoked by the rapid advance of American troops through North Korea in October 1950. Because of the presence of the Soviet Union's large military advisory group in North Korea during 194550 and the

acknowledged heavy flow of Soviet weaponry and equipment to the pre-war North Korean army, no serious historian doubted Moscow's complicity in the June 1950 attack. New evidence, however, also clearly demonstrates Chinese involvement in the invasion of South Korea. It is now clear that the war was planned and coordinated by the three Communist powers over a ten-month period, from April 1949 until February 1950.

The first solid diplomatic confirmation that North Korea would have Chinese support in its efforts to conquer South Korea occurred during an April 1949 meeting between Kim II Sung, the leader of North Korea, and Mao Tse-tung. After Kim asked for the return of Korean troops then serving in the People's Liberation Army (PLA), Mao assured him that China would assist the North Koreans in their planned conquest. The Chinese leader subsequently ordered the repatriation of two Korean units, the 164th and 166th People's Liberation Army divisions, who were veterans of the Chinese Civil War.

The impending invasion of South Korea fit into a much larger scheme, one that calculated the possibilities of an American reaction to the invasion. In August 1949, Chinese and Soviet officials met in Moscow and agreed on international spheres of influence and functional responsibilities. While Moscow would remain the center of the international revolution, Soviet leader Joseph Stalin agreed to underwrite Beijing's assigned role in directing the eastern extension of communism. During the winter of 1949-50, Mao visited Moscow and discussed the forthcoming invasion with Stalin. When the Soviet leader asked about America, Mao said that while the United States might not intervene, they had to take U.S. intervention into consideration.

Stalin evidently believed the risk was worth taking. On January 30, 1950, the Soviet leader sent a message to North Korean leaders: The Soviet Union was now ready to discuss the unification of Korea by force and would help North Korea. Kim visited Moscow for discussions in April 1950 and made final plans with Mao during a May 1316 visit to Beijing. During one of these sessions in China, Kim said he doubted that the United States would have time to intervene because he was confident the conquest of the South would only require about two weeks. He also doubted the need for Mao's support. (Three Chinese armies, standing in readiness, were poised along the Yalu River.) Less confident than Kim, Mao began dispatching additional troops to the border anyway. Thus, on the eve of the invasion, between thirty and forty thousand Koreans--former PLA soldiers supplied by China--had joined their countrymen in North Korea and were preparing for an invasion of South Korea. Large amounts of Soviet equipment, which greatly overshadowed the paltry number of armaments the United States had provided South Korea's defenders, would support the invasion. China had given Kim II Sung use of a substantial number of men for the conquest, and the large Chinese force being assembled on the ChinaNorth Korea border guarded against the contingency of American intervention against North Korea's invasion.

From Mao's perspective, Korea was not the only disputed East Asian area that might bring China into confrontation with the United States. But the Chinese leader gave it primacy. In the spring of 1950, a growing conflict between the Communist Vietminh forces under Ho Chi Minh and the French was raging in Indochina. In keeping with China's new role in encouraging revolution throughout the region, Mao was called upon to oversee and support Ho's campaign. And the Nationalist Chinese, although defeated in China, were establishing a hostile base on the island of Formosa (Taiwan). The latter situation was a major concern for the Chinese leader, particularly since the faltering Nationalists had a long-standing relationship with Washington.

But Mao's concern about the United States' intentions in Korea was relatively recent, a condition that only developed after his April 1949 promise to assist Kim Il Sung in the invasion of South Korea. Two months earlier, in February 1949, Mao had told Anastas Mikoyan, a member of the Soviet Politburo, that America had not become directly involved in China's civil war. Mao had said he believed that American obligations elsewhere were too extensive, and that Washington's allies were unwilling to support U.S. involvement in Korea. Stalin, who shared this view, told a Chinese delegation visiting Moscow five months later that the United States was in no position to wage a major war. According to the Soviet leader, this gave the Communist powers an opportunity to develop their own strength.

In June, after the meeting between Mao and Kim, Mao began focusing on the United States. He launched an anti-American propaganda campaign, personally writing five articles describing America as China's most dangerous enemy. A few months later he began planning a major overhaul of the Chinese military. The PLA, a huge 5.7-million-man infantry force, was to be stripped down and modernized, a navy and air force added, and a central reserve created. The latter was specifically structured and equipped to combat American armed forces. In early 1950, the Chinese leader ordered more than twelve hundred aircraft from the Soviet Union.

As soon as the North Koreans invaded South Korea in late June 1950, Mao readied his country for the employment of PLA forces in Korea, despite the hugely successful invaders' not inviting them to intervene. A second Chinese troop deployment, this one to the border with Korea, was made during the first week in July, immediately after North Korean forces first clashed with the Americans and drove them south to Pusan. Mao ordered China's central reserve, the best equipped PLA troops, to the Yalu, and commanders were ordered to defend China's borders. Secondarily, they were instructed to ready their soldiers to cross the border by the end of July. The orders to defend the border were just a mask, however, for at this juncture offensive plans outweighed defensive precautions. For example, on August 2, anti-aircraft artillery units were concentrated around the Yalu River bridges in order to protect them, ensuring a safe and speedy Chinese crossing into Korea. The North Koreans were still attacking, and U.N. forces were clinging to the shrinking Pusan Perimeter. Two days later, the Chinese Politburo met. Mao's foreign affairs adviser, Zhou Enlai, recommended that China's weight be added to the war in Korea. After the meeting, Mao ordered his military commanders along the Yalu to prepare their troops to enter the war.

The PLA leadership's attitudes about fighting U.S. forces surfaced at a meeting in mid-August, just when the North Korean offensive along the Pusan Perimeter began to falter. The Chinese commanders believed they should move across the border and assist the North Koreans, and calculated that their forces along the Yalu outnumbered the Americans by three to one. They were confident that worldwide responsibilities would preclude the Americans from putting more than half a million troops into Korea. In comparison, China had four million soldiers available. The commanders said Chinese troop morale, bolstered by a just cause, would overshadow that of the Americans.

At this same meeting, the Chinese officers also considered the tactics they would use in fighting the Americans. In view of the United States' superiority in firepower and mobility, they discarded the notion of frontal attacks. The preferred tactic would be to penetrate American lines and thrust to the rear, destroying communications and transportation capabilities before separating, surrounding, and finally annihilating isolated pockets of enemy resistance.

After the mid-August conference Chinese military leaders reported their conclusions to Mao and asked for more time to equip and prepare their forces. Chinese troops' attitudes about fighting in Korea also had been canvassed and reported. About half the Chinese soldiers in the north advocated joining North Korea in fighting the South Koreans and Americans. Some 40 percent were indifferent, neither enthusiastic nor unwilling. About one in ten of their troops, mostly former Nationalist soldiers, expressed a reluctance to leave China to fight someone else's war. On August 18, Mao granted permission to postpone the move across the Yalu, setting the new readiness date of September 30.

Mao meanwhile provided Kim with basic and critical intelligence. He forewarned North Korea's military forces about the likelihood of a U.S. landing at the South Korean port of Inchon. On August 23, the PLA's Operational Bureau predicted an American amphibious operation behind North Korean lines, a forecast based upon intelligence reports, observations, and logical deductions. There were reports of gathering U.S. naval vessels in Japan and the presence there of two U.S. divisions practicing landing operations. The Chinese also noted statements by an American diplomat that the U.N.'s military goal was unification of the two Koreas. In addition, staff officers noted that U.S. and South Korean forces along the Pusan Perimeter were neither attacking nor withdrawing. They took this as a U.N. ploy to draw as much of North Korea's army as possible southward to be cut off when the American landing was made. Finally, the bureau pointed to General Douglas MacArthur's great experience in amphibious operations during World War II. Several possible landing points, including Inchon, were cited as sound candidates for such a strike. Alarmed by the forecast, Mao called in a North Korean liaison officer, pointed to a map, tapped Inchon, and suggested that defenses immediately be prepared for a U.S. landing there.

Meanwhile, in the fall of 1950, while successful Chinese intelligence-gathering operations were proceeding, U.S. intelligence operations, military readiness, and politico-military coordination were proving inadequate. President Harry S. Truman believed that the loose army-navy intelligence sharing arrangement that had served the United States during World War II was outdated and inefficient, and had replaced it with the Central Intelligence Agency.

The CIA's first major test--predicting the outbreak of war on the Korean Peninsula--did not bode well. Truman later complained that the agency had only identified Korea as one of several places where war might break out in 1950, giving him no clue as to whether or when such an event might occur. The CIA's Korean operation appeared worse than the army-navy intelligence system's performance had been during World War II. In November 1941, military intelligence officers had given the president and his Asia-Pacific commanders ten days' prior warning of coming

hostilities with Japan. There was no such alert in June 1950. Both the Truman administration and the U.S. embassy in Seoul were caught napping.

Then, too, the United States had allowed its military forces in the Far East to wither and become vastly overmatched by potential Communist adversaries. The U.S. Army, the service destined to shoulder about 70 percent of the Korean War effort and about 80 percent of the American defensive role in Europe, had only ten understrength and ill-equipped divisions at the war's outbreak. The president had consistently opposed greater American military strength by refusing to heed his military leaders' advice and impounding any congressionally approved defense funding he had not requested. In February 1950, a civilian panel of the National Security Council (NSC), noting the growing military imbalance with Communist forces, recommended tripling the defense budget. But Truman turned aside his own aides' counsel. The administration had pursued an aggressive foreign policy that sought to contain the steadily advancing boundaries of the Communist world, but it was not willing to make the expenditures or develop the strength necessary to underpin that policy.

Much of the poor American performance during the early weeks of the war could be blamed on a lack of planning and policy coordination. The Far East Command's chief, General MacArthur, had no instructions from Washington to defend South Korea against a North Korean attack and had made no plans for such a contingency. He had publicly outlined the limits of his defensive responsibilities in early 1949, marking a line extending from Alaska's Aleutian Island chain to Japan, to the Ryukyu Archipelago, and down to the Philippines. This same line was confirmed by U.S. Secretary of State Dean Acheson in a public speech on January 12, 1950. Since the limits did not include Korea, little intelligence had been devoted to the North Korean army, Korea's terrain, or the country's road system. In sharp contrast to the Communists, the Americans had neither planned nor prepared for the coming clash.

Once the war began, American leaders anxiously pondered every possibility, from the potential for Chinese intervention to the chance of reaching into North Korea and toppling Kim's government. As early as July 7, 1950, only two days after American troops first made contact with the onrushing North Korean army, MacArthur informed his military superiors that his forces, properly supported by reinforcements, might defeat the invaders. But he warned that intervention by either the Chinese or the Soviets would create a wholly different situation. A few days later, the U.N. commander declared that he could prevent Chinese intervention by mounting operations in North Korea. His troops would have to occupy all of the Korean Peninsula but would not have to move into Manchuria. On July 17, President Truman requested that the National Security Council consider policy choices once the North Koreans had been driven back north of the thirty-eighth parallel, the pre-war North-South border.

On September 11, four days before MacArthur's landing at Inchon, the president approved an NSC-recommended policy concerning operations in North Korea. Presidential approval would have to be obtained for troops to cross the thirty-eighth parallel, but no such move would be made in the event of a major Soviet or Chinese intervention. MacArthur's troops were forbidden to cross the border into Chinese or Soviet territory but might go up to the border. The ultimate policy objective was aimed at the unification of Korea through U.N.-supervised elections.

Strangely, there is no indication that MacArthur was ever informed of Truman's decision to unify Korea until September 27, twelve days after the landing at Inchon. As a result, U.S. forces were unprepared to proceed into North Korea. The First Marine Division and Seventh U.S. Army Division had not been charged with extending their lines from Seoul eastward so as to cut off North Korean forces fleeing South Korea. The senior field commander, Lt. Gen. Walton Walker, stated on September 29 that his Eighth Army was planning to regroup at the thirty-eighth parallel, presumably to await further orders. Meanwhile, Walker's best pursuit force, Colonel William C. Westmoreland's 187th Airborne Infantry Regiment, had been assigned the mundane task of mopping up stranded North Korean troops throughout the Kimpo Peninsula.

When Washington finally ordered MacArthur north, his headquarters stitched together a hasty, complex, and logistically questionable plan in twenty-four hours. The scheme had the Marines and the Seventh Division backing out of the Seoul-Inchon area and mounting an amphibious operation into the northeastern part of the peninsula. Eighth Army, at the same time, was to fight its way north from the Pusan Perimeter. Paratroopers were hurriedly collected and staged for an airdrop above the North Korean capital in western North Korea. All this took time--too much time. By not allowing MacArthur an opportunity to prepare for the conquest of North Korea, the Truman administration forced hasty planning in late September and early October in order to prepare for the coming winter and delayed the U.N. northward advance by about seven days.

Despite a number of warnings, additional American lives were lost when the U.S. intelligence system failed again in October 1950. Crossing the thirty-eighth parallel and attacking north, U.S. forces and their civilian and military leaders in Korea, Tokyo, and Washington were acting on the basis of a flawed prediction by the CIA that the Chinese would not attack. This prediction stood unchanged from the time U.S. troops crossed the thirty-eighth parallel on October 9 until the first solid clash between U.N. and Chinese forces in North Korea on October 25. The CIA forecast was that Chinese intervention in the war "was not probable in 1950." Rarely have American servicemen and women been so tragically ill-served by their government. National-level intelligence was dangerously inadequate, and the coordination between policy makers, military strategists, and commanders was appallingly shoddy.

Of all the historical interpretations of the Korean War, however, few are as wrong-headed as the so-called "Check and Warning" notion. This is the favorite of those who insist that the United States provoked China, the Reluctant Dragon, into defending its borders, and that Mao moved troops across the Yalu River in late October 1950 in order to check U.N. forces and then withdraw.

The faulty assumption here is that Beijing's considerate, responsible action would give Washington notice that a U.S. threat to China's soil would not be tolerated. A subsequent American reaction, according to the Reluctant Dragon theorists, would have been to back off, to allow China to control a reasonable buffer zone south of the Yalu River, and thereby to avert war between the two powers.

Documents released by the Chinese government in 1997 disprove the Check and Warning thesis. On October 2, 1950, twelve days prior to Chinese troops moving into North Korea, Mao sent Stalin a message alerting the Soviet leader that China was jumping into the war to drive the Americans out of Korea and assist the expansion of communism. Beginning on October 14, the Chinese put 180,000 troops across the Yalu.

General Peng Dehuai, commander of China's forces in Korea, believed that due to Communist guerrilla activity, advancing U.N. forces would be kept to only about three U.S. and three Republic of Korea (ROK) divisions. He estimated the size of each American division to be twelve thousand troops, and that of each ROK division to be six thousand soldiers. Therefore, his 180,000 troops would be fighting about fifty-four thousand U.N. troops--a better than a three-to-one advantage. On October 21, 23, and again on October 25, Mao ordered Peng to surround ROK units in order to attract American forces farther northward where they could be defeated.

Within three days, Mao's orders had been obeyed. Three ROK regiments were all but destroyed, and one U.S. regiment, the Eighth Cavalry, had been roughly handled. But the Chinese, often in the open and exposed to U.S. firepower, had suffered as well. Peng reported to Mao on November 4 that he had been forced to call off his attacks and pull back. The general said that U.N. forces had retreated in time to avoid most of his planned traps. He also stated that his troops had become very fearful of U.S. air attacks. He described his soldiers as ill-supplied, cold, fatigued, and in need of reorganization before resuming the offensive.

Documents recently released also throw light on the November Lull episode, a lull in the fighting that occurred throughout the peninsula. Reluctant Dragon historians later interpreted this pause as an unstated Chinese offer to America of a truce in exchange for a protected Communist sanctuary in the northern reaches of North Korea. We now know that the mysterious November Lull was nothing more than a case of exhausted, cold, hungry, and battered Chinese troops in need of rest, resupply, and reorganization before resuming their efforts to annihilate U.N. forces and push the Americans out of Korea.

Historians writing from the 1960s to '80s, however, had not been the first to speculate on the reason for the lull. By November 9, 1950, the Joint Chiefs of Staff (JCS) were considering the mystery and concluded there were three possible reasons for the Chinese behavior. The first was that China was merely protecting its territory by establishing a buffer zone in the northern reaches of North Korea (the Reluctant Dragon theory). Second, they thought the type of action taken might merely signal a tactic: The Chinese intended to drain American military strength without risking much of their own. Finally, they considered the possibility that China was bent on driving U.N. forces from Korea and was merely regrouping. The Chiefs, however, did not believe the latter theory was credible.

Obviously alarmed about the late October--early November clash between Chinese and American troops, and perhaps influenced by the JCS's first choice of possibilities, the president took action. On November 16, Truman

publicly reassured the Chinese Communist government that the U.N. command would not violate China's territory: "We have never at any time entertained any intention to carry hostilities into China." Thus, America's commander in chief and his top uniformed advisers might be described as charter members of the Reluctant Dragon school of thought.

Learning that the U.N. was going to resume its offensive before his troops were fully rested, and spurred on by Mao's repeated urgings to defeat MacArthur's forces, Peng withdrew his forces farther north in mid-November to set a trap. He called a meeting with his commanders and chided them for their recent performance, criticized them for failing to infiltrate U.S. and South Korean positions, and scolded them for relying on costly frontal attacks. His exhortations paid off. MacArthur's Thanksgiving offensive drove deep toward the Yalu. Some advance U.N. elements, who had been moved too rapidly, became separated from supporting units and were subjected to assaults by waves of Chinese attackers streaming down from snow-covered hills. The U.N. command was battered, and MacArthur's troops began rapidly withdrawing from a bitterly cold North Korea.

On December 4, Mao urged Peng to pursue. The commander of Chinese forces in Korea complied, but informed Mao that while the South Korean troops were running south too quickly to catch, the Americans were proving more difficult to handle. He said U.S. forces were good at fighting, which was why more Americans were killed than captured. On the same day, Peng was instructed to recapture Seoul and destroy the ROK army, an essential step in convincing the Americans to leave the Korean Peninsula. There is no known communication between Mao and Peng about the establishment of a buffer zone in North Korea.

Some historians, while belonging to either the Reluctant Dragon or to the Red Conspiracy camp, have also taken the position that Mao and his generals practiced the revolutionary warfare doctrine in Korea that they had developed and written about during the Chinese Civil War. These interpreters, advocates of the so-called "Inscrutable Doctrine" notion, tout this military theory as a well-designed antidote to the industrialized world's use of mechanized warfare. Usually, historians of this school have portrayed MacArthur and his lieutenants as helplessly incapable of discerning what they were fighting against. One popular history of the war has it that the November Lull easily could have been foreseen if only U.S. military leaders had read Mao's On Protracted War, a 1930s-era book that, among other techniques, encouraged drawing in and then destroying an opponent: "enemy advances, we retreat....enemy tires, we attack." These analysts usually cite protracted warfare, the deliberate selection of a strategy of exhaustion, as Mao's choice for the overall prosecution of the war.

The new scholarship, however, has undercut this theory as well. As Mao's instructions to General Peng in the first two months of China's intervention indicate, the Chinese leader insisted on a strategy of annihilation, not exhaustion. We now know China only accepted protracted warfare much later--and then only reluctantly.

Mao's orders to quickly destroy the U.N. forces continued well into 1951. On December 13, 1950, about a week after he had instructed Peng to destroy the South Korean army, he urged his commander to push his troops across the thirty-eighth parallel to allow no time for the retreating U.N. forces to reorganize. On December 31, the Chinese launched a major offensive in temperatures that reached twenty degrees below zero. General Matthew B. Ridgway, now commanding the U.N. forces, directed the abandonment of Seoul and the second withdrawal south of the city. His forces escaped encirclement and drew the Chinese farther away from their supply bases. When Ridgway's forces struck back on January 27, 1951, the Chinese were taken by surprise. They sustained heavy casualties and pulled back toward the thirty-eighth parallel. Peng radioed Mao suggesting a cease-fire, but the Chinese leader dismissed his subordinate's plea and ordered another offensive aimed at annihilating twenty to thirty thousand American and ROK troops. The offensive failed, and Ridgway resumed his steady march northward. In March 1951, rushing reinforcements to Peng, Mao stated that it was essential to avoid a stalemate; thus, the new troops had to be used in an offensive to recover lost ground. The Chinese general was instructed to destroy ten thousand American troops.

The planned Chinese offensive came in April. To Beijing's surprise, Ridgway's forces stood their ground. In May, the U.N. staged another surprise offensive, killing or capturing more than sixteen thousand Communist troops. Since crossing the thirty-eighth parallel in December 1950, Peng's forces had staged five offensive campaigns, none of which achieved the desired results.

Mao now abandoned his strategy of annihilation, dramatically scaling down campaign objectives on May 26, 1951. He acknowledged that past efforts had not only failed to destroy a U.S. division, Chinese forces had even failed to eliminate any known American regiment. He remarked that American units exhibited confidence. The new battle

aims, he told Peng, would be to destroy one or two battalion-size U.S., British, or Turkish units. He said that Chinese units would have to be rotated in and out of the front so as to always maintain numerical superiority at any point. Mao then said that Peng's soldiers would have to be galvanized for a protracted and arduous war. General Peng Dehuai called his commanders together for a three-day conference (June 25-27, 1951) during which he told them that there should be no more expectations of a quick victory. The object now was to wear the enemy down. The new Chinese strategy was clearly not Mao's first choice.

Despite the new revelations coming from Moscow and Beijing, the flawed Reluctant Dragon version of the Korean War will likely persist for some time. The third wave histories that began appearing in the 1990s has been published in small runs by university presses or in academic journals. Mass-market, popular histories have yet to incorporate the more reliable information. This is unfortunate in view of the great impact this conflict had on the subsequent conduct of the Cold War and on the lives of hundreds of millions of people throughout the world.

The historians of the 1950s were right. There was a Red Conspiracy to invade and conquer South Korea. This war was a product of planning and coordination between three Communist leaders--Joseph Stalin, Mao Tse-tung and Kim Il Sung--during 1949-50. China, with responsibilities to further world revolution in Asia, was involved from the beginning. Mao provided Kim with almost one-third of the initial invasion forces. Mao's actions were not driven by the need for breathing space between China's border and General MacArthur's troops. The Check and Warning notion is wrong. Instead his actions sprang from the goal he announced to Stalin: Eliminate the American presence on the Korean Peninsula.

The November Lull was no signal. It was no assertion of China's right to a buffer zone in North Korea. The lull was an essential pause in fighting to allow General Peng Dehuai to rearm, rest, and reorganize his troops after their first brutal and bloody exposure to American firepower. Those still adhering to the Reluctant Dragon thesis are mistaken.

The Inscrutable Doctrine thesis is also wrong. From the very start, Mao urged his subordinates to use a strategy of annihilation, the doctrine furthest removed from protracted warfare. He only accepted a prolonged war when his own strategy failed in five costly offensives. Protracted war, as it was portrayed in Mao's book, depended on extensive guerrilla operations in the enemy rear. While there were guerrilla actions in South Korea, they were put down by effective ROK and U.S. counterguerrilla operations. During the Korean War, Chinese operations initially resembled the conventional maneuvers of World War II. Later, Peng's forces fought as if they were on a World War I battlefield.

Until the Vietnam War, the conflict in Korea was many times called the only war the U.S. ever lost. But a comparison of conditions before the war with those after it clearly points to the Communists as the losers. The Soviet, North Korean, and Chinese leaders had badly miscalculated. Before China's attempt to seize South Korea, the United States had lost its nuclear monopoly and headed a smaller and much weaker military alliance than the one it opposed.

After the Korean War, America expanded its network of alliances. Within five years the United States had concluded mutual defense treaties with more than thirty nations. The Eisenhower administration established an effective national security structure that coordinated foreign policy with military plans and preparations. Of utmost significance, the United States rearmed West Germany, reawakening Moscow's darkest fears. If Stalin supported the invasion of South Korea in order to drain Western strength in Europe, he failed beyond any measure. For more than three decades thereafter, the Soviet Union was surrounded by nations dedicated to containing communism. Moscow had been far better off before the Korean War.

It was the same in Asia. Defying most of the Communist leadership's estimates, the United States had entered the war almost immediately after Kim Il Sung launched the invasion. Spoiling the North Korean leader's plans, MacArthur used air transport to put enough of the U.S. Twenty-fourth Infantry Division into Korea to fatally delay Kim's planned conquest. China's support of the war was as ill-rewarded as Stalin's aid. Beijing awoke one morning to discover the U.S. Seventh Fleet standing between itself and its long cherished goal: the recovery of Taiwan. Steadily, the Communist Chinese dream of taking control of this great prize faded away as the American-supported Nationalist Chinese armed forces grew in strength. And, in the end, a devastated North Korea not only failed in its attempted conquest, it ended the war with less of its own soil than it had gained from the South.

Most of all, the war initiated the West's Cold War policies that carried the seeds of communism's demise. The first few weeks of this conflict proved beyond a doubt that the United States armed forces were in desperate need of strengthening. These grim days and China's subsequent entry into the war also demonstrated to America's leaders that they could not trust the new U.S. national intelligence organization, the CIA, for an adequate warning of war.

Before the conflict was over and for many years later, U.S. officials believed they were facing a potentially well-coordinated and enormous threat, one whose actions could not be predicted. These beliefs resulted in a quadrupling of America's defense budget in only three years. And, for the next thirty-five years, the United States remained armed to the teeth. This unprecedented phenomenon--an enormous and ever-improving peacetime American armed force--drove the Soviet Union, the linchpin of world communism, into an arms race it could not win. It was a race that ended in Moscow's bankruptcy and the triumph of the West.

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The Inchon Landing A Case Study in Amphibious Planning

COLONEL ROBERT D. HEINL, JR.U.S. MARINE CORPS, RETIRED

ONE HUNDRED AND EIGHTEEN YEARS BEFORE the Communists invaded South Korea, Karl von Clausewitz wrote: "A swift and vigorous transition to attack--the flashing sword of vengeance--is the most brilliant point of the defensive."

The landing at Inchon in September 1950 is one of the most dramatic such transitions from defense to attack in the annals of war. It is also a story of strategic prescience and unflinching nerve on the part of a high commander and of professional resourcefulness and expertise in the forces which were his instrument. Above all, Inchon is a triumph which could only have been achieved by maritime power, more precisely, by 20th-century American maritime power.

No mode of attack is more distinctively American than a smashing assault from the sea against the flank of an enemy. We have done this so often and so successfully that many, including some in uniform, take the capability of assault landing for granted, and--like one senior participant at Inchon--dismiss the landing as "merely a mechanical operation." I hope that before the end of the hour you will realize that amphibious capability is something we can never take for granted, and which we must ever strive to retain.

On a fall afternoon in 1949 the Chairman of the Joint Chiefs of Staff, after paying compliments to colleagues of the Naval Services, gave the House Armed Services Committee a forecast.

"I predict," said General of the Army Omar Nelson Bradley, "that large-scale amphibious operations will never occur again." Within less than a year, the 1st Marine Division was fighting its way over the beaches and seawalls of Inchon, a Korean west coast port that few people in Washington knew or cared about in 1949.

Our defense posture that year was less than brilliant. Demobilization had gutted the Armed Forces. "America fought the [Second World] war like a football game," said General [Albert E.] Wedemeyer, "after which the winner leaves the field and celebrates." What remained of the defense establishment was wracked by strategic controversy and inter-service rivalry. The atom bomb, at the end of a conflict whose iron bombs had conspicuously failed to substantiate [Giulio] Douhet, [Air Marshall Hugh] Trenchard, and [Col. "Billy"] Mitchell, seemed to foreshadow an apocalypse in which future war--absolute and total--would be waged by aerial thunderbolts. In corollary, it was asserted that seapower--historically our sword and shield--was through. A sample of the top thinking in the Administration and the Defense Department of those days can be found in a 1949 remark by Louis Johnson, then Secretary of Defense, to Admiral [Richard L.] Conolly, distinguished predecessor at this College of Admiral [John T.] Hayward.

Admiral [said Johnson], the Navy is on its way out. . . . There's no reason for having a Navy and Marine Corps. General Bradley tells me that amphibious operations are a thing of the past. We'll never have any more amphibious operations. That does away with the Marine Corps. And the Air Force can do anything the Navy can do nowadays, so that does away with the Navy.

Amphibious warfare, which General Bradley and many other senior officers decried, was a stepchild in the Navy too. The number of officers passed over while serving in amphibious billets was notorious. Op-343, amphibious warfare's front office in the CNO [Chief of Naval Operations] staff, was (as it still is in 1967) headed only by a captain--in an organization containing 38 flag officers and 335 other captains. Although the Navy had 610 amphibious ships in commission in 1945, only 91 were left four years later. In 1948 the Navy scrapped 510 landing craft and built only one. As far as the Marine Corps was concerned, the Fleet Marine Force--35,000 strong in 1948, [James] Forrestal's last year--had already been cut by Louis Johnson to 23,000. For 1950 the Defense Department was planning on an FMF made up of six infantry battalions and eleven aviation squadrons. Naval aviation had just had its first postwar carrier, the United States, canceled by the Defense Secretary, and the Marine Corps was fighting with its back to the wall to avoid being abolished outright or transferred to the Army.

In the Far East, thanks largely to Douglas MacArthur, the position of the United States appeared strong. To be sure, China had fallen. And Korea, like Germany, was divided into two parts, one Communist, one free. Yet there was not

much concern over Korea, nor had there been since 1947, when the JCS [Joint Chiefs of Staff] red-banded a memorandum which read:

The Joint Chiefs of Staff consider that, from the standpoint of military security, the United States has little strategic interest in maintaining the present troops and bases in Korea. . . .

Even as this paper was being shuffled about, the In Min Gun, or North Korean People's Army--a well-armed Communist force of 14 divisions--was proceeding with careful preparations to conquer South Korea.

You are all, I am sure, familiar with the opening scenario of the Korean war. How, on 25 June 1950, the North Korean Army--as MacArthur later said--"struck like a cobra." How the South Koreans reeled backward, and how American troops from Japan reeled backward, too. By mid-August the U.N. forces--South Korean, U.S. Army, British, and an undefeated brigade of U.S. Marines--were penned in a small perimeter around Pusan. (See Figure 1.) Here the bulk of the Communist forces were heavily concentrated, far south, intent on pushing the U.N. defenders off the peninsula. Since the 7th Fleet controlled the sea, enemy supply lines ran by land down the length of Korea with Seoul as the focal point of their communications. The Communist spearhead was sharp and strong, but their flanks and rear were totally exposed.

On July 4th--no day for celebration in the Far East, when a weak battalion was all we could get to Korea--Douglas MacArthur had already made up his mind as to how the Communists would be defeated. On that day MacArthur called a conference in Tokyo to consider a seaborne attack against the North Korean communications. What he had in mind was to land the 1st Cavalry Division at Inchon (though there might be other places, such as Chinnampo, Kunsan, or Chumunjin) to seize Seoul, cut the enemy communications, and, as he repeated, "hammer and destroy the North Koreans." Anticipating the requirements for this operation, he had already radioed Washington for amphibious troops.

Although MacArthur had no amphibious troops in July, he had an amphibious force. Early in 1950--alone among the Army's senior commanders in his belief in amphibious warfare--MacArthur had borrowed from the Pacific Fleet a tiny training force: 1 AGC, 1 APA, 1 AKA, 1 LST, and a fleet tug. Besides the ships there was a 57-man group of Marines from Landing Force Training Center, Pacific, Coronado, and a Tactical Air Control Squadron, and--most important--the staff of Amphibious Group1. The Amphibious Group1 Commander, James H. Doyle, had been [Richmond] Kelly Turner's operations officer in the Central Pacific and was one of the few flag officers then in the Navy with genuine enthusiasm for, and a deep professional grasp of, amphibious operations. Doyle was conducting a training exercise in Tokyo Bay when the North Koreans attacked in June and, of course, became the 7th Fleet's amphibious commander from that moment on.

Doyle, his people, and the Marines were only a nucleus, but their skills and experience gave MacArthur what he urgently needed, and needed without delay. It was only because of Doyle that MacArthur could start planning an amphibious assault in early July, when the roof was still falling in.

As we now know, events moved too fast to land the 1st Cavalry Division at Inchon. Every single soldier was needed to slow up the Communists in central Korea. We also now know that, although he kept an open mind as to possible landings elsewhere (Kunsan, particularly), MacArthur from the first thought of his objective as Inchon, and he never deviated from his original concept during the weeks of retreat and disaster that lay ahead.

The reasons why MacArthur kept thinking about Inchon are evident. (See Figure 2.) Inchon is the seaport of Seoul, Korea's ancient capital and first city. Seoul is the most important communications center in Korea. The excellent railroad net left by the Japanese fans north and south from Seoul, as do the less excellent highways. The national telephone and telegraph systems radiate from Seoul. Kimpo, Korea's largest and best airport then and now,lies between Inchon and Seoul. Inchon, in effect, is to Seoul what Piraeus was to Athens.

If as a strategic objective Inchon was all advantage, from the tactical viewpoint it was exactly the reverse.

Inchon is of about the same size and general attractiveness as Jersey City. The tidal range at Inchon is 32 feet, a range which is greatly exceeded only by the Bay of Fundy. Tidal currents in the approach channels rarely drop below three knots and, in the main ship channel, may reach seven to eight knots, close to the speed of an LCVP. Inchon's approach channel, the Salee River, is a tortuous dead-end street with virtually no room for turning or maneuver. At many points one sunken or disabled ship would block the channel from below and pen in anything

above. Despite the currents Inchon's waters are eminently minable and are commanded at several places by heights or islands well suited for batteries that could shoot minesweepers out of the water.

Of beaches, in the common usage of the word, Inchon has none. In the *Joint Dictionary*'s definition of a beach ("... that portion of the shoreline designated for landing of a tactical formation"), Inchon in 1950 had certain stretches of moles, breakwaters, and seawalls which Admiral Doyle's planners considered least objectionable. Beach exits were mainly the go-downs, railroad yards, and factories of a congested Oriental city.

Taking into consideration the underwater gradients approaching these so-called beaches, a tidal height of 23 feet is required to get LCVP's and LCM's ashore, while 29 feet is needed for LST's. Tidal heights of this magnitude prevail at Inchon only once a month for about three to four days.

Later on, General [Edward M.] Almond, of whom we shall hear more, said Inchon was "the worst possible place where we could bring in an amphibious assault." But because it was the worst possible place it was also, in a sense, the best possible. There is an ancient Chinese apothegm that "the wise general is one able to turn disadvantage to his own advantage."

Besides the physical obstacles to a landing at Inchon, there were two other obstacles which, if anything, would have seemed to anyone but MacArthur and Admiral Doyle even more forbidding. One was to find the forces--landing forces and assault shipping--capable of executing such a near-impossible landing. The other was to convince a large and exalted body of doubters that an amphibious attack, even if practicable, was the correct counterblow to the Communist invasion and that Inchon was the place. At this time, for example, a strategy being enthusiastically urged on the JCS, as well as any correspondent who would listen, was that we should progressively bomb the communications and principal cities of North Korea, and that by the time this program reached the outskirts of Pyongyang the Communists would sit down and negotiate.

Finding qualified amphibious troops presented grave difficulties, because the only such we had in 1950 were Marines, and the last thing anybody in the Pentagon or White House of those days wanted to see was another exhibition of Marine headline-hunting and publicity--such as a victory. Besides, there were not very many Marines. Louis Johnson had seen to that.

By dint of tooth pulling, MacArthur had obtained a Marine brigade in early July for service in the Pusan perimeter. It says much for the climate of the times that the decision even to let Marines into the war--when our other ground forces were being drubbed the length of Korea--had to be personally approved by President Truman. To assemble a war-strength division of Marines from the Corps, which numbered less than 70,000, would require mobilization of the Reserve. It would require transfer of practically the entire Atlantic Fleet Marine Force to the Pacific. It would require the reactivation, organization, and mount-out, within days, of new regiments and new battalions made up of reservists, Navy Yard guards, and school troops. This tremendous feat of planning and sheer will would be worth an entire lecture in itself. The two men, above all, who made it succeed were Lieutenant General [Lemuel] Shepherd, commanding Fleet Marine Force Pacific (a trusted friend of MacArthur's), and General [Clifton B.] Cates, commandant of the Marine Corps, whose nerve, optimism, and powerful personality (backed by a sympathetic House Armed Services Committee in the clinches) brushed all aside. The Reserve was called up on 19 July. The 1st Marine Division sailed from San Diego on 12 August. Not quite all the division sailed from San Diego, however. One Battalion Landing Team happened to be in the Mediterranean with the 6th Fleet, so they sailed from Crete via Suez. And, of course, one-third of the division which was to land at Inchon (the Marine brigade MacArthur had obtained earlier) was fighting in the Pusan perimeter.

Few military operations in history have been as strenuously opposed as Inchon. Aside from the general conviction in the Army and Air Force that amphibious operations were passé, we must remember that our defenses were stretched perilously thin and that any commitment of forces to Korea only heightened our exposure elsewhere--for example, what would we use if the Russians decided to cross the Rhine? In July, General [Joseph L.] Collins, the Army Chief of Staff, told MacArthur he would have to fight the war with forces already in the Far East. "Joe, you'll have to change your mind" was all the reply Collins got.

During July 1950, MacArthur sent five messages to the JCS, each one hammering out his requirement for amphibious troops--but nowhere, cagily, did he spell out his plan to employ these forces at that "worst possible place."

Under intense pressure, the JCS finally acceded to the requests for forces but still wanted to find out how MacArthur intended to use them. The upshot of this understandable curiosity was that Forrest Sherman, the CNO, and General Collins were sent to Tokyo in August for what, in effect, was a showdown with MacArthur. In preparation for this conference, indeed for the forthcoming operation, Admiral Doyle had prepared detailed studies on Inchon as an objective, and the results were anything but encouraging. General Almond, MacArthur's chief of staff, had cautioned Doyle not to bring up this kind of thing, that the General just wasn't interested in details. Doyle simply looked Almond in the eye and said, "He must be made aware of the details." So it was finally arranged that Doyle and his staff would present their findings to MacArthur at the same time as the latter presented his plan to Sherman and Collins.

On 23 August, late in the afternoon, the Amphibious Group 1 staff gave MacArthur 80 minutes of details-intelligence, aerology, beaches, tides, currents, channels, communications, pontoonry, landing craft, ship-to-shore movement, gunfire support, and air support. Then Doyle stood up and gave the broad picture: "The best I can say is that Inchon is not impossible."

For more than an hour, MacArthur let the visitors talk themselves out. Then he stood up and gave a completely extemporaneous exposition of his strategy. "The amphibious landing is the most powerful tool we have," he said. Perhaps, he went on, he had more confidence in the Navy than the Navy had in itself. "I realize that Inchon is a 5,000-to-1 gamble, but I am used to such gambles. . . . We shall land at Inchon and I shall crush them," he ended.

The JCS delegation didn't exactly go home rejoicing, but when they reached Washington they sent MacArthur tepid approval of what he proposed.

On the same day that MacArthur spellbound Sherman and Collins, the forward echelon of 1st Marine Division headquarters reached Tokyo by air. Now that Inchon had a landing force commander, planning would commence in earnest, especially with such a commander as Oliver P. Smith.

Gen. O.P. Smith was an unusual officer. By temperament, he was (and is) a mild, kindly, ascetic thinker and teacher, a practicing Christian who smoked only a pipe and drank sparingly. But O.P. Smith was also a graduate of Fort Benning, of France's Ecole Superieure de Guerre, of New Britain, Peleliu, and Okinawa and had been, until a few weeks earlier, General Cates's Assistant Commandant of the Marine Corps--which possibly reveals more about the man than his externals suggest.

"One of MacArthur's greatest attributes," said Admiral [Arthur D.] Struble, then Commander 7th Fleet and soon to command the forthcoming operation, "was to get going, and to hit quick." MacArthur announced his intention to strike at Inchon in CINCFE [Commander in Chief, Far East] OpPlan 100-B, code-named CHROMITE, on 12 August 1950.

MacArthur's "as soon as possible" meant 15 September 1950. High tide that day would put maximum high water over Inchon's mud flats, a tidal height of 31.2 feet. Twelve days later, on the 27th, there would be 27 feet (two feet short of what the LST's needed). Not until 11 October would there again be 30 feet of water. September 15th was, therefore, not only the earliest possible date but the best too. This left 23 days between arrival of the landing force commander in Tokyo and the target date for the operation. It left no time whatsoever for rehearsals. You will see that the normal planning cycle for such an operation calls for a minimum of 90 days.

From here on, as we talk about the planning, remember that every tick of the clock brings us nearer to September 15th.

Accumulation of intelligence should have proved no problem. Inchon had been used by the U.S. Army for years after World War II, but information of even the most elementary kind was lacking. The Japanese and American tide tables for Inchon differed appreciably, and nobody could say which was correct. Would the mud flats support infantry or vehicles at low water? How high were the seawalls at various stages of the tide? And so on.

By dint of furious search, the planners found an Army warrant officer at Yokohama who had operated Transportation Corps boats all around Inchon harbor, and this man promptly joined Admiral Doyle's staff. Aerial photographs were needed, but Far East Air Forces had no suitable photo planes. The only aircraft in the theater capable of taking the pictures which would reveal the characteristics of the seawalls were two Marine F4U's and a photo detachment aboard one of the carriers. Flying up to 13 sorties a day with only two airplanes, this detachment completed its assignment in four days and turned over the results to a special photo interpretation team flown straight to Japan from Dayton, Ohio. And plans were set afoot to verify all information by the surest means of all-personal reconnaissance.

But there was one item of intelligence which no one knew or could know, at least then. In early August, [Soviet] Naval Mine Depot, Vladivostok, had sent training teams and several trainloads of assorted mines to Chinnampo and Wonsan. Four thousand of these mines were being distributed from Chinnampo to Inchon, Kunsan, and Mokpo. If undertaken quickly enough, minelaying was something that could take Inchon out of play completely. What the odds on this might be nobody could calculate, but it meant that the sooner MacArthur could collect his forces and strike, the more favorable the odds would be.

I have spoken of the influence of the tides on selection of D-day as 15 September. That day, however, the tidal timing could hardly have been worse. Morning high tide on the 15th came just 45 minutes after sunrise. The next high tide would not come until 27 minutes after sunset. The morning tide would be many hours too soon for the under-powered, single-screw APA's and AKA's, without modern navigational radar in those days, to make a daylight approach up Flying Fish Channel to Inchon. On the other hand, 27 minutes after sunset isn't ordinarily considered the best time for a landing either.

The nub of this problem was how to land a Marine division on two separated tides, one so early that normal assault shipping couldn't make it up the approach channels, the other so late that landings would have to be conducted by twilight and darkness.

Paradoxically, a third problem helped solve the other two. (See Figure 3.)

The island of Wolmi Do is the tactical key to Inchon. Its peak commands the entire harbor and city. No soldier in his right mind would consider landing at Inchon without having control of Wolmi Do.

General Smith's planners therefore concluded that Wolmi Do--which had to be secured initially--should be taken on the morning tide, and that the main landings at Inchon proper could then proceed in the evening. In this way, by solving the Wolmi Do problem separately, the Inchon landings could be simplified and streamlined.

But how could the Wolmi Do landing force--a BLT [battalion landing team]--get to its transport area in time for the morning flood just after sunrise? The usual shipping--APA's, AKA's, and LST's--were out of the question. Admiral Doyle's chief of staff, Capt. Norman Sears, found the answer. He proposed that the entire BLT be embarked in APD's [destroyer escorts converted to carry troops] and one LSD, all of which were adequately powered, maneuverable, and equipped with suitable navigational gear for the night approach. Then, to prove he really had faith in his idea, Sears persuaded Admiral Doyle to let him command this Wolmi Do advance attack group.

After morning high tide receded during the day, the Marines on Wolmi Do, although physically cut off, would be in a strong defensive position and, of course, under the guns and air support--ours, that is--of the Fleet. In the very late afternoon the remainder of the Division would land in assault over two widely separated beaches.

Besides the obstacles of intelligence collection, of the tides of the approach, and of the capture of Wolmi Do, certain others remained before the Inchon plan could be firmed up.

You will remember that one-third of the Marine division--what we would today call a Marine expeditionary brigade or MEB, built around the 5th Marines and Marine Air Group 33--was at this time fighting away in the Pusan perimeter. General [Walton H.] Walker, commanding the 8th Army down there, was to say the least unenthusiastic over losing his Marine brigade and had gone so far as to say he would not be responsible for holding the perimeter if the Marines were taken away. General Almond--who knew little or nothing about landing operations--sympathized with Walker and tried to persuade General Smith to go into Inchon without the 5th Marines. He even offered to

substitute an Army regiment without amphibious training, containing 40 percent Korean civilian levies, and saw no reason why such a formation wouldn't be acceptable for an assault landing two weeks later. However, after another showdown conference--this time with the naval commanders and Generals Smith and Shepherd--Almond and Walker yielded when General MacArthur ordered that the 5th Marines be released anyway.

At length--you may have been wondering when--we can come to the final obstacle of all: the enemy. What, in August 1950, were the enemy capabilities and forces?

Aside from mining Inchon out of the game, the Communists could heavily reinforce the Inchon-Seoul area. They could intensify fortification activities sufficiently to unbalance the equation which MacArthur had set up. Russian aviation or submarines could intervene. With or without Russian support, Chinese ground forces could enter the war (although, if they did, MacArthur predicted that the Air Force would "turn the Yalu River into the bloodiest stream in all history").

While the intelligence estimates somewhat underestimated the strength of the Inchon-Seoul forces at 5,000–10,000 in all, Inchon itself was not strongly held, thus indicating that the North Koreans tended to agree with General Almond's view of Inchon as "the worst possible place." The garrison of Inchon consisted of two battalions of the West Coast Regiment (infantry) and two harbor defense batteries of a coast artillery regiment manning 76mm. and 106mm. guns. Engineers had plans for eventual fortification of Inchon, Russian land mines were being laid, and, as you have seen, harbor defense minefields were eventually planned.

The plan for Operation CHROMITE contained the following missions (see Figure 2):

- Seize the port of Inchon and capture a force beachhead line.
- Advance rapidly and seize Kimpo airfield.
- Cross the Han River.
- Seize and occupy Seoul.
- Occupy blocking positions north, northeast, and east of Seoul.
- Using forces in the Inchon-Seoul area as an anvil, crush the Communist army with a stroke from the south by the 8th Army.

The forces and command structure for this operation--projected as for D-day--are shown in Figure 4.

To execute the Inchon operation, General MacArthur, a unified commander, created a joint task force--Joint Task Force 7, a false face for the 7th Fleet headquarters and its commander, Vice Adm. Arthur D. Struble. The troop component of JTF-7 ("expeditionary troops," as it would have been entitled in the Navy/Marine doctrine of the day) was X Corps, commanded by General Almond, who at the same time kept his original hat as MacArthur's chief of staff. But this headquarters had no amphibious capability or function. X Corps would only enter the picture in its own right when the battle ceased to be amphibious. Its headquarters was embarked in an MSTS [Military Sea Transportation Service] transport without communications; its commander, Almond, did not even accompany Admiral Struble aboard the force flagship, *Rochester* [CA 124]. As a whole, X Corps was one of few serious mistakes in the plan.

To get around the amphibious impotence of X Corps, jointure of command did not take place until one level lower-that of the attack force under Admiral Doyle and the landing force under General Smith. Correspondingly, there was one further juncture of command below Doyle and Smith--that of the advance attack group under Captain Sears and his landing group, the 3d Battalion, 5th Marines. The remainder of the picture presented no novelties, either in forces or organization, except one. That was that the Tactical Air Command, X Corps (another false face designation, this the 1st Marine Aircraft Wing), was placed directly under the command of the supported unit. Considering the haste with which it had to be organized, Struble's force was an impressive one: 71,339 officers and men in assault or followup landings; and 230 ships from 7 navies, plus MSTS, and even 34 Japanese LST's, one commanded by a former battleship captain. In passing, you may note that although CHROMITE was to be executed

by a joint task force, there was no Air Force participation: the inconvenient remoteness of the objective area from shore bases left aircraft carriers as the only means of providing efficient air support.

The pre-D-day operations--settled only after heated debate--consisted of an extensive program of diversionary strikes against Chinnampo, Ongjio, and Kunsan, and then two days of naval and air bombardment at Inchon, the latter especially planned, by exposure of thin-skinned destroyers at short range, to tempt enemy shore batteries into opening fire. The principal points at issue centered over Air Force participation and the duration of pre-D-day bombardment. Admiral Struble--whose experience had been in Europe and the Southwest Pacific--favored only one day and a light bombardment. Doyle and Smith, thinking in terms of the Central Pacific, wanted five days of everything that could shoot and fly. Under considerable pressure, Admiral Struble finally assented to two days.

The landing plan called for initial seizure of Wolmi Do on the morning tide over Green Beach. (See <u>Figure 5.</u>) In the late afternoon, making the main effort, the 5th Marines in LCVP's would land over Red Beach and seize Observatory Hill, high ground which dominates Inchon town. Since the capacity of Red Beach was barely enough for one regiment, the 1st Marines was to land in AMTRACS over Blue Beach. An added advantage of the Blue Beach landing was that it would put the 1st Regiment directly on the flank of any enemy counterattack from Seoul as well as sealing off Inchon from the south. The two regiments would link up next morning. Considering the limited daylight available, the initial beachhead lines shown here represent a very respectable bite.

The limited duration of high water posed still another problem: the only time when LST's could beach was on the heels of the assault waves while the front lines were only a block or so inland. Admiral Doyle nevertheless elected to take the risk, as well as the major complication of bringing in eight LST's onto Red Beach (only one of whose skippers had ever beached or retracted his ship previously) at H+30 minutes. Only if these ships got in--to remain stranded until morning high water--could the landing force get the logistics required to maintain it on the beach.

Fire support would come from two CA's and two CL's, the latter British, 8 DD's, and 4 LSMR's. Two Marine squadrons, based on CVE's, would provide the bulk of the close air support, backed up by Navy AD Skyraiders from the fast carriers. It was hoped that some of the Marine artillery could be gotten ashore onto Wolmi Do in time to support the main landings.

As described, I am afraid I have made this plan sound rather matter-of-fact. However, to work up such a plan--or any plan--within such a compressed time frame was a virtuoso performance. As in the case of Guadalcanal the subordinate echelons, instead of responding to directives and plans from higher headquarters, anticipated and almost completely dominated the plans on higher levels. General Smith issued his Inchon order on 27 August. On the next higher echelon Almond didn't issue his order (in theory the basic directive for landing forces) until three days laterand only after a copy of the Marines' order had been sent to X Corps to keep them straight. The final version of Admiral Doyle's numerous drafts didn't get formal promulgation until 3 September, while that of Admiral Struble, the overall commander, came out even later. Struble wasn't even aware of the forthcoming operation until 23 August and didn't get to Tokyo with his staff until 25 August.

The planning problems of the 1st Marine Division deserve special note. General Smith's staff was never assembled in one place at the same time until after the landing. Part of it served as the Marine brigade staff in the perimeter and had to conduct unrelated, hard-fought operations while moonlighting on plans for Inchon. Another part flew with General Smith direct from Camp Pendleton to Japan, while the remainder, of necessity, had to accompany the main body of the division (and most of this last echelon had to stay in Kobe to run the loading and embarkation).

In the journal which he faithfully kept through World War II and Korea, General Smith concluded his entry for 15 September with one sentence: "Operations have gone about as planned." Since this lecture is concerned mainly with the planning process for Operation CHROMITE, we can let General Smith's note tell the story. Naturally, no battle really goes that smoothly--wasn't it Moltke who said: "No plan ever survives contact with the enemy"?--and Inchon was no exception. Largely speaking, however, what Admiral Doyle and General Smith worked out succeeded quite remarkably. The D-day operations were completed on schedule, with all objectives taken, at a cost of 21 killed and 175 wounded. Twelve days later, after heavy fighting in and for Seoul, the capital was reconquered, and, as MacArthur had predicted from beginning to end, the North Korean Army was destroyed. The In Min Gun had been hit so hard and so quickly from the sea that it was incapable of reaction or resistance until too late.

What are the lessons and conclusions we can draw from Inchon? Three, I think, stand out.

- An operation of this magnitude and unique complexity could never have been accomplished without fully qualified professional amphibious and landing forces in-being. The know-how and cumulative experience of Doyle's amphibs and Smith's Marines were what made the operation possible.
- Despite ill-considered remarks that Inchon was a gamble where you had to throw the book away, nothing could be further from the truth. Only because we had a "book"--the well-formulated, well-tested, commonly used and understood doctrines of the USF series (ancestors of NWP-22[A] and the NWIP's)-could the Inchon plans be prepared in viable form, under conditions of unbelievable haste, inability to coordinate, and physical separation of staffs and commanders.
- Inchon was a triumph of seapower in all its manifestations: black-shoe, brown-shoe [surface and aviation], and Marines. Only great maritime power--only American maritime power in mid-20th century--could have completely upset this awkward war in a remote place and done so within a matter of days.

Thomas More Molyneux, who in 1759 wrote one of the earliest complete works on amphibious warfare, might well have been thinking of Inchon when he said:

A Military, Naval, Littoral War, when wisely prepared and discreetly conducted, is a terrible Sort of War. Happy for that People who are Sovereigns enough of the Sea to put it into Execution! For it comes like thunder and lightning to some unprepared Part of the World.

This lecture, delivered at the Naval War College on 27 February 1967, first appeared in the May 1967 *Naval War College Review*. Colonel Robert Dl. Heinl, Jr., U.S. Marine Corps (Ret.), was educated at Yale University and various U.S. Marine Corps schools. He was at Peal Harbor in 1941; participated in the campaigns of the South Pacific; was a member of the U.S. Occupation Forces in Japan and North China; was Director, Marine Corps Schools, Quantico; and servied with the 1st Marine Division in Korea. From 1958 to 1963 Colonel Heinl was Chief of the U.S. Naval Mission, Haiti. He passed away in 1979.

Colonel Heinl's published works include Soldiers of the Sea, A Dictionary of Military and Naval Quotations, The Defense of Wake, Victory at High Tide, and The Marshalls. He was a coauthor of the Marine Officer's Guide and published numerous magazine articles.

Final Glory of the Superfortress GEORGE A. LARSON, LIEUTENANT COLONEL, USAF

In spite of the daunting threat of enemy jet fighters, Boeing B-29s served throughout the Korean War.

At 4 a.m. on June 25, 1950, North Korean troops poured across the 38th parallel into South Korea. The Soviet Union had supplied North Korea with large quantities of military equipment, including tanks, artillery, trucks, guns, ammunition, uniforms, rations and all the supporting elements necessary to field a modern military force. The North Korean air force was equipped with 62 Ilyushin-10 ground-attack aircraft, 70 Yakovlev Yak-3 and Yak-7B fighters, 22 Yak-16 transports and 8 Polikarpov Po-2 trainers. The force completely outclassed South Korea's air force.

On June 27, 1950, the United Nations authorized the use of military force to stop North Korea's attack. Eight hours after the authorization, the United States Far East Air Force (FEAF), the air element of the Far East Command (FEC), began flying the first combat air sorties over South Korea. President Harry S. Truman directed General Douglas MacArthur to supply South Korea's military forces from U.S. quartermaster depots in Japan and to commit available U.S. forces to attack North Korean forces crossing the 38th parallel. American ground troops would be supported by land- and sea-based airstrikes. As the ground situation worsened for the retreating South Korean forces, Truman authorized MacArthur to expand airstrikes north of the 38th parallel against North Korean supply depots, railyards and supporting strategic targets.

On June 28, 1950, four Boeing B-29 Superfortresses of the 19th Bombardment Group (BG), which had been transferred from Andersen Air Force Base on Guam to Kadena Air Base on Okinawa, attacked Communist troops north of Seoul. On June 30, 15 B-29s of the 19th BG dropped 260-pound fragmentation bombs on suspected North Korean troops and equipment along the north bank of the Han River. After the strike, a close ground examination revealed there had been no North Korean troops or equipment within the designated bombing area. Either U.S. Intelligence had erred or the North Korean troops had shifted locations prior to the air attack. It was recommended that future direct-support bombing strikes by the B-29s be conducted only if the ground situation was absolutely hopeless. The B-29 was not designed to be a ground support or tactical aircraft.

In August, the 98th Bombardment Group arrived at Yakota Air Base on Okinawa from Fairchild Air Force Base in the United States. The 98th BG was temporarily quartered in a hastily built lean-to adjoining the base's gymnasium. The majority of American military dependents at the base were shipped back to the States shortly after North Korea attacked the South, however, and their family housing units were then modified to serve as quarters for the B-29 aircrews. Many of the 98th's initial complement of aircrews had flown combat missions during World War II and had completed five years of intense and specialized Strategic Command training between 1945 and 1950.

To reduce the flow of replacement military equipment, armament and supplies to North Korean forces south of the 38th parallel, B-29s were ordered to bomb enemy strategic and military targets in the north. The majority of those targets were concentrated around Pyongyang, Chongyin, Wonsan, Hungnam and Rashin. Militarily, it probably would have been better to use incendiary bombs on those targets, but for political reasons only general purpose (GP) bombs were used. The possible uproar over using incendiaries on North Korea so soon after the destruction of Japanese cities by Twentieth Air Force B-29s during World War II was something President Truman did not want to face at home. Consequently, it would require more B-29s per target, or repeated B-29 strikes, to knock out a target. The GP bombs were fitted with delayed-action fuses to thwart North Korean attempts to repair bomb damage or defuse unexploded munitions.

A typical B-29 load consisted of 40 500-pound GP bombs. Each bomb was fitted with a delayed-action fuse, consisting of a propeller on the bomb's nose. After the bomb was released from the B-29's bomb bay, the propeller turned and tightened a threaded rod running through the bomb's nose. The rod continued turning until it ruptured an acetone-filled vial. The nose fuse was filled with Plexiglas disks surrounding the acetone vial--the number of disks determined the detonation delay time. When the acetone vial was broken, the acetone began to dissolve the Plexiglas disks, triggering the bomb's predetermined detonation time--from one to 144 hours.

To prevent the North Koreans from easily defusing the delayed-action bombs, a groove was milled into the main body of the fuse. As the fuse was screwed into the bomb by B-29 armaments specialists, the ball bearing was forced into the deepest section of the bomb's milled groove. Any attempt to remove the fuse after the bomb was dropped

caused the ball bearing to rotate into the shallow section of the fuse, locking it into position. To further frustrate bomb disarmament efforts, a small rod was connected to the end of the fuse, and any attempt to remove the fuse triggered the bomb's explosion. A 500 GP bomb was filled with 250 pounds of RDX composition D explosive, which is more powerful than TNT. The external casing of the GP bomb was scored so that, when detonated, metal fragments (shrapnel) would shower the area around the explosion.

B-29 operations were not restricted to visual bombing conditions. When clouds obscured a target, radar located the offset aiming points (OAPs) that set up the correct bomb release run into the target. Although weather conditions in Korea were better than B-29 aircrews had expected, weather forecasting for Korea was difficult because the country's weather patterns were generated in the Mongolian steppes, outside of FEAF's weather reporting area. At first, FEAF weathermen tuned in to Russian weather broadcasts from Vladivostok, but eventually they decided not to put too much faith in the validity of those reports.

Using visual and radar bombing releases, B-29s had destroyed North Korea's strategic targets by September 15, and the decision was made to halt further attacks on those targets. In response to the B-29 attacks, North Korea increased the number of anti-aircraft defenses against the B-29s. The Soviet Union and China shipped in large numbers of anti-aircraft artillery and ammunition, and the probable B-29 attack routes were more effectively defended. By late November 1950, increased numbers of Communist flak batteries along the bomber routes forced the B-29s to fly at 20,000 feet in an attempt to avoid the flak. In doing so, however, the B-29s faced a new threat--MiG-15 fighters.

On November 12, the 98th BG attacked Nampojin. Flak hit B-29 No. 6371 in the No. 2 engine, holing the propeller and producing a runaway (out of control) engine that could not be feathered. The bomber's crew began preparations to bail out of the aircraft while the navigator hurriedly gave the pilot a heading toward the nearest emergency airfield. Other B-29s of the 98th BG flew near the damaged bomber in case the crew did bail out, so they could watch the crew's exit from the aircraft, provide rescue directions and coordinate air cover support. The pilot brought the damaged B-29 in for an emergency landing at the Marine Corps fighter airfield at Yanpo. The base's Marine Corps commander informed the crew members that Chinese soldiers were approaching the air base and that he did not know if the field could be defended. The commander told the crewmen they had two options: They could be issued weapons and help defend the airfield, or they could leave for Japan on a Douglas C-54 that was due to land at the base shortly. The crew choose to fly to Japan. Without the help of the crewmen, the Marines at Yanpo repulsed the Chinese assault. When no Air Force personnel returned for the damaged B-29, the Marine Corps commander wondered if the damaged engine could be repaired. The Marines were able to locate a P2V R-3350 engine, but before it could be flown to the base, a C-54 landed with an Air Force maintenance crew and the replacement bomber engine. Once that was installed and ground tested, a ferry crew flew the damaged B-29 to Japan for a complete rework.

B-29s were used in a wide variety of missions during the Korean War. One B-29 of the 19th BG flew a decoy mission over the Korean Bay in the North Yellow Sea. Flying a racetrack pattern toward the mouth of the Yalu River, the B-29 would turn 180 degrees as it neared the river, coming no closer than five miles to the North Korean coastline. Meanwhile, the rest of the 19th was attacking a target near Pyongyang. The 19th BG's Intelligence officer had told the crew of the decoy B-29 that Chinese Mikoyan-Gurevich MiG-15 jet fighters would probably not venture over the Yellow Sea. As the B-29 approached the coastline, however, the radar officer identified a blip on the radar coming toward the bomber at 12 o'clock and from below. The MiG did not attack and flew away at the 6 o'clock position. This cat-and-mouse game continued for approximately five hours, during which time the decoy B-29 completed 12 orbits. The B-29 also received reports from ground-based radar that there were 20 to 30 MiGs circling inland, directly opposite the decoy B-29's orbit area.

The growing danger of being stalked by MiGs and the large number of Communist flak batteries made it necessary for the B-29s to fly at night. The bombers usually flew in a stream formation with a 500-foot altitude separation, stepped up and at three-minute intervals. North Korean anti-aircraft gunners soon began to anticipate where the bombers might fly, however, so the Americans modified their target approach tactics. B-29 intervals were altered to between one and five minutes, and the separations between aircraft in the same bomber stream were mixed.

Lieutenant General James V. Edmundson, commander of the 22nd BG, stated that fighter opposition was no problem in 1950 but that it increased as the war progressed. Initially, the flak encountered by the 22nd BG was generally meager and inaccurate. Later, though, the Communists increased their number of flak batteries.

The B-29s were still able to achieve remarkable success when bombing North Korean targets. On one nighttime mission, the third B-29 in the 19th BG's bomber stream dropped its bombs on a bridge and completed a 60-degree turn away from the target. In order to take photographs of the strike, each B-29 was carrying two photoflash bombs mixed within the bombload. The photographs from the first two B-29s showed a supply train crossing the bridge. Bombs from the first two B-29s straddled the bridge while the trailing B-29's bombs struck the bridge dead center. The trailing bomber's tail gunner had a bird's-eye view of the spectacular result: The train crossing the bridge disappeared in a series of explosions and the violent secondary detonation of its load of ammunition. The tail gunner reported that the explosions turned the black night into day for almost 30 seconds.

As North Korean targets became scarce, B-29s began attacking more hazardous areas. In September 1952, the 96th, 19th and 307th BGs were directed to attack the Siuho Dam on the Yalu River. Up until that time, B-29 targets were never located within 12 miles of the Yalu River. The bombers' approach tactics were altered for the dangerous mission. The B-29s flew low until they reached the southern tip of Korea; then they climbed to their bombing altitude. Upon reaching 16,000 feet, one B-29 of the 19th BG reported severe icing on its wings, making the plane difficult to control and keep in formation. The aircraft commander decided to abort the mission and notified Seoul Command of his decision. Seoul Command informed him not to abort, however, but to head east toward the coastline and then north to rejoin the bomber stream. Weather officers believed they had identified a possible warm air trough near the coast that should melt the ice on the bomber's wings. The warmer air did melt the ice, permitting the bomber to turn back north. When the B-29 reached Wonsan Harbor, it turned onto a westerly heading and slowly worked its way back into the bomber stream.

As the bombers approached the Siuho Dam, they were illuminated by radar-directed searchlights, followed a few seconds later by anti-aircraft fire. They continued toward the target while being buffeted by both flak bursts and variations in jet stream winds. The B-29s were able to drop their bombs and damage the dam, although not enough to put it out of operation. The flak was intense throughout the bomb run to and from the target, with 18 of the 19 B-29s holed by flak.

When targets were located in the western part of North Korea, B-29s turned toward the east after their bombs were dropped and then continued toward the central part of Korea, where they turned south for Okinawa. One confused 19th BG navigator directed a pilot to make a 360-degree turn. The pilot automatically followed the navigator's instructions, but on rollout the pilot and crew recognized the heading error. They quickly completed a 180-degree turn to get back onto the proper course.

Meanwhile, the B-29 that had been behind the off-course bomber reached its post-target turn point and executed the correct heading toward the central part of Korea. That B-29's flight engineer was tired, however, and did not properly monitor the bomber's engines, allowing them to torch. (When the fuel-air mixture becomes too rich, it causes the fuel at the end of the exhaust pipes to burn.) The bombardier on the B-29 that had made the incorrect turn saw the four exhaust plumes of the torching engines. Believing he had four MiGs in his gunsights, he began firing 50-caliber shells toward the flames, holing the higher B-29, with one spent shell landing within the navigatorradio operator's compartment. Even experienced B-29 crews had problems on combat missions, and there never seemed to be enough trained crews.

From the very start of the Korean War, it was apparent that B-29 strength in the FEAF had to be increased and a qualified crew replacement source established. It took three months to produce an 11-man B-29 combat crew. The three-month training program was divided into two phases--one 30- day transition period (becoming familiar with and able to fly the B-29) and then a 60-day combat-training period. Virtually all crews were assigned to Strategic Air Command (SAC) after graduation and were shipped to the FEAF.

As the replacement crews arrived and became combat qualified, veteran crews were shipped home, although there was one exception. General MacArthur retained five atomic bombqualified B-29 bomber crews within the combat zone so that, if the war escalated, U.S. forces could respond with nuclear weapons. President Truman and his military and foreign-policy advisers, however, were firmly committed to keeping the war limited because they were more concerned with a potential Soviet armed incursion into Western Europe. It would have been unrealistic for MacArthur to initiate a widened ground offensive or launch airstrikes north of the Yalu River, but just in case, the five atomic bombqualified crews alternated on 10-day ground alert and 10-day off status. The retained crews also served as combat instructors for newly arrived replacement aircrews. Even though atomic bombs were never used in

the Korean War, MacArthur's contingency plans provided grist for speculation about what might have happened if they had been used.

When U.N. troops retreated from North Korea, FEAF aircrews were called upon to provide tactical interdiction. Using conventional bombs, the aircrews greatly delayed the southward advance of the Chinese Fourth Field Army, giving the U.S. Eighth Army time to prepare defenses. The FEAF inflicted an estimated 40,000 causalities on the advancing Chinese, decimating a force equivalent to five divisions.

Although B-29 atomic-qualified crews had demonstrated their ability to attack fixed positions (permanent strategic targets), there was still some reason to believe that the U.N. command forces were not well enough prepared to use atomic weapons effectively against moving ground troops (tactical targets). In any case, U.S. Intelligence did not identify hostile concentrations at Taechon and in the Iron Triangle in November 1950 until they were breaking up. And atomic attacks against Imjin and Wonju would have been close enough to U.N. troop elements to cause casualties.

The threat of using atomic weapons, however, did help to end the war. On May 22, 1953, U.S. Secretary of State John Dulles sent a message to the Chinese leadership via the Indian diplomatic corps. The Chinese were raising unnecessary barriers to an armistice agreement ending the Korean War, said Dulles, and if peace was not forthcoming, the United States would bring in atomic weapons. Within 11 days, the Chinese accepted the armistice plan, with minor changes.

By January 1951, it was necessary to restrict B-29 operations to steer clear of "MiG Alley"--the area between the Chongchon and Yalu rivers where MiG-15s based in the Antung complex in Manchuria constituted a particular threat. B-29s were withdrawn after Chinese troops captured the U.S. Air Force fighter airfields at Kimpo and Suwon, compelling the Americans to withdraw their North American F-86 Sabres to air bases in Japan. Since the B-29s were highly vulnerable to MiG attack, they required supporting fighters.

Nevertheless, the B-29s continued to pound other Communist targets with effective results. During November 1952, B-29s attacked three airfields that the Chinese were trying to build at the southern end of MiG Alley, north of the Chongchon River. Repeated B-29 attacks forced the Chinese engineers to stop work on those three airfields, as well as their attempts to repair previously damaged airfields.

In order to keep up such devastating attacks, the B-29s required extensive post-mission maintenance to make their three-day turnaround times. Post-mission maintenance consisted of inspecting the bomber's engines and skin for flak damage, washing dirt and oil off the aircraft to maintain maximum aircraft speed, tightening oil connections and any loose equipment, and checking oil sump plugs for metallic shavings, the presence of which indicated the onset of engine wear and probable future engine failure. Maintenance personnel also had to clear bomber crew post-mission write-ups and then complete engine tests to monitor correct operational limits. B-29s needed 7,000 gallons of aviation fuel, and oil reservoir tanks and lines had to be topped off prior to the next mission.

Weather was an important factor in the aircraft mechanics' work--Korea tended to be mild in the fall and spring, bitterly cold in the winter and oppressively hot in the summer. Typhoons were a severe threat to the B-29 bombers on Okinawa. One typhoon warning forced an evacuation of the B-29s and supporting aircraft to Andersen Air Force Base on Guam. The majority of the ground personnel remained behind and waited out the storm. When the B-29s returned, maintenance personnel identified critical fuel-feed problems in the engines. The higher octane fuel used on Guam was eating into the seals of engine fuel-pump gaskets and causing them to leak. The B-29 fuel tanks had to be drained and the fuel-pump gaskets changed prior to the bombers being certified for the next mission.

During another typhoon alert, the winds were determined to be within the B-29's structural tolerance, so the bombers were not evacuated to Guam. The B-29s were lined up on the runway, and the crews and maintenance climbed on board to ride out the storm. Sandbags were piled to wing level around one landing gear, while hydraulic lines were disconnected from the brakes on the other landing gear to let the bombers swing into the changing wind. The force of the winds, which reached 91 mph, caused the B-29's propellers to turn. The crews reported it was an awesome experience, and the damage to the base was approximately \$1 million. The next evening, the B-29s were ready to strike North Korean targets. Riding out the storm saved maintenance personnel three to six days of work.

Regardless of careful mission planning, fighter protection and night bombing attacks, B-29 aircrews operated in a dangerous environment. Communist anti-aircraft gunners and MiGs unloaded their vengeance on the B-29s. After the war, U.S. Intelligence studies indicated that the Communists' inexperience in aerial warfare prevented them from making the most of their fighter force. F-86 pilots believed that most of the experienced pilots they encountered were probably from the Soviet Union or Eastern bloc countries, while the newer pilots were Chinese and North Korean. With the end of the Cold War, Air Force Intelligence was able to use Soviet records to confirm that many MiGs encountered by U.S. pilots in MiG Alley and officially reported to be Chinese and North Korean were, in fact, flown by Russian and Polish pilots. Those pilots were rotated through Chinese fighter squadrons for six weeks to gain practical combat experience against U.S. pilots. The Soviet involvement was heavily classified, but early in the war Soviet pilots were heard on radio during combat engagements. Some Soviet pilots were shot down, but the exact number has never been officially confirmed by either U.S. or Soviet air force records.

On January 10, 1953, one B-29 from the 307th BG was badly damaged by a MiG. The aircraft commander kept the bomber flying straight and level so that the crew could bail out. He stayed with the damaged bomber too long, however, and was unable to bail out. (The commander was posthumously awarded the Silver Star for saving the crew.) When the B-29's left gunner reached the ground, a compassionate North Korean farm woman took care of his wounds before North Korean troops captured him. The gunner was then placed in solitary prison confinement until early May 1953. At that time, with about 10 or 12 other captured B-29 crewmen, he was transported to a larger prisoner of war (POW) camp.

The downed radar operator had also been quickly captured and spent three months in solitary confinement. Since he was an officer, the North Koreans made an exceptional effort to play mind games with him. At one point, he was dragged in front of a firing squad in the compound's center courtyard. A North Korean officer barked a command, the soldiers raised their rifles at him and then held that position for several minutes. Of course, the radar officer thought he was about to be killed--as many downed crewmen were. Unexpectedly, however, the North Korean officer barked another command that made the soldiers lower their rifles and laugh at the badly shaken American officer. The radar officer was then dragged back to his cell.

American airmen suffered greatly while in Communist captivity. The food was bad and medical care practically nonexistent. Captured B-29 crewmen were usually held in isolated or solitary confinement for approximately three months and were fed two cups of rice a day. The prisoners were the clothing they had on when captured, regardless of the condition, and slept on a dirt floor, usually without blankets. The Korean winters are very harsh and cold, and POWs suffered from all the effects of exposure. Periodically, the captured crewmen would be removed from solitary for interrogation, usually lasting three hours, and then were returned to their cells.

When the three-month initial confinement and interrogation phase was completed, the airmen were transported to a central, Chinese-run POW camp. Life was somewhat better there, but not much. Prisoners were allowed limited exercise, which had been prohibited in the North Koreanrun prison. They were still completely isolated from any outside contact, including non-Communist radio broadcasts, newspapers, magazines and letters, and were not allowed to have writing materials. In the Chinese camps POWs were issued some clothing, and crude shelter was provided, but captured U.N. personnel certainly were not treated according to the rules and standards set by the Geneva Convention. The 19th BG personnel who had survived when their B-29 was shot down on January 10, 1953, remained in Communist captivity until August 21, 1953. On that date, they were loaded in trucks along with other POWs and taken to the U.N.Communist POW exchange point.

Responding to Communist propaganda techniques, the United States used B-29s to drop leaflets to persuade North Korean troops to surrender. In early April 1953, for example, a B-29 propaganda drop scattered thousands of leaflets that stated: "Many thousands of North Korean soldiers have been killed! Many thousands of young North Korean women will never have husbands! Blame the Communists!" Those leaflets were designed to arouse homesickness among the North Korean soldiers and to incite them to rebel against their commanders and leaders for continuing the war in the face of relentless air and ground attacks. The leaflet drops were only an occasional diversion, however, from the main bombing campaign.

A 98th BG mission on July 20, 1953, was typical of the late war attacks against North Korean targets. On the afternoon of the 20th, more than 180 aircrews sat in the briefing room, waiting for the mission briefing to begin. The wing commander quickly walked onto the platform, took his seat in front of the crewmen and ordered them to take their seats. The operations officer waited behind the podium while another officer stood to the right of a large,

drape-covered wall map. The crews drew a quick breath as the drape was pulled to one side, revealing their evening targets--two airfields near Pyongyang. The operations officer began describing the mission, "First aircraft takeoff will be to the north at 1830 hours," and as he gave locations and routes, the second officer pointed each out on the map. The Intelligence officer then briefed the crews on the general shape, size and location of the two targets, mentioning what the pre-strike reconnaissance photographs revealed about the target, its defenses, landmarks and the selected offset aiming points (OAPs). When the Intelligence officer was finished, the communications, weather and engineering officers added their information to the briefing.

As the crews exited the briefing room, many crewmen were asking each other: "What do you think? Will this be the last mission?"

At 4 p.m., the crews began reassembling to be issued personal equipment--parachutes, side arms, flight helmets, earphones and other equipment needed to perform the mission. The crews then boarded trucks for the trip to the B-29s parked on the steel and cement runways. Each B-29 was a beehive of activity as flight crews began their preflight aircraft inspection. Crews examined every inch of their bomber's fuselage, wings, tires, guns, propellers and all the other items on their preflight checklist. Each aircraft commander then lined up his crew with their equipment piled behind. He slowly moved down the line of men, inspecting each piece of equipment to verify everything was combat ready. At his command, the crewmen donned their Mae West life jackets and parachutes and began loading all the equipment into the waiting bomber.

"How about it, Captain, is this the last mission?" the crewmen asked. He could only answer, "It's the last one...for tonight!" But all questions were soon put aside as the control tower cleared the crew's B-29 for takeoff.

As the B-29 rumbled off its assigned parking hardstand and taxied to position on the runway, the crewmen's anticipation grew. The B-29 turned onto the end of the runway, and the pilot put on the bomber's brakes and ran the engines up to full power. The aircraft was vibrating, then it surged forward as takeoff power was applied and the brakes released. The four screaming engines pulled the heavy bomber down the runway into the air toward its assigned target near Pyongyang.

The B-29s encountered heavy clouds that obscured the target, even though they were flying under the light from the moon. That was a very dangerous time for the bombers because they had to fly straight and level and could be tracked by prowling Communist night fighters. The bombardiers used radar to locate their target, releasing their 500-pound bombs through the clouds. Even with the thick cloud base, brilliant flashes of flame could be seen through the cloud layer. The B-29s were being tracked by radar-directed anti-aircraft artillery, and flak burst among the bombers. All B-29 crewmen scanned the night sky looking for enemy fighters, but on this mission none approached the bombers. As each B-29 dropped its bombs, it turned away from the target and headed back to base. The crews relaxed when the aircraft landed and were parked back on their hardstand, but the evening's mission was not over until after the post-mission debriefing.

In the trucks heading for the debriefing, the crewmen returned to the question of whether they had just flown the war's last mission. As each crew entered the debriefing room, chaplains met them, welcoming them home and giving each a cup of hot chocolate. The crewmen unzipped their flight suits, wet with sweat and stained with dirt, as they went to the assigned debriefing table, where the Intelligence specialist tried to draw out as much information about the mission as possible. Dawn streaked the eastern horizon as the crewmen finally exited the building, moving slowly toward their quarters. At the same time, other men were getting up, ready for the heavy work of preparing the bombers for the next mission.

The mission had been part of the FEAF's airfield neutralization program, which Brig. Gen. Richard Carmichael called a "blaze of glory." Those bombing raids against North Korea's airfields were designed to render them unserviceable for conventional and jet aircraft. The Chinese, under the cover of inclement weather, had flown in approximately 200 aircraft to Uiju airfield in early July 1953. Once the planes had landed, they had been quickly towed to scattered dispersal revetments in the hills adjoining the hard surface highway between Uiju and Sinuiju. Most of these aircraft received some shrapnel damage during the B-29s' airfield bombing raids.

The Chinese could still ferry in replacement aircraft before the neutral nations' inspection teams arrived at the various North Korean airfields to record how many aircraft were at the base. Communist combat engineers were authorized to repair the dirt-surfaced runways after the bombings to permit landings of replacement aircraft, but they

could not maintain full combat operations. The replacement aircraft were towed into the aircraft revetments to wait for the inspection team's visit. Once the inspection team counted the number of aircraft on the North Korean airfields, the fields could be brought up to full operational capabilities. The armistice agreement between the U.N. and the Communists included a statement that guaranteed North Korea the right to retain the number of aircraft that were on the airfields and operational at the time the armistice agreement became effective. On July 27, 1953, the last day of the war, two B-29s of the 98th BG and two of the 91st BG flew over North Korea delivering a final round of psychological leaflets.

B-29s flew 1,076 days during the 1,106-day air war in Korea, dropping 160,000 tons of bombs on Communist targets--a greater bomb tonnage than had been dropped on Japan during World War II. Regardless of the many obstacles they faced, B-29 crews performed brilliantly, destroying industrial and military strategic targets in North Korea and supporting U.N. ground troops. The FEAF lost a grand total of 1,406 aircraft and suffered 1,144 men killed and 306 wounded during the war. Thirty FEAF men who had been declared missing were eventually returned to military control, 214 POWs were repatriated under the terms of the armistice agreement, while 35 men were still being held in Communist captivity as of June 1954. The men who flew and supported the B-29s in the Far East Command were an important part of the air war over Korea, but their contribution has seldom been recognized.

George Larson, a retired Air Force lieutenant colonel, writes from Altoona, Iowa. Further reading: The Korean Air War, by Robert F. Dorr and Warren Thompson; and Air War Over Korea: A Pictorial Record, by Larry Davis.

Logistics

"The Bitter Lesson of Unpreparedness"

GEORGE C. MARSHALL, Jr., MAJOR, US Army

Marshall's 1923 speech is quoted in its entirety by Congressman Ike Skelton of Missouri speaking on the "Future of the US Military" in the House proceedings for the US Congressional Record, 105th Congress, First Session, 28 April 1997, vol. 143, no. 52. The speech was first presented at the annual meeting of the Military Schools and Colleges Association in March 1923 and originally appeared in "Factors Contributing to Morale and Esprit de Corps," by General L.R. Gignilliat in 1923.-Editor

Mr. President and Gentlemen:

I must ask your indulgence this afternoon because, until General Gignilliat requested me to make this talk the latter part of the morning, I had no expectation of participating in this meeting.

You gentlemen, I am sure, are all interested in the National Defense, and I would like to talk to you for a few minutes regarding the effect of our school histories on this question.

The Army, which is the principal arm we depend upon for the defense of the country, can hardly be called the result of a slow growth. Its history has been a series of ups and downs, a continuing record of vicissitudes, with which you may be somewhat familiar in more recent years, but I cannot believe many people understand or are aware of what has happened in the past, because it seems improbable that what has happened should continue to happen if our citizens were familiar with the facts.

In looking back through the history of the infantry component of the Regular Army, we find that from the earliest days of this country, it was materially increased in strength and drastically reduced with somewhat monotonous regularity. From eighty men immediately after the Revolutionary War, it was increased to sixteen regiments, about as many regiments of infantry as we have today. In 1798, two years later, it was reduced to eight regiments. With the War of 1812, it was increased considerably and then decreased immediately afterwards. I am not talking about the temporary army, but the Regular Army. Another increase came during the Mexican War, about trebling its size; and immediately thereafter came the inevitable reduction. In the early months of the Civil War it was increased from about eight regiments to sixteen. But the odd phase of this policy develops in 1866. Then the war was over, but the infantry was increased to forty-six regiments, and suddenly, but a few years later, reduced to twenty-five regiments, with which we entered the war with Spain. In 1901, this number was increased to thirty. Just before our entry into the World War, Congress provided for sixty-five regiments. Thereafter you cannot get an accurate parallel, because the Congress varied its method. Instead of authorizing regiments, it gave us numbers.

When the World War was over, in the summer of 1920, they gave us 285,000 men. Nine months later this was cut to 175,000. Three months later, came a cut to 150,000; followed six months later by a further cut to 125,000. And just by the skin of our teeth we got through this last Congress without a further cut to 75,000.

The remarkable aspect of this procedure to me, and I think to anyone, is that both increases and reductions should have been ordered after the war was over and all within a brief period of time, which can be measured in months. A decrease following the establishment of peace is readily understood, but the combination of two diametrically opposed policies is difficult to comprehend.

In searching for reasons to explain this inconsistency, it appears that when the war was over every American's thoughts were centered on the tragedies involved in the lessons just learned, the excessive cost of the war in human lives and money. So the Congress, strongly backed by public opinion, determined that we should be adequately prepared for the future, and accordingly enacted a law well devised for this express purpose. However, in a few months, the public mind ran away from the tragedies of the War and the reasons therefore, and became obsessed with the magnitude of the public debt and the problem of its reduction. Forgetting almost immediately the bitter lesson of unpreparedness, they demanded and secured the reduction of the Army, which their representatives had so recently increased for very evident reasons. Now what has occurred but recently has many precedents in the past. There are numerous ramifications of the same general nature, but the astonishing fact is, that we continue to follow a regular cycle in the doing and undoing of measures for the National Defense. We start in the making of adequate provisions and then turn abruptly in the opposite direction and abolish what has just been done.

Careful investigation leads to the belief that this illogical course of action is the result of the inadequacies of our school histories so far as pertains to the record of our wars, and in a measure, to the manner in which history is taught. During the past few months, the War Department has been concerned as to what might properly be done to correct the defects in the school textbooks which are now being published. Naturally, it is a matter that must be handled very carefully. The Department is loathe to take any positive action, because immediately the Army would be open to the criticism of trying to create a militaristic public opinion. Furthermore, criticism of the existing textbooks would probably arouse the hostility of the publishers, and particularly, of the authors.

Following a discussion between General Pershing and a prominent publisher, several of the more recent school histories were submitted to the Historical Section of the War College, and each reviewed by a number of specially qualified officers. When these reviews were assembled and digested, it became apparent that what had been done in the past, was again in the process of repetition. A reading of these reviews convinces one that our military history would probably suffer another repetition.

It is apparent that you can talk about the present National Defense Act as much as you please and of the scheme of military education provided in the Reserve Officers' Training Corps units, but we will repeat our errors of the past unless public opinion is enlightened, and public opinion in these matters depends in a large measure on the written word of our histories, except for a few months immediately following such a National calamity as the World War. It is almost purposeless for the War Department to attempt to make an impression on Congress which is not in accord with public opinion.

When a boy goes to school he studies history. Thereafter I believe less than five per cent of the men of the country continue this study. You gentlemen are of a class apart, and if you were not familiar with the important facts of our military history, certainly no other class of men will be. The lasting impression of the American man on what has happened in the past, is absorbed from his school history. I remember studying Barnes' American History, and I still have, I suppose, the same feeling I acquired then regarding the English nation and the British Army, so depicted in Revolutionary [War] days. In the course of my present occupation it has become necessary for me to learn something of the actual facts in the case, which I have found are often strikingly at variance with many of the ideas Mr. Barnes implanted in my mind.

You gentlemen are no doubt familiar with most of these facts, but I believe there are some of them of which even you are not aware. Certainly the average man is in the dark as to the difficulties our military leaders have invariably encountered. Take the history of the Revolutionary War for example; I imagine there are but few men today who have even a vague idea of Washington's troubles in maintaining his Revolutionary Army- what they actually were and the causes that lay behind them. Virtually the same difficulties continued to arise in the history of our Army and with the same basic reason for their recurrence. Is the average boy given an idea of the lessons of these incidents?

What has the American youth been taught of the War of 1812-that it was one of the most ignominious pages in our history-wonderful on the sea, splendid at New Orleans-but in almost everything else, a series of glaring failures and humiliating occurrences? Were you given any such idea as this? In the Mexican War the operations of our armies were carried out in very shipshape fashion, thanks to a long period in which to prepare. But I doubt if there are more than a few people who know that after the capture of Vera Cruz, General Scott's army, preparing for its advance to Mexico City, was well nigh emasculated and rendered impotent by the policy of the Government which permitted a large proportion of the volunteers to secure their discharges and return home. It has been alleged that this course was intended to wreck any political aspirations of General Scott. But it was an American Army on foreign soil far from home, that was imperiled in this fashion.

We find almost an exact repetition of this incident in the Philippines in 1809, when the obligation of the Government to return home the state volunteer troops, left a small force of the Regular Army besieged in Manila until fresh quotas of volunteers could be raised in the United States and dispatched seven thousand miles to its support. We do not realize how fraught with the possibility of National tragedy were these occurrences. Think what the result might have been had our opponent been efficient and made us pay the penalty for such a mistaken policy.

Until recently the Civil War formed the major portion of our military background. In your study of the history of that period was your attention drawn to any conclusions? As to why, for example, the North experienced so many

difficulties and failures during the early years of the war, and the South was so uniformly successful? There are very definite reasons for this and therefore, lessons to be drawn, but the one-time school boy when he casts his vote at the polls, or represents his District in Congress, must as a rule, base his action on false and misleading premises.

Popular American histories of the World War would more than startle the German reader. It is possible that he might think he was reading of some other struggles in which his country had no part. I will venture the assertion that for every boy who comes out of our public schools realizing that over a year elapsed before America's soldiers could make their first attack on the enemy-for every youth so informed, there will be a thousand whose attention is not called to this, but who can recite the date on which we entered the war. This may seem a small matter, but it will have a definite effect on every paragraph of legislation attempted for the National Defense.

We talk of Valley Forge in Revolutionary days, and do not realize that American soldiers experienced something very like Valley Forge over in France in the fall of 1917. I have seen soldiers of the First Division without shoes and with their feet wrapped in gunny-sacks, marching ten or fifteen kilometers through the ice and snow. You do not have to go back to Washington's army at Valley Forge for a period of hardships experienced, because of unpreparedness. I have seen so many horses of the First Division drop dead on the field from starvation, that we had to terminate the movements in which they engaged. One night I recall Division Headquarters being notified that the troops in an adjacent village were out of rations and the animals were too weak to haul the necessary supplies. The question to be derived was, should the men be marched to the rations and the animals left to die, or would it be possible to secure other transportation. That was in the fall of 1917. It was a small matter but it reflects the general condition of unpreparedness with which we entered the war, and it was only the strength of our Allies who held the enemy at bay for more than a year, that enabled us to fight the victorious battles which ended the war. The small boy learns that we were successful in the end, but he is carefully prevented from discovering how narrow has been the margin of our success. Good luck has always seemed to be with us and the attending circumstances seem to prove Bismarck's saying that "God takes care of the fools and the United States."

Some of these days, now that we are a dominant, if not the dominant power in the world, we may have to make good without Allies or time or fortuitous circumstances to assist us.

There seems to have been a conspiracy to omit the pertinent facts or the lessons of our military history which would prepare the boy to be an intelligent voter or legislator. So long as this is the case, we will continue in a series of the errors I have been describing.

The study of ancient history reveals innumerable occurrences which have that exact parallel in modern times. There must be some lesson to be drawn. For example, General Pershing recently called attention to the fact that while the Peace Conference was sitting in Paris in 1919, building up the Treaty which we did not accept, there were English soldiers at Cologne, American soldiers at Coblenz, and French soldiers in Mayence, and a general reserve at Treves, (General Pershing's own Headquarters). Eighteen hundred years before, during a prolonged peace, Roman Legions were stationed at Cologne, Coblenz and Mayence, with a reserve of ten thousand at Treves. The setting was identical with the recent deployment of the Allied troops along the Rhine. There must be some lesson to be drawn from this repetition of history, that is of much more moment that a recollection of the date of the signing of the Peace Treaty.

The other day I had occasion to look up something regarding Phillip Sheridan, who was one of the five Generals of the Army, of which General Pershing is the most recent, and General Washington was the first. After locating my information, I read a little further and came across, what to me, was a most remarkable coincidence.

General Sheridan after the Civil War was sent abroad to observe the operations of the Prussian Army in the Franco-Prussian War. He joined the Staff of the Emperor William, west of Metz on the eve of the Battle of Gravelotte. The day after this fight, riding in the carriage of Bismarck, he drove through Point-a-Mousson. This town was the right flank of the American army in the St. Mihiel operation. Turning west, Bismarck and Sheridan drove on to Commercy and were billeted there for the night. They followed the exact route of the American troops being transferred from the St. Mihiel front to the Meuse-Argonne. From Commercy, Sheridan passed on to Bar-le-Duc, and he describes how he stood on a little portico of that town and watched the Bavarians marching through the Central Place as they turned north towards the Argonne in the great maneuver to corner McHahon's French Army on the Belgian frontier. American troops followed this same route and executed the same turn to the north, and I happened to have watched them pass through the Central Place of Bar-le-Duc. With Bismarck, Sheridan drove north to Clermont, following the principal axis of the advance taken by the American Army in September 1918. After a

night's billet in that village, they drove through a series of towns, later to be captured by the Americans from Bismarck's descendants, and billeted in Grandpre at the other tip of the Argonne Forest.

Now comes a more remarkable coincidence. General Sheridan describes how he drove from Grandpre through the Foret de Dieulet into Beaumont, where a French division had on that morning been surprised and captured by the Germans, this was the opening phase of the Battle of Sedan. Our Second Division passed through that identical Forest at night and surprised Germans at roll call in the early morning in the streets of Beaumont.

Accompanying the entourage of the Emperor William, General Sheridan pressed on to Wadelincourt, and from a hilltop nearby looked down across the Meuse at the French Army, cornered but not yet captured, at Sedan. A battalion of the Sixteenth American Infantry on November 7, 1918, pressed forward to that same hill and looked down on the Germans in Sedan. Is not this a remarkable coincidence, and does it not point to the uncertainties of the future and the necessity of being prepared for almost any eventuality?

I hope you will pardon my very disjointed remarks and I deeply appreciate your kind attention. MR

George Catlett Marshall (1880-1959), US Army officer and statesman, graduated from Fort Leavenworth's Infantry Cavalry School in 1907 and from the Army Staff College in 1908. At the time of this speech, Marshall was an aide to General John J. Pershing, Army chief of staff. Putting into practice what he espoused, Marshall immediately began an enormous expansion of the Army and reorganization of the General Staff when he became chief of staff in September 1939. It was largely due to Marshall's vision and energy that America went into World War II with a sound framework on which to build a well-prepared armed force

MAJ C. William Robinson, USA, 82d Airborne Division, Fort Bragg, North Carolina

The Operator Logistician Disconnect GENE S. BARTLOW, COLONEL, USAF

You will not find it difficult to prove that battles, campaigns, and even wars have been won or lost primarily because of logistics.

Gen Dwight D. Eisenhower

OPERATORS and logisticians often do not understand each other. Logistics may be the least understood element in war planning. This article is an effort to foster mutual understanding through education.

The Issue

A communications disconnect or gap exists between our operations commanders and our logisticians. Often our "operators" do not understand the play of logistics in warfare, and our "loggies" do not understand the operations planners' and commanders' estimates of the situation or concepts of operations. When each function operates narrowly to the exclusion of the other, we are courting disaster. "If a commander understands the play of logistics, then he or she can factor some logistics realism into plans and concepts without actually working on or solving particular logistics barriers (a fouled-up pipeline, depot, or what-have-you)."

However, the commander often simply does not know and does not appreciate the logistician's concerns. The "ops" types are usually able to practice their wartime skills in the execution of realistic exercises in peacetime, as is done in Red Flag training. But does the loggie have a chance to practice realistic scenarios? Usually the only opportunity is a shortened, simulation-laden, command post exercise using a simple status board and paper shuffling. We have our combat aircrews, but where are our combat logisticians?

Air Force logisticians often have the reputation of being the people who always tell the operational commander why his or her plan will not work. In fact, the logistician is seldom perceived as a positive go-getter. Why is the logistician held in such low esteem? One very important reason is that he or she is often not aware of (or educated in) a methodology for effectively approaching the problem presented by the operational commander. Logisticians (and some operators) are frequently not prepared to handle fluid operational-level situationsbecause their education and experience have not prepared them to compare the scenario they face to a principle or historical precedent. The result is the quick "no" answer rather than the more optimistic "Sure, let's try to figure a way to do it."

In an article in the Air Force Journal of Logistics, Lt Col William T. McDaniel, Jr., addressed this same concern:

Realistic logistics training is marginal at best. Most joint and Service exercises begin after deployment and end well before sustainment becomes an operational constraint. The magnitude and complexity of a major force deployment or sustainment have not been rigorously tested in either a field training exercise (FTX) or command post exercise (CPX).... The real danger of these training inadequacies is that commanders do not fully appreciate the impact of logistics on operations. And, logisticians will be unable to assist the commander because they have not been educated to handle the enormous detail of a major operation at the theater and global level.²

The Air Force is currently teaching logistics management, not wartime planning. This orientation may be appropriate for peacetime administrative tasks, but it is inappropriate for combat units and fighting commands. Rear Adm William S. Sims noted in an address to the Naval War College in 1919 that "an officer may be highly successful and even brilliant, in all grades up to the responsible positions of high command, and then find his mind almost wholly unprepared to perform its vitally important functions in time of war." ³

The official Air Force approach could be equated with MBA-style management. Officers and NCOs often do not take advantage of the full range of military educational opportunities open to them. Unfortunately, the Air Force community has forgotten about the historical perspective of wartime logistics planning.

Why a Disconnect?

Frequently, the missing link--both in the mutual understanding between operator and logistician and in education--is the knowledge of what historically has and has not worked and why. Missing is the conceptual framework required to think through the potential pitfalls in developing a line of communications to support wartime operations. Also missing is the essential understanding between operators and logisticians.

This missing link is very often reflected in the boilerplate or cookbook approach taken by our operators and logisticians in writing war plans. There is neither in-depth thought of the principles of logistics nor the conceptual understanding of the relationship of logistics to strategy and tactics. Development of this thought process must be taught to logisticians and operators in an environment designed to elicit innovation, conceptual thought, and adaptability. They must learn to make a distinction between how to think (education) and what to think (training) in support of our combat logistics requirements.

This critical thought process can perhaps best be learned through trial and error during an actual war, obviously not a practical solution. Attempts are made in operational commands to activate this thought process during major command post exercises. However, failure to learn in this environment is normal because participants train in accepted and preplanned scenarios.

The Final Report of Army Service Forces, July 1947 stated that "for the most part, Army schools and the War Department General Staff in peacetime planned, trained for, and studied combat operations. To a great extent the Army neglected the logistics problems of operation. This was a deficiency that proved to be costly." The study of logistics has often been neglected by operators and logisticians alike. Who was the world's greatest logistician and why? What was the critical error of the D-day invasion of Normandy? Can the average Air Force operator or logistician discuss the logistics problems faced by General Lee in the 1863 Gettysburg campaign or by Napoleon in his 1812 invasion of Russia?⁵

Would the average operator or logistician agree that the world's greatest logistician was Albert Speer, Hitter's armaments minister in Germany during World War II? Speer continued to produce and distribute military supplies and equipment in increasingly greater quantities during each year of a long war ("tripling armament production by July 1944 while reducing the number of workers per unit produced by nearly 60 percent . . . [and increasing] synthetic fuel production . . . by 90 percent") despite laboring under the most intense strategic bombing campaign ever inflicted upon any nation tip to that point in history.

"Know the enemy and know yourself." That statement by the great military sage Sun Tzu illustrates the long-recognized need to study military art and, particularly, that of the enemy. What does the average logistician or, for that matter, the average operator know about Soviet logistics principles and combat systems? Perhaps the operations and logistics war-planning communities have yet to study the issue adequately.

Soviet logistics is based on a tightly controlled supply-push model, with ammunition and fuel claiming first and second priorities, respectively. For example, Soviet fuel pipeline regiments can "lay field pipe in 10-meter quick-connect sections at a rate of 2 to 3 kilometers pet, hour. Once installed, a single pipeline can deliver 75 cubic meters of POL [petroleum, oil, and lubricants] per hour to virtually any distance, as long as sufficient booster pump stations and pipe sections are available." Does the United States have a similar pipeline-laying capability? Do we need one? When combat logisticians and operators participate in the logistics requirements process, are they aware of the enemy's capabilities and principles, and have they thought about the fall implications? Do we have a formal course of study in Soviet logistics?

Programming and planning logistics for war may be the most complex element in the operational art of war, perhaps even more difficult than strategy and tactics. Ernie Pyle, the World War II war correspondent, wrote in 1944 of logistics: "This is not a war of ammunition, tanks, guns, and trucks alone. It is as much a war of replenishing spare parts to keep them in combat as it is a war of major equipment." Again, in order for the operator to understand how the logistician works through these problems, it is important for him or her to gain a perspective of the principles and process of logistics.

The Historical Perspective

Unless we understand the events of yesterday, the difficulties of today are distorted, and the successes of tomorrow may be delayed indefinitely. Operators need to understand basic logistics from the historical perspective in order to avoid repeating the errors of the past. Our operators' ignorance of logistics could lead to serious shortfalls in combat sustainability. From a historical perspective, that critical error of World War II mentioned earlier may be the most important logistics lesson available. This story is told by Col Harold L. Mack, US Army, Retired--the logistics planner who personally developed the lines-of-communications plans for Operation Overlord (the Normandy

invasion). The following passage, extracted from an Air Force logistics management study, reveals the primary military objective of the operation:

What's not well known about Operation Overlord is that the direct military objective of Overlord was neither strategic nor tactical, but logistical. The primary objective of the plan read: "To secure a clear lodgement on the continent from which further offensive operations can be developed." Since it was clear the war would be a battle of industries, we had to be able to rapidly deliver our industrial output to the front lines.

The primary need, then, was for portfacilities. The Normandy location was selected because of physical characteristics and its location between two major port groups--Cherbourg and South Brittany. Until ports could be taken, refitted, and opened, the beach had to handle the influx of troops and supplies. ¹¹

Colonel Mack relates:

There can be little question that a shortage of gasoline and ammunition, and other supplies, was primarily responsible for our failure to inflict a decisive defeat on the Germans before the close of 1944. 12

He further states that

after months of planning, it became evident that, based on the original Overlord plan... we could not land and move enough tonnage to meet the demands of the various armies on their combat missions. The facilities, particularly the railroads and ports which would be captured... had not the capacity to enable us to move the tonnage needed to supply the armies in the field...

I was always intrigued by the possibility of utilizing the excellent ports and railroads on the southern coast of Brittany fronting on theBay of Biscay. Quiberon Peninsula, jutting out into the bay, seemed to offer excellent beaches for the landing of supplies becauseit could be approached from different directions in any kind of weather. One of the best freight railroads in France ran along the coast and, straight from there, east to Paris and Germany. ¹³

A major change in Overlord would thus be required. "It involved the capture of Lorient, either the capture or isolation of Saint-Nazaire, and the reduction of the German installations on the islands facing the coast--a combined military and naval operation of major proportions." After many strategy meetings the plan "then was changed to include the capture of Quiberon Bay. . . The operation was given the code name Chastity and was a very closely guarded secret." ¹⁴

The Chastity mission was assigned to Gen Omar N. Bradley's 12th Army Group. For various reasons, General Bradley and his subordinate, General Patton, relegated the logistics plan to a low priority:

As a result, Lorient and Quiberon were not captured; the Chastity plan of supply was never put into operation, and, although St. Malo and Brest finally were captured, they proved to be completely useless from a logistical standpoint. . . . While General Bradley planned classical campaigns, slow and methodical, General Patton displayed a quality of original thinking, improvising, hitting hard and fast, and anticipating in advance the enemy moves. General Patton later wrongly claimed, however, that the indications were that it was a deliberate withholding of gas from his army by higher authorities. He was wrong in this respect. There just wasn't enough to go around. . . . Unfortunately for all concerned, his genius was curtailed and his victorious advance stopped because of the initial failure to carry out the Chastity plan, needed to keep him supplied. By September 1st, his army was short of everything-gas, rations, blankets, winter clothing. ¹⁵

General Bradley "underestimated the logistical need for obtaining the use of Quiberon Bay and the railroads running east from there. These were most costly mistakes." ¹⁶

It was the combat operators who failed to give logistics a coequal status with strategy and tactics. Or, as Rear Adm Henry E. Eccles pointed out, "Strategy and tactics provide the scheme for the conduct of military operations; logistics provides the means therefor." ¹⁷

Logistics thus became a critical factor in one of the most important military campaigns of the World War II European theater. There are many historical lessons to be learned in logistics; we must learn and never forget them.

A Framework for Understanding

The classic logistician's lament is that operators don't listen. The different experiences of operators and logisticians constitute one important reason for this situation. The disconnect is not a new one, as is shown in the following passage from the *Army Logistician*:

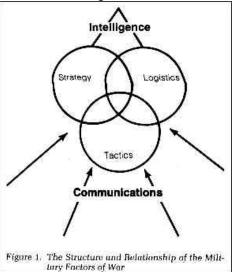
Logisticians are a sad embittered race of men, very much in demand in war, who sink resentfully into obscurity in peace. They deal only with facts, but must work for men who traffic in theories. They emerge during war because war is very much fact. They disappear in peace because, in peace, war is mostly theory. ¹⁸

The solution to the operator-logistician disconnect is through increasing mutual understanding. Although the two are faced with different tasks on a daily basis and thus find the need to develop different solution methodologies, each has the same mission. Without that mutual understanding, they are unlikely to succeed.

Admiral Eccles, a noted author on modern combat logistics, writes the following about the operational-logistical relationship:

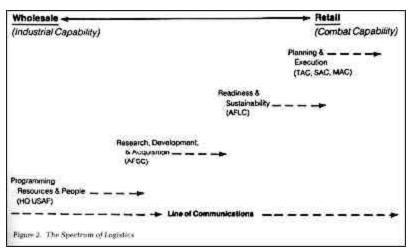
[The operational commander] should retain cognizance and authority throughout the entire range of his responsibilities. He should avoid the common tendency of some commanders to concern themselves almost entirely with the so-called "operational" matters (either strategic or tactical) at the expense of concern over those logistical matters which form the very basis for "operations." In other words, once a commander thinks of the strategic, logistical, and tactical elements as individual or isolated matters he has lost his perspective.

He has put this relationship in the form of a chart that considers the critical elements of war planning and execution, strategy, tactics, and logistics coupled with the communications and intelligence interface (fig. 1). According to Admiral Eccles, "In the field of military planning, for instance, it has been found that at the highest level of military thinking it is not always possible nor desirable to distinguish between what is strategic and what is logistic." ²⁰



An important basis of mutual understanding involves the operator's knowledge of how the logistician approaches a problem and thinks through the task. The following discussion provides a macroperspective of modern combat logistics planning for the layman or novice war planner.

Logistics can be thought of as a continuum, as an open-ended support concept from industry to combat. Consider the spectrum of logistics as illustrated by figure 2. Logistics provides the means to create and sustain combat forces and is the bridge between the national economy and the operation of combat forces. In an economic sense, it limits the combat forces that can be created; in an operational sense, it limits the forces that can be employed.



Logistics, strategy, and tactics must be studied in equal depth. It is only after both the operator and logistician become familiar with past military campaigns, including those seemingly trivial or accidental elements, that they can begin to understand *why* things happened the way they did.

Maj Gen Jonas L. Blank, in his study of logistics and strategy, makes the following observations about the campaign in North Africa during World War II:

The Germans frittered away their early gains after coming to within an eyelash of making the Mediterranean a German lake. Again, brilliant tactical execution [by Gen Erwin Rommel] was undone by inadequate logistics support. Only about 10 percent of Rommel's fuel requirements for his tanks was delivered during the critical days when the fate of North Africa hung in the balance. What he needed could have been delivered. This was proved the next year when German equipment and supplies poured into Tunisia in response to the American landings in Africa, but by then it was too late. Field Marshal [Albert] Kesselring, the German commander in chief in Italy, and Rommel disagreed on many aspects of the North African campaign. They did agree, however, after it was over, that it was primarily a logistics battle and that their promising opportunity for decisive victory evaporated because transportation had been badly planned and clear organizational channels for logistics support had never been established.²¹

Quite frequently, seemingly trivial events were actually very important, even critical, and what seemed to be accidental occurrences were actually the natural result of the campaign. An ongoing historical analysis should become the basis for the development of logistics theory, doctrine, and the associated principles of logistics. As Admiral Eccles has stated, "The search for comprehensive theories is the best way of shedding light on these [logistics] problems and of developing the understanding of principles and of cause and effect relations which may guide the responsible men who must choose among conflicting ideas." ²²

James A. Huston, in his book *The Sinews of War: Army Logistics*, 1775-1953, wrote about the principles of logistics. A few of them are summarized below:

- First with the most: And be there with the best if possible.
- Dispersion: Storage and other logistical activities should be dispersed and multiple lines of communications used when possible.
- Feasibility: Strategic and tactical plans depend on logistical feasibility; logistical plans depend on the national economy, availability of resources, and limitations of secondary logistical requirements.
- Timing: This principle is relative to the objective and is the key to all logistics, whether high-level procurement or tactical supply.
- Unity of command: Control of logistics is essential to control of strategy and tactics. A single authority, identical with command authority, should be responsible for logistics.

- Forward impetus: The impetus of supply is from the rear forward. An automatic supply system should exist that frees forward commanders of details without impairing their control of their own logistics.
- Information: Accurate, current information is essential to effective logistical planning and to supply distribution.
- Relativity: All logistics is relative to time, place, and circumstances; logistical factors are relative since there are always "opportunity costs" in every decision made. ²³

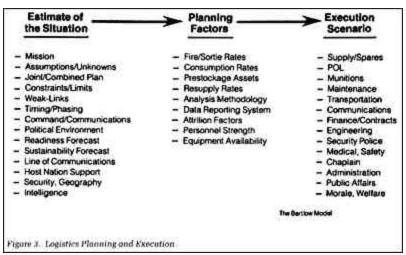
These principles are interrelated and in some cases are scenario dependent. For example, if all communications are open in the battle area and information is flowing freely, the principle of forward impetus would not be applicable, in that only specifically required material should be pushed to the operational base.

The experience of the past must be conveyed to developing professionals through the theory of the present. The Air Force has only recently addressed the concept of logistics principles, called combat support principles in chapter 3 of the 1987 edition of *Air Force Manual* (AFM) *1-10*, *Combat Support Doctrine*. ²⁴ These new principles are a "proven basis for deciding on a reasoned course of action." ²⁵ The following eight principles cited in AFM 1-10 are somewhat different from Huston's. The debate over principles has only just begun:

- Objective: Know what you want to do before you do it and keep reminding everyone until it's done.
- Leadership: You are the single most important factor in achieving military victory.
- Effectiveness: Do only those things that improve combat capability.
- Trauma/friction: Understand: War is hell! (What Clausewitz referred to as "friction in war" describes why things naturally go wrong in war. . . Friction is bad weather during the Battle of the Bulge, contagious panic in France in 1940, an empty prison at Son Tay, or a dominant characteristic of the Iranian rescue mission. Clausewitz considered friction to be the central factor that distinguished real war from theoretical analyses.)
- Balance: Get the right thing in the right amount to the right place at the right time.
- Control: Never lose contact with your resources.
- Flexibility: Create aerospace forces that can operate in any combat environment.
- Synchronization: Combat power equals the combination of combat operations and combat support.

These principles are actually a litany of the lessons distilled from the experience of warriors. The debate should continue over which lessons from past conflicts should constitute basic principles and thus contribute to Air Force doctrine. The list is incomplete. This debate can best continue through a dialogue among experienced warriors and new members of the war-planning community.

A logistician must be concerned about virtually everything bearing on operations. The chart on logistics planning and execution (fig. 3) is a decision matrix used in combat logistics problem solving. It provides structure and can assist in the development of concepts for applying principles and theory in judging logistics feasibility and effectively executing a plan. This chart can be the vehicle by which the logistician derives the logistics objectives from the overall operational mission objective.



Lt Col G. T. Reach, US Army, writes of a concern for logistics structure:

For many years, the notion has been perpetuated [by the layman (nonlogistician) that logistics estimates are little more than moderately complicated exercises in basic mathematics. Several generations of logisticians have calculated short tons of dry cargo, gallons of fuel, stackage objectives, order-ship times [mobility flight times] and transportation time-distance factors. This data is of value in the preparations of the [logistics] estimate [of the situation], but it is not the estimate itself.²⁷

The data merely provide background to give the logistics planner some idea of the requirements of the force and the support capability. The information does not tell the planners how best to employ the available logistics assets. The logistics planner must determine this by examining the figures and then asking, "So what?" The answer to that restively straightforward question is all too often elusive because the logistics estimate lacks a guiding structure.²⁸

Colonel Reach explains that the structure used in the operations estimate is composed of a number of doctrinal factors. The logistics estimate structure should be similar in form, with factors extracted from logistics doctrine [or principles, as applicable] as the components. These tenets, lifted from the essential axioms of logistics, provide a framework within which to evaluate either tactical courses of action from a logistics standpoint . . . or concepts of support. ²⁹

How would a logistician use this planning and decisionmaking chart (fig. 3)? First, he or she should use the left column's list of issues to analyze the mission and circumstances and then develop the logistics concept of operations, particularly keeping in mind the principles of logistics. Moreover, the logistician and operator must coordinate their actions by means of an estimate of the situation, considering possible options and courses of action. They must also determine the development of the best solutions for each of the elements listed in the left column of figure 3.

Most operational commanders have been taught the classical use of the estimate of the situation as a methodology for analyzing the options to mission accomplishment. Not well understood is the complementary need of the logistician to structurally develop a logistics estimate of the situation and apply those findings to the mission. This need can perhaps be better understood by way of a historical example.

During the planning of the Japanese invasion of Midway in 1942, Vice Admiral Nagumo estimated the situation as follows:

- 1. The enemy fleet will probably sortie to engage once the Midway landing operations are begun.
- 2. The enemy is not yet aware of our plan, and he has not yet detected our task force.
- 3. There is no evidence of an enemy task force in our vicinity.
- 4. It is therefore possible for us to attack Midway, destroy land-based planes there, and support the landing operation. We can then turn around, meet an approaching enemy task force, and destroy it.
- 5. Possible counterattacks by enemy landbased air can surely be repulsed by our interceptors and antiaircraft fire. ³⁰

In this situation Admiral Nagumo was wrong about each element of the estimate. His error resulted in what some historians describe as one of the greatest sea battles of the modern age. The US Navy had a general idea of where

Nagumo's fleet was, when he planned his attacks, and what his objectives were, and our fleet was closing on his as his estimate was being written. Nagumo's losses were staggering. The Japanese defeat at Midway led to a complete turnaround in the course of the Pacific war and the eventual mastery of the sea by the US Navy. The lesson to be learned is that an accurate estimate of the situation, both operational and logistical, is critical to success.

By using the center column list of planning factors in figure 3, one can analyze the logistical support calculations--a step that is critical to the later judgment of feasibility. Determining how requirements are designed is important in the development of planning factors. Erroneous analysis and faulty methodology for development can become a weak link in the logistics plan.

The right column, listing entries related to scenario execution, reflects an analysis of the ways, means, and requirements. One can use this data to place the procedural and feasibility information into the various logistics annexes of a war plan. Occasionally, the logistics planner will erroneously use only the third column as the source of analysis and attempt to determine requirements and concepts from a microperspective.

The chart is only a tool for highlighting and guiding the thought process; it is certainly not the sole vehicle for war plan development. It is scenario dependent and must be used in conjunction with the essential principles of logistics, the applicable strategy and tactics, and the lessons of history.

Colonel Reach maintains that through this framework, we are able to give additional meaning to the quantitative elements of our data base. . . The factor framework allows us to combine calculations with logistics doctrine in support of maneuver forces. This synthesis ensures that optimum use is made of austere resources to satisfy force requirements. Logistics units are organized, positioned and given missions which maximize efficiency and minimize risk. Concepts of support become more precise. In the final analysis, we have determined not only what must be done but also how best to go about it. . . ³¹

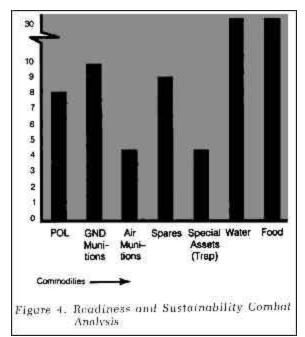
The following statement by Admiral Eccles gives us a valuable guide for the study of logistics: "The objective of a logistics effort is the creation and sustained support of combat forces." Data on combat sustainability and the credibility of the reporting logistician are critical to the effectiveness of the information given to the operations planner and commander for their analysis of strategy and tactics. Both the operator and the logistician need a highly reliable and efficient way of analyzing combat mission sustainability, as well as a prompt and effective reporting system.

The importance of information to the logistics equation can be illustrated by another historical example:

Within three weeks after the start of the Korean War, the backlog of top-priority shipments had built up to more than could be airlifted in two months. More than half the requisitions received from Korea were listed as top priority and designated for air transportation. Yet our air cargo capability could accommodate only a small fraction of that amount. Flooding the supply system with top-priority requisitions was self-defeating. Cargo jammed aerial ports of embarkation and sat there for months, although it could easily have been delivered in less time by surface transportation.

Two years after the start of the Korean War, an Army general inspected the port of Pusan. He reported that, despite prolonged hard work, one-fourth of the supply tonnage stared there had still not been sorted out. As supply personnel did not know what these supplies were, obviously they could not be issued.³³

There are many reporting and analysis systems available. One that has been used to good effect by the author involves reporting base-level information to the operational commander through charts or graphs (fig. 4). This illustration shows that missions could be flown for only four more days in the tasked configuration, due to the lack of air-to-air munitions. Selection of the critical categories is mission and scenario dependent. This chart is simple and readily understood. It is a means by which both operator and logistician can gain a mutual understanding. Such a reporting device can become the core of an ongoing logistics estimate of the situation.



An important point to remember is that operations and logistics are truly inseparable. The logistician must develop a special trust and confidence in the operational commander to ensure that logistics concerns are given a fair and equitable hearing when strategy and tactics are discussed.

This special relationship is cultivated by a continuing demonstration of integrity and credibility on the part of the logistician. This attitude leads the commander to believe that the logistician will always provide a clear and honest picture of mission supportability. Trust, integrity, and credibility are best demonstrated to the commander by three simple standards: (a) say what you mean, (b) do what you say, and (c) help when it hurts.

Summary

Talented people (operators and logisticians) have made gross errors in logistics planning and execution simply because they lack an educated, historical perspective. It is essential to understand that the logistics function is a critical element of the operational art of war for both the commander and the logistician.

There are several improvements the Air Force can implement to alleviate both the operator-logistician communications disconnect and the deficiencies of formal education. An obvious remedy is a greater use of logistics concepts and doctrine in available facilities such as the Air Force Wargaming Center, the Air Force Institute of Technology (AFIT), and the professional military education schools. As noted in the *Air Force Journal of Logistics*, AFIT has recently expanded its course capabilities in teaching combat logistics and war planning through professional continuing education courses.³⁴ Oftentimes, however, these courses are optional. This effort is noteworthy, but more needs to be done.

We must foster mutual understanding and communications between operators and logisticians. The Air Force now faces the challenge of improving its educational resources and elevating the mutual understanding of its people to a higher plane.

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- 14. Ibid., 4, 6.
- 15. Ibid., 8, 12, 13.
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- 34. "USAF Logistics Policy Insight," Air Force Journal of Logistics 11, no. 2 (Spring 1987): 21.

Contributor

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The Emergence of Infrastructure as a Decisive Strategic Concept MARTIN BLUMENSON

The term "infrastructure" came into prominence during the Vietnam War as a handy way of denoting those permanent installations needed to support the growing presence of US forces. But since Vietnam, the proliferation of American expeditionary interventions in various overseas theaters has now made this once trendy term a permanent feature of the soldier's lexicon. In fact, the definition of infrastructure now enshrined in the *Department of Defense Dictionary of Military and Associated Terms* (10 June 1998) is applicable not only throughout DOD but in NATO as well: "All fixed and permanent installations, fabrications, or facilities for the support and control of military forces."[1] Planners in particular are concerned with the condition the word describes, that is, the presence or absence of certain facilities in an area. Where these installations exist, they make sustained ground operations immediately feasible. Where they are nonexistent, they must be established before modern protracted warfare can occur. Obviously all professional soldiers know the importance of infrastructure. What they may not fully appreciate, however, is that the availability of infrastructure cannot be taken for granted, especially in an age when short-notice expeditionary interventions anywhere on the globe may be contemplated by policymakers.[2]

The *concept* of infrastructure, as distinct from the term itself, apparently originated with the French in World War I, when haphazard support of combat troops was no longer sufficient to feed the greedy maw of armies with rations, ammunition, and other necessaries incident to waging industrial-age warfare. In contemporary military parlance, the term infrastructure has become so ubiquitous that in some fuzzy contexts it seems almost interchangeable with "logistics" itself, but it is important for conceptual clarity to keep the two terms distinct. Infrastructure is but one narrow, albeit vital aspect—the permanent supportive installations and facilities—of the total logistics enterprise, which is the broad endeavor of planning and carrying out the movement and maintenance of forces.[3] Supplying armies in the field during World War I required a scientific system and a massive physical plant. If an infrastructure was in place, logistical service was relatively easy, and the battle could proceed.

Territorial installations indispensable for employing armed forces--military infrastructure--most generally pertain to naval vessels and aircraft: deep-water port facilities, heavy-duty piers, off-loading cranes, warehouses, etc. in the case of ocean-borne freight; runways, air traffic control structures, hangars, parking aprons, workshops, ordnance and fuel storage facilities, etc. in the case of air freight and air operations.[4] Land forces, which are dependent upon naval and air transportation for strategic movement, supply, and support, thus have a huge stake in the infrastructures underpinning those two modes of support. But ground forces also have infrastructural needs of their own in the form of supply, maintenance, and repair depots, as well as hospitals, storage facilities, and communications nodes. Moreover, today's information-based warfare, with its addition of advanced electronics and other technologically sophisticated hardware, introduces new complications in the infrastructural challenge.[5] Finally, we must note the internal transportation system--roads, highways, railways, bridges, tunnels, canals, etc.--that permit delivery of supplies from ports to the using units. In sum, infrastructure is the totality of fixed and permanent facilities necessary for the military to live and maintain operational capability within a theater.

In 1899, writing of Kitchener's Nile campaign, Winston Churchill called victory "the beautiful, bright-coloured flower." But in that primitive land, he noted, the transportation brought in for the marching columns was the "stem without which [victory] could never have blossomed." Almost half a century later, Churchill forgot his own lesson. British forces fighting in undeveloped regions early in World War II created large administrative and logistical tails he sneeringly called "fluff and flummery." The British army, he complained, was like a peacock--"nearly all tail." General Sir Alan F. Brooke, Chief of the Imperial General Staff, countered by pointing out that a peacock without its tail would be a badly balanced bird. But Churchill kept insisting on less fat, more muscle, a smaller tail, and sharper teeth. Commanders in the field at every echelon continued consistently to request more troops to man base and support facilities, while Churchill beseeched them to cut off the tail and sharpen the teeth. His pleas were to no avail, and properly so.

Despite Churchill's resistance to the growing size of the logistical slice, the relative manpower devoted to sustaining and supporting the combat echelons has been increasing since about 1850. By the 1940s, more men served in technical units than in combat formations. In an overseas theater, it took about 25,000 troops to service the 15,000 in a combat division, and almost half of the soldiers within a division themselves engaged in non-combat activities. North Africa, the first Allied theater overseas, was especially difficult for mounting operations. Base installations

and transportation facilities were lacking. Building a rudimentary infrastructure, improving roads and rails, and importing a large quantity of trucks, which never reached adequate numbers, made the campaign possible.

Having been plagued by a shortage of trucks everywhere, the planners of the Anzio landings took into account the absence of an infrastructure in the beachhead. They scheduled a heavy shipment of trucks to come ashore early in the invasion. Several days after the troops touched down, Churchill asked how many vehicles had been deposited at Anzio. Eighteen thousand, he learned. With exquisite sarcasm, Churchill remarked, "We must have a great superiority of chauffeurs." Yet the drivers and mechanics were an important part of why the combat troops were able to remain there for four painful months.

The role of infrastructure is nowhere better illustrated than in the preparations for and the execution of the cross-Channel attack. Immediately after the bombing of Pearl Harbor in December 1941, when the Allies officially decided to follow a Europe First strategy and to carry it out by an eventual invasion of the continent, the Americans sent combat forces to the British Isles. Their arrival in January 1942 was the beginning of a continuing buildup of troops and materiel. The shift of resources across the submarine-infested waters of the Atlantic demanded its own infrastructure in Britain, specifically, warehouses, depots, storage space, and the like, all of which were built.

Overlord, the outline plan for the amphibious operation across the Channel, was essentially a logistical document. The initial object of the invading forces was the seizure of a logistical base to support a future offensive campaign. The combat troops ashore were to take possession of the logistical necessities permitting later action designed to defeat Germany. In other words, Overlord was the preliminary step to gain an infrastructure embracing all the facilities necessary for the ultimate battle.

The invaders were to capture a lodgment area in three months. The specified boundaries were the Seine River on the east and the Loire River on the south. Included were that territory of Normandy west of the Seine, all of Brittany, and parts of the ancient provinces of Anjou and Maine. In that region of western France were the ports and airfields required, the space for the transport, depots, storage, and other logistical organizations needed to enable the combat forces to fight--and, of course, some maneuver room. Once in possession of that sizable area, the Allies were to pause. They were to consolidate and build up not only their fighting forces but also their logistical establishment. This accomplished, the Allies were to launch their post-Overlord operations designed to overcome the enemy.

One of the early aims of the invasion was to deny an infrastructure to the Germans. Pre-Overlord air bombardment and French Resistance saboteurs destroyed roads, railways, bridges, and other targets. Yet these were precisely the facilities the Allies would need once they were well ashore. Plans thus included efforts to rebuild and repair the installations damaged and made inoperable. The Allies also recognized that the Germans would destroy the ports rather than abandoning them intact to the Allies. Blocked and mined waterways, dynamited piers and cranes, and fires set in coal dumps and fuel reservoirs were expected. The Allies consequently planned a huge endeavor to rehabilitate those facilities.

To make possible the discharge of vessels before the capture of continental ports and also before the rehabilitation of the German-destroyed harbors, the Allies constructed two artificial ports called Mulberries, one for the British and Canadians, the other for the Americans. In the wake of the invasion assault, they were towed across the Channel to the landing beaches and opened to receive shipments. A three-day storm in the Channel two weeks after the initial landings put both facilities out of commission. The American Mulberry was abandoned, the British facility repaired. The latter worked continuously as a sheltered harbor just offshore. Although the planners expected the bad weather of the period to stop supply deliveries and reception over the beaches, the process continued well into the fall.

What determined the landing sites in Operation Overlord was the location of ports, the most important objective of the invasion. Specifically, to facilitate the early capture of Cherbourg, the Allies expanded the number of landing beaches to include Utah on the Cherbourg peninsula. The Americans on the right of the invasion forces faced a waterlogged and hedgerowed area, compartmented, close, and restricted, with few roads and a minimum of causeways across large marshes flooded by the Germans. Though this terrain was perfect for the German defenders, the Americans drove to Cherbourg and seized the major port at the end of June, three weeks after D-Day.

The Germans had, as expected, destroyed the port facilities of Cherbourg, and it was two weeks before the first Liberty ship could be unloaded there. Four weeks later, Allied military engineers had refloated most of the ships

sunk by the Germans in the harbor, cleared the mines in the port area, and repaired the docks, cranes, and other loading machinery. Cherbourg, a tourist site before the war, became the major port for war materiel in northwestern Europe. Demining and salvage were finally completed by the end of September.

The British on the left of the forces coming ashore were to take Caen immediately, for Caen loomed large in the planning. The city was a minor port, a major road center, and the entrance to the Falaise plain, which provided excellent ground for waging mechanized warfare and for building airfields. The Caen-Falaise area also gave direct access to the Seine River and Paris, as well as to the ports of Honfleur, Rouen, and Le Havre. Unfortunately, it took the British and Canadians 33 days to seize Caen. The delay held up expanding the beachhead into the interior.

Three weeks after D-Day, the Allies had brought one million men, half a million tons of supply, and 150,000 vehicles to the continent. Yet they occupied an area only one-fifth the size projected by planners. The beachhead was small, cramped, and congested. Instead of 62 air squadrons operating on 27 continental fields, 30 squadrons operated from 17 strips. Needing space for the buildup, more depth in the beachhead for security, and a larger area for maneuver, the Allies brought more combat troops to the continent at the expense of service units. The 5th Armored Division, for example, was originally scheduled to arrive on 10 September, but it stepped ashore on 25 July.

That was the date of Operation Cobra, the attack that sparked the St. Lô breakout, which changed everything. As the Americans swept southward into Brittany, then headed westward for the ports of Brest and Lorient, the campaign speeded up. Other combat forces swung eastward toward the Seine River. In a sudden surge, the Allies overran most of the lodgment area in August. Three months after D-Day, as stipulated in the plans, the lodgment area was for all practical purposes in Allied hands.

Instead of stopping at the Seine River to consolidate and build up in the lodgment area for the ultimate offensive, General Eisenhower, the Allied Supreme Commander, recalled McClellan's failure at Antietam to aggressively pursue a retreating Lee. Eisenhower decided to avoid McClellan's mistake and to continue the pursuit of the defeated Germans across the Seine River.

The logistical establishment was unable to keep up with the operational advance. A normal logistical structure based on the depot system was lacking. Ninety-five percent of the supplies on the continent were near the invasion beaches, now 300 miles from the front. Deliveries to field army dumps decreased in September, dwindled, and finally ceased. The destroyed railroads were rehabilitated by work on damaged rails, choke points, centers, junctions, bridges, tunnels, viaducts, roundhouses, machine shops, and rolling stock. But the system was unable to keep up with the furious pace of the advance. By 29 August, the Red Ball Express's 132 truck companies, about 6,000 vehicles, were moving more than 12,000 tons daily. But they too were insufficient. By early September the pursuit ground to a halt.

The pursuit, an attempt to end the war quickly, thus failed. The Germans took advantage of the Allied halt imposed by logistical insufficiency, remanned a line of defense on the near approaches to Germany, and made winter campaigning necessary. Operation Overlord succeeded in providing the Allies with the logistical necessities of combat. But the quick thrust beyond the boundaries of the lodgment area proved the tyranny of logistics. Without a functioning infrastructure in Normandy, the Allies were unable to mount the early decisive offensive to defeat the enemy.

Now fast-forward 46 years to Operation Desert Shield, the prelude to Desert Storm that would evict Saddam Hussein's Republican Guard from its entrenched positions in Kuwait. Operation Desert Shield was the unopposed allied logistical and troop buildup employing the modern seaport facilities, airfields, and highway network of Saudi Arabia. Had this advanced infrastructure not been in place and made available to allied forces, or had Iraqi forces seized it before allied forces could respond, the feasibility of Desert Storm itself would have been problematic in the extreme.[6]

Desert Storm/Desert Shield, not to mention recent US interventions in Africa, the Caribbean, and the Balkans, serves to remind today's strategic planners that the hands of the world's one great superpower could easily be tied if the port and staging facilities of overseas target areas are inadequate to receive our gargantuan military machine. Planners are sobered by the realization that existing infrastructure in future theaters, particularly those in the fringe

areas of the world, is likely to be minimal and possibly even absent. True, in some situations such as at Cam Rahn Bay in Vietnam, we were able to build a huge port and ancillary facilities from scratch. The shaping of Cam Rahn Bay into a militarily useful port was hastened by the use of DeLong piers, prefabricated in the United States and towed to South Vietnam.[7] But even this process could take excessive time. In the meanwhile, we could face a disastrous fait accompli at the hands of an aggressive, fast-moving enemy. Advances in equipment, technology, and techniques are giving today's logisticians the ability to create a distribution system so efficient that it reduces the need to maintain mountainous stockpiles in-theater, thus minimizing reliance on warehousing, but the requirement for substantial infrastructure will always be with us in major operations.[8]

The days are long past--if such days ever existed--when expeditionary armies could land on foreign shores across the beach and support themselves during extended campaigns by pack train, horse-drawn wagons, and local foraging. Serious campaigning today requires a physical foundation of truly mega proportions, so much so that its presence or absence will determine not only whether campaigns are to be successful, but indeed whether they can be undertaken at all. Expedients such as Mulberry ports, DeLong piers, pierced-steel planking for runways, container storage, clamshell maintenance structures, lay-down packages for key airfields, the Army's Force Provider soldier community packages, and ingenious producer-to-user distribution schemes--not to mention the Army's concerted efforts to reduce the physical weight of its weapons inventory--can mitigate the infrastructure requirement to some modest degree, but withal infrastructure remains an oppressive sine qua non for the conduct of overseas operations. If the interventionist foreign policy of the last two US administrations is to be sustained in an effort to maintain order in an increasingly disordered world, then infrastructure will need to assume an equal place with flexible forces and strategic transport in the calculus of military planners.

NOTES

Except where noted below, this article is drawn from Gordon A. Harrison, *Cross-Channel Attack* (Washington: Office of the Chief of Military History, 1951), Roland Ruppenthal, *Logistical Support of the Armies* (Washington: Office of the Chief of Military History, 1953), and my *Breakout and Pursuit* (Washington: Office of the Chief of Military History, 1961). The quotation from Winston Churchill is sourced in my *Kasserine Pass* (Cambridge, Mass.: Houghton Mifflin, 1967), pp. 118-19.

- 1. Joint Pub 1-02, Department of Defense Dictionary of Military and Associated Terms (Washington: Office of the Chairman, Joint Chiefs of Staff, 10 June 1998), p. 219.
- 2. See, e.g., Williamson Murray, "USAF: Drifting into the Next Century," *Strategic Review*, 27 (Summer 1999), 22; and Ruth Wedgwood, "Procure-All" (Letter to Editor), *Foreign Affairs*, 78 (September-October 1999), 191.
- 3. Joint Pub 1-02, p. 221.
- 4. For a glimpse of the complex US Air Force infrastructural organization today, see Lionel A. Galway et al., "A Global Infrastructure to Support EAF," *Expeditionary Airpower*, 23 (Summer 1999), 2-7, 38-40.
- 5. See Robert Kuttner's "System Meltdown" (*The Washington Post*, 13 August 1999, p. A25) for a droll discussion of the fragility of modern electronic gadgetry.
- 6. William G. Pagonis, Moving Mountains: Lessons in Leadership and Logistics from the Gulf War (Boston: Harvard Business School Press, 1992), pp. 5-6.
- 7. William C. Westmoreland, A Soldier Reports (Garden City, N.Y.: Doubleday, 1976), p. 186.
- 8. Philip Schoenig, "A Global Military Logistics Network," *Army*, May 1999, pp. 49-52.

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Logistics and the British Defeat in the Revolutionary War JOHN A. TOKAR, MAJOR, US Army

When war erupted in the American colonies in 1775, the British Army was unprepared logistically. Compared to the logistics organization of the rebelling colonies, the British logistics system was, on the surface, the epitome of efficiency. Faced with a 3,000-mile line of communication across the Atlantic Ocean, Britain ensured that its soldiers were reasonably well equipped and never starved. Indeed, a logistics feat of this magnitude would not be repeated for over 150 years, until the Allied invasion of North Africa in World War II. However, significant shortcomings in the resupply system did exist, and before they were identified and corrected, they contributed significantly to the British Army's defeat.

An analysis of how Britain supplied its army, both from home and in the colonies, demonstrates how the presence, or absence, of critical commodities affects military operations. Ultimately, the lack of sufficient reserve supplies, combined with cautious generalship, insufficient transportation, widespread corruption, and the lack of a coherent strategy to maximize the potential support of British loyalists in the colonies, ensured British failure. These factors forced the British Army to fight a guerilla war—the only kind of war that the upstart United States could hope to win.

The British experience in the American Revolutionary War holds particular relevance for today's military. Even though there have been enormous changes in military technology and organization over the last two centuries, U.S. forces still struggle with many of the same issues that plagued the British resupply effort. Logisticians in a force projection army still confront the challenge of supplying forces over enormous distances, overcoming resource constraints, and relying upon host nation support. Most importantly, military operations still suffer when logistics is not planned in detail.

British Logistics Organization in the 18th Century

In the late 18th century, Britain had a system to support its widely dispersed colonial armies, but it was plagued with many internal problems. When that support system was pressured by a quick succession of overseas conflicts, these faults were quickly exposed. The British, to their credit, were able to correct many of the deficiencies before the end of the Revolutionary War, but not in time to win.

Three bureaucracies supported the colonial armies: the Treasury Department, the Navy Board, and the Ordnance Board. When hostilities began in North America, the Treasury Department had overall responsibility for supplying the army. A division of labor did exist, but it was not rigidly maintained, and there was some duplication of effort. In addition to overall coordination, the Treasury was responsible for food supplies, including forage for animals. The Navy Board was responsible for transport of infantry and cavalry soldiers, clothing, hospital supplies, and tents and other camping equipment. The Ordnance Board was responsible for artillery, guns, and other ordnance stores, including ammunition, and engineers.

The Treasury Department was not well prepared for the initial stages of war. The British Army at the time was primarily a colonial garrison force, and there was no general staff in England to serve as a central command. In fact, there were no army officers in the chain of command above the regimental level before the Revolutionary War. The result was a sharp learning curve for those appointed to staff positions in the various boards and departments created to support the army in the field. The Navy Board was slightly better organized than the Treasury, probably because of Britain's preeminence as a sea power.

The Quartermaster General and his department had existed in the British Army since 1689, and the Quartermaster Department was the army's senior service department. But unlike today, when quartermaster duties are strictly logistical in nature, the British Quartermaster General of the 18th century had other duties. He was primarily a "chief of staff" to the Commanding General, and supply issues were only one of his areas of concern. He also was responsible for coordinating all the other staff agencies (such as intelligence and operations) and served as a troop commander when the army went on the offensive. Obviously, it was difficult for him to devote the proper attention to matters of supply.

The Commissary was the next largest department in the service corps. The Commissary General was a civilian, and his staff in the colonies gradually expanded to about 300 men. Procurement of fresh food became the primary supply

problem of the war for the British. Unfortunately, this department was traditionally rife with corruption, and the first Commissary General, Daniel Chamier, was not only dishonest but also incompetent. Chamier's biggest failing was an inability to report accurately the total number of individuals in the colonies who required rations. The Treasury could only base its ration acquisition and shipping requirements on the numbers supplied by Chamier. Largely through ineptitude, the total requirement sent to England by Chamier was routinely short by an average of 4,000 rations; it also failed to account for officers, wives, children, refugees, and others who were entitled to army-provided rations.

The Barracks Master General not only was responsible for ensuring that the troops were quartered properly in garrison, but he also had to provide them with the tents, cots, stoves, and other camping gear they needed to live in the field. He was responsible for providing fuel (first firewood, then, later in the war, coal). The Barracks Master General, like many of the army's service support corps, was likely to exploit his position for personal gain. Medical and Engineer departments rounded out the Commanding General's support staff in the colonies.

Corruption and Profiteering

Corruption and profiteering were rampant in many areas of the British logistics organization. The British Army's service corps had no shortage of unethical individuals in its ranks. However, many practices that we define as corrupt today were not crimes under British law, and they rarely were considered to be morally or ethically wrong in the 18th century.

Commissaries routinely kept the "fifth quarter" of butchered livestock for themselves, that being the head, hide, and tallow. These parts then would be sold for personal profit. Such sales were deemed acceptable, but they invariably led to more unscrupulous acts. A common practice among the contractors in England who provided food for shipment, as well as the commissaries in the colonies, was to furnish quantities of dry goods (such as flour or rice) that were less than the standard measure. Barrels of flour could be short as much as 10 percent. No record exists of what eventually happened to the millions of crates, boxes, barrels, bags, and other containers shipped to America. Much of their contents arrived in very poor condition and would have been disposed of, but one can assume that the commissaries sold much for profit.

Another policy heartily abused by the Commissary General and his men concerned captured cattle. Since fresh meat was in great demand, the army agreed to pay soldiers one dollar (1/2 pound sterling) per head for cattle brought to the commissaries for army use. However, the Commissary General routinely paid the soldiers the dollar they were owed from his own pocket and then sold the livestock to the army at market value, thus making a considerable personal profit.

Similarly, the practice of reimbursing civilians for commandeered provisions was converted into a moneymaking scheme for the men of the commissary. If the army in the field had to commandeer provisions from local farmers, the soldiers were supposed to provide each farmer with a receipt to take to the commissary for reimbursement. However, the locals rarely appeared to claim the money they were due, either because they were afraid or because they were convinced that reimbursement was unlikely. The commissaries then pocketed the money set aside for the farmers and reported the claims as paid.

Transportation was another source of corruption and profiteering in the British logistics system. A Parliamentary commission appointed to review the expenditure of public funds in 1781 discovered that the majority of wagons and horses hired to support the British Army in America were owned by officers in the Quartermaster General's department. These were the same officers who were responsible for doing the hiring, which by today's standards would constitute a clear violation of ethics. The total cost of land transport from 1777 to 1782 averaged over 200,000 pounds a year. The owner of 50 four-horse wagon teams could expect a profit of nearly 10,000 pounds annually, a very considerable sum for that time. Although this and other profitable practices were not necessarily crimes by 18th century stand-ards, there is evidence that many of the officers knew that what they were doing was improper. As historian R. Arthur Bowler observed, "They went to some lengths to conceal their ownership and even, when defending the system of hiring wagons before a board of general officers in New York in 1781, did not reveal their proprietal interest in the service."

Most major forms of profiteering and corruption were brought to a halt by 1780, but the damage had been done, and the precedents, once set, were hard to erase. Minor ethical transgressions continued to occur. For example, officers

were not entitled to free rations while in garrison, but many made arrangements with the commissary agents to provide them, their families, and their friends with free food. When campaigning in the field, officers would subsist on army rations; however, the existing policy of garnishing their wages to pay for those rations was almost never followed. The danger was that, by allowing these seemingly minor abuses to persist, commanders opened the door to further transgressions. Soldiers and officers alike witnessed tacit approval of these actions, and some then were emboldened to attempt larger crimes. Minor infractions also had a negative impact on the morale of the fighting force, because the common British infantryman inevitably was aware of the large-scale profiteering of the quartermasters, as well as the fact that officers and their families routinely ate much better than he did.

Strategic Logistics and Host Nation Support

The problems of supplying the army from Great Britain were great, and the most serious challenge was that of providing food over such a tremendous distance. Cork, on the coast of Ireland, was the primary victualling port. This was chiefly because of its large natural harbor and its location (which was nearer to the American colonies than English ports), but also because the farms of Ireland were a major source of food. Southern Ireland also was an important recruiting center for the army, and thus it was easy to put troops aboard victuallers (food ships) for transport to America.

Contractors hired from throughout the British Isles were required to deliver their goods to the port already packaged for shipment. However, their packaging was often very poor, and the voyage to America was long, rough, and damp. Barrels routinely did not survive the journey, and if they did, they often were no longer strong enough to be moved onto wagons and shipped overland. Corruption and incompetence were problems with contractors in England, too, but they were not held responsible for their products once those products were delivered to Cork.

Initially, quality control was lacking. Flour barrels were frequently 5 to 6 percent lighter than the contractor advertised, and a 200-pound barrel of meat or pork could be short as much as 20 pounds. In one convoy in 1775, five ships departed with 7,000 barrels of flour; on arrival in Boston, 5,000 of those barrels were condemned. So instead of 12,000 men having bread for 5½ months, that particular shipment was consumed in only 47 days! In 1778 alone, flour deficiencies amounted to over 640,000 pounds—enough to feed 20,000 soldiers for over a month. An attempt was made in 1776 to ship hard biscuits instead of flour, but the result was not promising: at best, rotten biscuits were mixed in with edible ones. The commissaries also were guilty of leaving good food to spoil on the docks, due either to mismanagement or lack of transportation.

That the Treasury was trying to do its best for the army was undeniable. In October 1775, the department undertook a remarkable effort to supply the army in Boston with enough quality fresh provisions to last through the winter, so that the soldiers would be well fed and rested for a spring campaign. The firm of Mure, Son & Atkinson was contracted to furnish enough fresh food to fill 36 ships. According to Bowler—Besides the usual beef, pork, bread, [peas], and oatmeal, they loaded on board . . . some 500 tons of potatoes, sixty of onions, fifty of parsnips, forty of carrots, and twenty of raisins, as well as 4,000 sheep and hogs and 468,750 gallons of porter . . . Considerable care attended all this. The contractors noted that they had gone to great trouble to determine the best method of storing potatoes, and they were loaded very gently into the ships "so as not to bruise them." Onions were packed in hampers for the same reason, and as the several tons of sauerkraut being shipped would not have completed the fermentation process, each cask was fitted with a spring-loaded pressure relief valve. Finally, in recognition of the perils of shipping livestock, a premium of two shillings and sixpence was promised to the masters of the transports for each animal delivered alive.

All this hard work was for naught, as one of the worst storms in years struck the convoy. Many of the ships were forced to turn back to England, others were diverted to Antigua, and still others spent weeks sailing up and down the eastern seaboard of America waiting for the weather to break while their cargoes rotted. American privateers also took their toll.

Only 13 ships eventually made it to Boston, and very little of their cargoes survived. Only the preserved food (sauerkraut, vinegar, and porter [a type of beer]) survived intact. Most of the other provisions were rotten, damaged, or dead (only 148 of the livestock survived). Out of 856 horses shipped, only 532 survived the voyage. This convoy marked the last time that Britain attempted to ship fresh food and livestock to its army. The demand for supplies was not too much for British shipping to accommodate, but under the combined effects of bad weather and profiteering, the supply system broke down.

Living Off the Land

Because shipment of many commodities from Britain was deemed impracticable, the army resorted to local sources for fresh food, fodder, and transportation. Although British logisticians performed significantly better than their American counterparts, their shortcomings had a much greater impact on the course of the war. The undying hope of the British Government that its army could subsist locally in America stemmed, in part, from the success the British had during the Seven Years' War (known in North America as the French and Indian War) from 1756 to 1763. Most of the support for the army during that conflict had been acquired locally, and shipment of supplies from Britain was limited. The Treasury had organized a system of subcontractors throughout Canada (then French) and the colonies, and had not even appointed a Commissary General.

During the Revolutionary War, conditions were quite different. The enemy was more determined, and the British overestimated both the amount of loyalist support and their own ability to cultivate it. At the beginning of the war in New England, acquiring subsistence locally (by foraging) was impossible once the rebels laid siege to the British garrison in Boston. After the main British army occupied New York in the summer of 1776, hopes that the troops could live off the abundant farmlands of New Jersey and Long Island were soon crushed. Foraging parties sent into eastern Long Island met with resistance and ended up consuming more supplies than they could gather.

George Washington's Christmas counterattack at Trenton, New Jersey, in 1776 ended all British hopes of gathering supplies from New Jersey farms. The logistics battle really began in earnest as a result of the British defeat at Trenton. After the British occupied Philadelphia a year later, their logistics situation looked promising at first. Pennsylvania farms were bountiful, and the British hoped to find abundant loyalist help, but again that support dried up. The continuing hope that enough provisions and supplies could be procured within the colonies must have stemmed, in part, from the belief held by many in the British Government and Army that it was only a matter of time before the rebels came to their senses and returned to British rule.

Flour was needed for making fresh bread, and other grains and vegetables were important to the soldiers' diet. Fresh meat, however, outranked nearly all other foodstuffs. Units in the field went to great lengths to obtain fresh beef, pork, mutton, poultry, and other meats. The policy of paying individuals for captured cattle was only one procurement method. In one instance, British soldiers reported subsisting on alligators and oysters, complemented by Madeira wine they found on a shipwreck off the South Carolina coast.

Probably of equal significance to meat (at least to the infantryman) was alcohol. Copious amounts of porter were shipped initially, but eventually a spruce beer brewery was established in the colonies. At the discretion of the commander, soldiers were authorized one pint per day in garrison and two pints per day in the field. Fresh ingredients in the beer were thought to offset the likelihood of contracting scurvy. Rum also was available, from the West Indies, and was rationed at two quarts for every six men. The rum presumably was used to purify drinking water, but it certainly was abused to some degree.

British efforts to subsist locally could have been more successful if they had developed a coherent strategy to use loyalist support. Loyalists in the colonies accounted for perhaps half the population and were typically conservative, cautious, and pacifist. Many of the more fundamental religious sects were largely loyalist, or at least neutral. They were not ideal conscripts for military serv-ice, but they could have served as a greater source of logistics support. The army repeatedly misjudged not only their character, but also the overall amount of popular support for the Crown in a given area of operations.

The army was not able to resupply its troops solely from Great Britain, and that possibility was never seriously considered by the Government. The army could not sustain itself strictly with what it obtained locally, either, but a proper balance was never achieved. The formidable logistics hurdles, coupled with the inconsistent and inefficient civilian hierarchy, ensured that whatever momentum British generals were able to generate would be extremely difficult for them to maintain.

Transportation

The challenges encountered in conducting the transport of provisions, supplies, ordnance, and troop reinforcements were enormous. Insufficient shipping was the primary cause of food shortages suffered by the British Army. Most ships were contracted and controlled by the respective government boards. Many were old, not seaworthy, and manned by merchant crews. The departments often could not cooperate, and in their zeal to acquire more shipping

assets they bid against each other and drove prices higher. Many British merchants did not want to lease their ships to the war effort because it was not profitable for them. They could not find return tonnage, and their ships could wait as long as 8 weeks before they were unloaded in American ports. The Netherlands and Germany were scoured for available ships, and many were subsequently hired. French merchant ships were available early in the war, but the British held the quality of those vessels in contempt and would not consider their use.

The voyage from Cork to America was long and dangerous for man and animal alike. As one officer of the Guards testified, "There was continued destruction in the foretops, the pox above-board, the plague between decks, hell in the forecastle, the devil at the helm." Many soldiers became sick and even died from scurvy and smallpox. To cite one example, out of a contingent of 2,400 German soldiers who left Europe for New York in 1781, 410 were sick upon arrival and 66 were dead. Many horses suffered a similar fate. In 1777, live horses were thrown overboard as a "humane alternative" to watching them die from hunger and thirst; they had been provided with only 3 weeks of forage for a journey that lasted 40 days in good weather.

Impact of Logistics on Operations

British commanders believed that large reserves of food, fodder, and other supplies were vital, so the absence of sufficient quantities of those items must be viewed as the greatest failing of the British supply system. The generals felt that they needed at least 6, but preferably 12, months of supplies in reserve before they could begin an offensive campaign. But over the course of the 8-year war, they began only two campaign seasons with what they considered to be the necessary amounts of supplies. Furthermore, when supply reserves dropped below the 2-month level, which they often did, British generals stopped thinking about offensive action and began to plan evacuation. Abandoning a garrison was no simple task, due primarily to the shortage of transportation. Since the army never had enough ships to move the entire force in one lift, withdrawals had to be planned in detail and carefully executed.

The British Army repeatedly attempted to subsist through the practice of foraging, but it was never entirely successful for several reasons. Foraging was no longer part of conventional strategy. It was time consuming and tiring, and many British soldiers considered it to be beneath them. Foraging parties required a covering force, which was a further drain on manpower and consumed even more supplies. To compound the problem, many foraging expeditions produced little or nothing, which not only was demoralizing but also placed a further drain on supplies.

Conventional tacticians of the time did not trust living off the land, because it could be bad for morale and could lead to looting, unauthorized foraging, and desertion. Under the 18th century concept of limited war (at least the British model), civilians from whom supplies were taken were supposed to be reimbursed. But it often was easier to take what was needed by force. Such pillaging alienated Americans who were sympathetic to the British or neutral. Worst of all, foraging exposed great numbers of British soldiers to guerilla warfare, including ambushes and snipers. Foraging parties grew as large as 5,000 men, but they habitually were harassed by small parties of rebels. British losses in these types of skirmishes soon equaled those suffered in the larger pitched battles.

Nearly every time the British Army appeared ready to strike a decisive blow at the rebelling Americans, it seemed that a shortage of reserve supplies and a lack of faith in resupply prevented action. British generals, particularly William Howe and Henry Clinton, were not willing to gamble their forces in offensive campaigns without considerable supplies in reserve. The failure of the Government to provide the armies with adequate provisions was not due to neglect but to a logistics system that was inadequate and poorly managed. In defense of British generalship, gambling with their armies on extended campaigns with meager provisions and no guarantee of when the next shipment was coming was a large risk indeed. Howe and Clinton could not afford to lose the army, for there were no replacements in England.

An aggressive offensive war was the only type that was going to retain the colonies for Britain. To have any hope of victory, the British had to seek out the rebel army and defeat it. Yet far too often their soldiers were forced to sit and wait or, worse, to evacuate a position, garrison, or city that had already been gained through difficult fighting. The effect that logistics deficiencies had on these decisions to wait or pull back is undeniable. The battles of Trenton in 1776 and Saratoga in 1777 clearly demonstrated how the long delays caused by insufficient supplies and the resulting caution shown by commanders allowed the rebels repeatedly to concentrate their forces at critical locations or to avoid a potentially crushing defeat.

Supply shortages affected the conduct of the war in many ways. Most importantly, shortages diverted troops from their primary task (fighting) because they had to forage the countryside in order to survive. Foraging operations were time consuming and increased the already high level of stress on both soldiers and leaders. The number of soldiers who died or were wounded on foraging missions was a very real byproduct of logistics deficiencies. Questionable generalship, corruption and profiteering, and a largely hostile American population also had farranging implications for an army that could not afford to occupy port cities and wait for the enemy to capitulate.

Lessons From the British Experience

The lessons offered by the British experience in the American Revolutionary War for modern military strategy and logistics planning and operations are numerous. Strategic lift of forces and supplies into the theater of operations remains the most immediate concern for a deploying army. Current U.S. military strategy is based on force projection, which often rests on the assumption that there will be sufficient time to build up supplies and combat power before hostilities begin. The British did not have sufficient time to build up supplies, given the limitations of their logistics organization, and British generals never felt that they had sufficient stores to campaign effectively against the rebels.

The British experience also provides lessons in the use of host nation support and the transportation of bulk cargo. The British expected to benefit from loyalist support in the colonies; they counted on what we call host nation support. Today, the U.S. military bases a significant amount of its force projection strategy on the premise that host nation support will be available to augment the logistics assets that can be brought into the theater. This has been demonstrated in every military action of the 1990's, from the Gulf War through the current Balkan engagements. The ability to gather intelligence about available local assets and the disposition of the population to provide support has advanced significantly in 200 years, but the primary lesson should not be lost: the United States cannot assume automatically that host nation support will be provided willingly by every nation from which it intends to stage military operations.

Transportation managers still wrestle with packaging certain commodities, and, when depending on civilian support, they may see the negative influence of the profit margin on supply operations. A modern example was the shipping of airdrop cushioning material ("honeycomb") for use in the Bosnian humanitarian airdrop mission, Operation Provide Promise, in 1993 to 1994. The cushioning material is very bulky, yet so lightweight that civilian shipping agents and trucking companies routinely would not accept it at normal rates. This is a direct parallel to some of the problems encountered by the British during the Revolutionary War. Merchant shipping agents routinely rejected contracts from the Treasury Board because certain cargo, such as animal fodder, was too light to be profitable.

A broader critique of the British inability to integrate strategy and logistics successfully shows that they did not recognize the importance of such modern logistics tenets as responsiveness. Despite overcoming enormous geographical obstacles and displaying occasional flashes of logistics brilliance, the flaws in the administrative system contributed greatly to Britain's failure. In the final analysis, British logisticians lacked responsiveness; they consistently failed to get the right supplies, men, and equipment to the right place at the right time. At the strategic level, the system lacked flexibility. When shipping prices rose or certain commodities were temporarily unavailable, for example, the ministers of the various departments seemed incapable of developing alternative solutions. These same ministers (and others in positions of influence) often were petty and unable to work together for the common good of the deployed army.

Modern logistics doctrine emphasizes the importance of centralized planning and decentralized execution for support tasks. FM 100-16, Army Operational Support, perceptively notes that "too much centralization often results in rigidity and sluggish response, while too little often causes waste and inefficient use of critical resources." This was a tenet that the British never grasped, for they were always highly centralized in their logistics planning and execution. Instead of using the positive qualities of centralization to their advantage, they robbed their units in the field of critical flexibility and responsiveness by not decentralizing at all. Moreover, a limited duplication of assets and management not only is justified when executing military operations but is mandatory to mission success.

Weighed against its modern counterparts, 18th century logistics operations would appear to be relatively simple. The challenges faced by the British from 1775 to 1783, however, were not of lesser significance than today's logistics hurdles, just of a different nature. Instead of having to maintain high-technology weapons and manage supersonic transportation assets, the suppliers of that time had to contend with ships at the mercy of winds and currents and the

challenge of providing fresh rations without the benefit of canning or refrigeration. At the height of the war in 1780, Britain was maintaining over 92,000 troops overseas, including those in Florida and the Caribbean, and the majority of those soldiers had to be fed and equipped from the British Isles. This was at a time when it could take 3 months to receive an answer to a simple communication or request. Delivery of certain items often took more than a year.

Many of the challenges faced by the British during the 8 years of war in the colonies have not changed significantly in two centuries. Operations still suffer when logistics is not planned in detail. Corruption and unethical behavior, although not as significant in today's force, still can have a negative impact on an army's ability to fight. These problems inevitably are compounded when operating in a theater where the supply system cannot rely on host nation support, or at least on a population that is friendly or neutral. These irrefutable facts make the study of British logistics during the Revolutionary War particularly rewarding to any logistician in today's military, and the lessons derived from that war can be educational on many levels. Logistics greatly influenced the outcome of the Revolutionary War. While not the primary cause of British defeat, its impact was, without question, significant. **ALOG**

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Logistics and the Defeat of Gentleman Johnny

Major John A. Tokar

The surrender of British General John Burgoyne at Saratoga was the turning point of the Revolutionary War. Logistics problems played a crucial role in the British failure.

The British logistics system during the American Revolutionary War was gravely deficient, and its defects contributed greatly to the ultimate British failure to subdue the 13 rebelling colonies. (See my previous article, "Logistics and the British Defeat in the Revolutionary War," in the September-October 1999 issue of *Army Logistician*.) Nowhere were these shortcomings more apparent, or the consequences more dire, than during the Saratoga campaign of 1777. The British commander, Lieutenant General John Burgoyne (known as "Gentleman Johnny"), historically has received much of the blame for the British defeat in this most pivotal of operations. Historians have noted that he maintained a lavish lifestyle in the field and paid little notice to the severe supply and transportation challenges that faced his army.

However, much of the blame for the British failure may be misplaced. Burgoyne was not inexperienced, and many other factors contributed to the shocking British defeat by an enemy that seemingly was disorganized and underresourced. In particular, logistics played a decisive role during Burgoyne's campaign, perhaps more than at any other time during the war. During their campaign of 1777, the British felt many logistics shortcomings acutely, while the American supply system achieved some of its greatest success.

Logistics: A Concern From the Beginning

Burgoyne was not new to the North American theater when he arrived in Canada in the summer of 1777 to take command of the multinational force that would attempt to sever the New England colonies from their Middle Atlantic brethren. Nor was he ignorant of the British Army's logistics concerns. He had witnessed how logistics influenced the first significant British strategic judgment of the war, the decision to abandon Boston. (The British departed in March 1776.) At that time, Burgoyne had been the first to recognize that, even if British forces were successful in initiating a campaign from Boston, it would be very hard to maintain a line of communication with supply bases around that city. Not only were the rebels likely to attack the precarious supply lines, but they also were likely to sweep the surrounding area clean of any usable food and fodder. So General Thomas Gage, the British Army commander from 1768 to 1775, finally decided that the evacuation of Boston was unavoidable. In correspondence to England in October 1775, Gage admitted, "It appears to me most necessary for the prosecution of the war to be in possession of some province where you can be secured, and from whence draw supplies of provisions and forage, and that New York seems to be the most proper to answer these purposes."

Gage's successor, General Sir William Howe, and his deputy, General Sir Henry Clinton, agreed with Gage's analysis and initially wanted to move the garrison to New York (Manhattan and Staten Island). From there, they could attack south, into the Middle Atlantic colonies. If the British could defeat the Continental Army in the Middle Atlantic and subsequently convince those colonies to remain loyal, Howe felt that the South would capitulate. Then New England would have to follow suit.

With less than 6 weeks of provisions on hand and no knowledge of when his next shipment might arrive, Howe had no choice but to leave Boston. However, despite the desire to move to New York for strategic reasons, the army was moved to Halifax, Nova Scotia, primarily because Howe and Clinton were unsure if they could subsist adequately in the New York area. Moreover, they were equally unsure about when they could expect the next supply convoy from Cork, the Irish city that was the main port of embarkation for supplying the British forces in the colonies. (The state of supplies at Halifax was not much better than at Boston, but at least the locals were friendly.) The move was carried out hastily, with significant logistics consequences. An estimated 30,000 pounds of supplies were left behind because of inadequate shipping, and those supplies immediately fell into the hands of the rebels.

This campaigning is a favourite portion of Life; and none but stupid Mortals can dislike a lively Camp, good Weather, good Claret, good Musick and the Enemy near. I venture to say all this for a little fusillade during dinner does not discompose the Nerves of even our Ladies.

Sir Frances Clerke, in a letter to his father during the Saratoga campaign, 10 September 1777

Logistics and a Campaign That Fell Short

After more than 3 months in Halifax, Howe finally decided to move the garrison to New York. Because of shipping delays in England, however, Howe was forced to postpone his move south. Four victuallers (supply ships) were held up in Cork from January until April 1776 for unknown reasons. Furthermore, the Treasury delayed sending troops and other supplies to the colonies because of a rise in shipping rates. The result of these developments was that Howe and his army lost 2 months of the campaign season (the period of favorable weather after winter) in New York and New Jersey. The impact of those lost months was significant. As a direct result of insufficient logistics, Howe was not able to land at Staten Island until the middle of the summer.

Still, despite this late start, 1776 was perhaps the best year of the war for the British. They had success against General George Washington at Long Island and White Plains and eventually had the Continental Army reeling across New Jersey. Washington was vulnerable and perhaps could have been defeated soundly. Had those 2 months not been lost early in the campaign season, Howe might have been able to crush Washington and conquer Pennsylvania as well, which would have had drastic consequences for the rebel cause. This lost opportunity often is cited as evidence of indecision and caution in the British leadership, but logistics certainly played a large part in that year's events. As historian Edward E. Curtis noted, "[The capture of Pennsylvania] would have been a far more serious blow to the Americans than the occupation of New York and New Jersey alone. Indeed, it might have sufficed to terminate the war."

The British Prepare for a Decisive Campaign

The British concept for the campaign of 1777, which eventually concluded at Saratoga, involved a three-pronged offensive. Burgoyne was to lead forces south from Canada, along Lake Champlain and down the Hudson River. Howe was supposed to detach a force from New York City to move up the Hudson to meet him, while Lieutenant Colonel Barry St. Leger hoped to create a diversion along the Mohawk River from Lake Ontario and then join them from the west. By adopting this strategy, the British hoped to split America in two, eliminating the possibility of mutual support between the New England colonies and those south of New York.

Unfortunately, Howe never really supported the plan, preferring instead to keep the bulk of his forces in New York for a push south. St. Leger laid siege to Fort Stanwix (present-day Rome, New York), but was forced to retreat when American General Benedict Arnold (not yet a traitor) arrived with 900 militiamen. Meanwhile, Burgoyne's force had such tremendous difficulties from the outset with terrain, transportation, and supplies that it never had a chance to achieve a decisive defeat of the rebels. From a logistics standpoint, Burgoyne's struggle is the most illuminating of the three movements.

Canada, where Burgoyne's expedition was to begin, was an entirely separate British command after 1775. Although British forces in Canada struggled with many of the same challenges faced by Howe in the rebelling colonies, Canada did provide some logistics advantages. That Canada was completely under British control after 1776 was certainly a benefit, but much of the British logistics success in the Canadian theater was due to Sir Guy Carleton, the British Governor-General. Carleton was able to eliminate much of the corruption and profiteering that hurt Howe's army; in particular, he established a commissariat that operated with a much higher degree of honesty and efficiency than previously experienced.

When Burgoyne returned to America on 7 May 1777, Carleton already had been notified that he would not be in command of the campaign that year. Nevertheless, he had collected most of the supplies and equipment Burgoyne required by that time, and he did not let personal misgivings about the command decision affect his preparations. However, Carleton did not make adequate arrangements for the transportation of troops and equipment, and this failure would prove fatal to the expedition. For nearly a month after Burgoyne's arrival, Carleton did little to obtain the horses, carts, and drivers needed to conduct the portage that would be required at the southern end of Lake Champlain. Carleton assumed that sufficient numbers of French Canadian farmers would volunteer their services as *corvées* (as required by British law). But these laborers never materialized, and Burgoyne finally directed Carleton to contract for 500 two-horse carts for provisions and an additional 400 horses to haul artillery pieces.

Burgoyne knew that these horses would not be sufficient to support the army for the duration of the campaign, but he relied on his column's ability to obtain additional transportation on the march. This was a fundamentally bad assumption, based largely on faulty intelligence. Under the best of circumstances, the region they were to traverse

would have failed to sustain an army adequately, both because of its sparse population and because most of the inhabitants were unfriendly. The 500 carts originally contracted were only enough to haul 14 days of provisions, instead of the 30 days that Burgoyne intended to carry. To compound the already critical transportation problem, the contractors did not provide carts and horses in the numbers originally requested, and many of the civilian drivers later deserted the campaigning army.

Burgoyne Moves South

Burgoyne's forces initially consisted of nearly 9,000 soldiers, of whom about half were British and half German. Out of the eight German regiments, roughly 3,000 soldiers were hired from Duke Carl I von Braunschweig. The latter were not merely Hessian mercenaries but regular troops, hired by the British Crown, commanded by Major General Baron von Riedesel, and bound by a loyalty oath. Burgoyne relied on Carleton to provide nearly 2,000 Canadian militiamen to assist in building bridges, acting as escorts and, most importantly, holding captured fortifications while his army advanced. However, these militiamen probably never numbered more than 150, so many regulars had to be detached to perform those tasks. Burgoyne also received only about 500 of the 1,000 Indians he expected to accompany his army.

Despite having fewer personnel, wagons, and horses than expected, Burgoyne decided to commence the expedition in the third week of June 1777. The men-particularly the German dragoons-were encumbered by bulky uniforms. Historians still debate why Burgoyne chose to march with dismounted dragoons, but most experts conclude that he assumed he could obtain the horses he needed later.

Burgoyne's officers-undoubtedly following the example set by their commander-insisted on bringing along enormous quantities of personal possessions. Burgoyne's personal baggage alone was said to occupy 30 carts, and although some stories of his opulent lifestyle have been exaggerated, he and his officers usually enjoyed their time on campaign. Compounding the critical transportation shortage was Burgoyne's insistence on hauling 138 artillery pieces in anticipation of protracted siege operations against American fortifications. The delays caused by moving the artillery overland gave the rebels time to prepare their defenses and to mass troops at critical locations. As historian Hoffman Nickerson pointed out, "It was the very movement of that apparatus that created the necessity of employing it."

The Americans Respond

American Major General Philip Schuyler was in command of the Northern Department of the Continental Army, which included New York. He considered Major General Arthur St. Clair to be his best subordinate, so St. Clair was placed in charge of the defense of Fort Ticonderoga at the southern end of Lake Champlain. However, the fort had been allowed to fall into disrepair, and St. Clair was manned and supplied inadequately. In addition, by failing to occupy Mount Defiance, which overlooked Fort Ticonderoga, the Americans made it relatively easy for the British to capture the fort. In retrospect, Burgoyne's forces probably could have bypassed Ticonderoga, but at the time the fort was considered the "Gibraltar" of New England, and its possession was of tremendous psychological importance to the Americans.

Initially, Burgoyne was able to maximize the use of his strongest support asset-waterborne transportation-and he moved his forces by boat nearly to the base of the fort. By early July, Ticonderoga was in British hands, and the Americans had lost many lives, supplies, and weapons in its defense. Because of the British supply shortages, their capture of badly needed provisions and weapons at the fort represented an even more significant loss to the Americans. Between Mount Independence (a fortification on the Vermont side of Lake Champlain) and Fort Ticonderoga, the British captured 1,768 barrels of flour, 649 barrels of pork, 5 barrels of beef, 36 bushels of salt, 100 pounds of biscuit, 180 pounds of peas, and 120 gallons of rum. They also added American ammunition, 40 artillery pieces, and 200 boats to their stocks.

Schuyler, however, had tremendous appreciation for logistics, and he "refused to despair" after the loss of Ticonderoga. Instead, he adopted tactics that he knew would exacerbate the supply difficulties that the British already were experiencing. As his men withdrew to the south, Schuyler ordered them to fell trees across the roads and into Wood Creek to inhibit the British advance. Furthermore, he adopted a "scorched earth" policy, ordering all "crops burned, bridges destroyed, and all possible horses, cattle, and wheeled vehicles moved out of Burgoyne's reach."

British Plans Go Awry

Burgoyne's decision to use two routes instead of one to move his supplies, men, and equipment from Lake Champlain to the Hudson River often has been criticized as a tactical error, but it made sense logistically. Unfortunately, both routes had their disadvantages. Burgoyne chose to send his artillery and other heavy supplies south through Lake George, again maximizing his use of water transport, even though it took 17 days to get all the boats and equipment past the falls between Lakes Champlain and George. The other route, from Skenesboro by way of Wood Creek and Fort Ann, suffered from Schuyler's scorched earth tactics, so significant British manpower and time were needed to clear the roads of fallen timber. What should have been a 2-day march took nearly 3 weeks-an average daily advance of only 1 mile! Philip Skene, the Tory chief of Skenesboro, reportedly urged Burgoyne to use this route so that the British Army's manpower could improve his infrastructure while en route, including building a 2-mile causeway through a marsh. These continual delays further strained British food supplies.

Burgoyne was now at what some consider the decisive point of the entire campaign. Because he had received no replies to his urgent requests that Howe move up the Hudson to meet him (as originally planned), he correctly concluded that no assistance would be coming from that quarter. Moreover, he had received no word from St. Leger in the west, and his logistics situation was now deplorable. Although several other options were available, Burgoyne decided to keep his main force at Fort Edward and send a detachment to conduct a local foraging expedition. Von Riedesel suggested raiding nearby Bennington, Vermont, because intelligence sources reported that a large supply of corn, flour, and cattle there was guarded only by local militia. The German commander also hoped to acquire more horses to mount his forces. Skene had assured Burgoyne that the countryside around Bennington was full of loyalists and that the suspected enemy militia force was weak. He was not aware that American General John Stark had assembled 1,500 New Hampshire militiamen in a single week and was preparing to face the British raiding party. Moreover, the composition of the British force was curious, including female camp-followers and musicians. On 16 August, the British detachment was attacked, and the resulting British losses approached 900, half of them regulars.

Because Carleton was unable to augment his force, Burgoyne had to garrison Fort Ticonderoga, and that compounded the impact of his personnel losses in Vermont. The raid also proved that the initial estimates of loyalist support in the area were greatly exaggerated. When Burgoyne subsequently learned of St. Leger's defeat by Benedict Arnold, his right flank became vulnerable. Finally, the considerable delays caused by insufficient supplies and an overly cautious advance had allowed the rebels to amass a considerable opposing force on his front. To withdraw completely would be to admit that his plan was flawed, and that, to someone with Gentleman Johnny's ego, was unacceptable. By 13 September, he had amassed 30 days of supplies, so he chose to cross the Hudson and attack Schuyler's successor, General Horatio Gates. Perhaps he had resigned himself to his fate by this time, justifying his failings by reasoning that his expedition was only intended to tie up Gates so that he could not move south on Howe.

On 19 September, Burgoyne approached Freeman's Farm with about 6,800 regulars and 870 others. He had moved only 50 miles in the 74 days since arriving at Skenesboro. The resulting battle was a British defeat. Clinton, although under no instructions from Howe to do so, finally responded to Burgoyne's urgent request by starting a force of 3,000 men up the Hudson on 3 October. His progress was slow, however, and as had happened earlier, the delays allowed the rebels to swell their ranks (now more than 23,000 men) while the meager British supplies continued to dwindle. Burgoyne was forced to either retreat or plan a final drive south in an attempt to meet Clinton. His reconnaissance met with fierce American counterattacks, and on 7 October the British withdrew to Saratoga. Ten days later, hopelessly surrounded, with his supplies exhausted and with no hope of replenishment, Burgoyne surrendered.

What Went Wrong?

The difficulties of conducting military operations during an oppressive New York summer, through dense foliage and over difficult terrain, and the resulting delays that allowed the rebels to reorganize and resupply their forces compounded the inadequacy of Burgoyne's transportation. These were the primary factors leading to the surrender.

The British had abandoned their greatest advantage of the war-command of the sea-to adopt a plan of inland invasion that depended on lines of communication that were precarious at best. Although they did achieve temporary command of the lakes, they failed to use it to their logistics advantage. As historian James Huston points out, "Burgoyne allowed logistics to become his master instead of his servant. He was so concerned with getting

everything up to meet all possible contingencies that he was too paralyzed to meet any contingency." Burgoyne was unable to seize the initiative at any time, and surprise was almost always an advantage for his enemy.

Burgoyne made many tactical errors, to be sure, but the larger strategic mistakes were probably the ones that were fatal. Burgoyne was guilty of taking enormous baggage trains; he might have delayed unnecessarily in taking Fort Ticonderoga; and his choice of the Skenesboro route to move part of his army, instead of using only Lake George, is suspect, at least in hindsight. However, strategic planning mistakes were made in London before the campaign ever commenced (although Burgoyne was a participant in that planning), and coordination between Lord George Germain, the Minister of War, and Burgoyne was lacking. Another critical flaw was the assumption that loyalist support abounded in the countryside of New York and Vermont and thus would be a source of logistics aid. Most important was the fact that Howe never intended to support Burgoyne's effort by sending a force north to Albany. Howe's focus remained on the Middle Atlantic colonies.

Logistics Remains a British Problem

Instances of logistics inadequacy and their impact on operations did not end with the British defeat at Saratoga. The entry of France into the war following the debacle at Saratoga caused a change of strategy in London. The command of the army was given to Clinton on 8 May 1778 in Philadelphia, and he was ordered to abandon that city immediately and fall back on New York. Clinton also was instructed to carry out "harassing operations," which were consistent with his need to forage the countryside for provisions, and to send large detachments of his army to Georgia and the West Indies. The cumulative effect of these orders caused Clinton to sink into a deep despair, feeling that London had given up on his army's ability to quash the rebellion outright. The inadequate amount of provisions that he was receiving from Cork only reinforced in his mind that the British Government had switched priorities to the West Indies. His despondence over ceasing to be perceived as the main effort, as well as the lack of adequate supplies from England, caused another campaign season to pass without significant British offensive action.

The final significant example of British logistics inadequacy occurred in 1781 in the South. Lord Charles Cornwallis had the unenviable task of pursuing Nathaniel Greene's American army. Cornwallis had limited success in a campaign that featured not only a lack of logistics assets but also a lack of understanding of basic logistics principles. By contrast, Greene had been given the Southern command of the Continental Army after serving for 2 years as Washington's Quartermaster General. This experience provided Greene with an impressive education in the importance of logistics. Although he had an inferior force, he divided it in the face of Cornwallis' greater numbers, primarily so that he could subsist off the land with greater ease. Cornwallis, conversely, kept a line of communication open to the coast so that he could maintain his resupply options.

In January 1781, however, Cornwallis cut loose from his baggage trains in order to increase the speed of his pursuit. (He actually burned his wagons and remaining supplies!) He soon was forced to halt his chase after Greene in order to collect flour and other provisions, and over 250 men deserted rather than face the hardships of foraging. Cornwallis' gamble paid off in the short term, for he managed to catch Greene's force at Guilford Court House, North Carolina, in March. However, his fundamental mistake was the one so often witnessed in the early years of the war: he wrongly assumed that a significant loyalist presence in the region would rise up and provide for his army. Lack of provisions meant that his men were too ragged to follow up on the victory at Guilford. Cornwallis was forced to return to the Cape Fear River, where he could receive supplies by sea and attempt to refit his army. As soon as he disengaged, Greene quickly reorganized his own forces, moved away from Cornwallis into South Carolina, and continued his mission of reducing British control in the South.

As these examples demonstrate, the lack of sufficient provisions and the means to transport men and equipment severely affected British military operations in the Revolutionary War. Saratoga is widely recognized as the pivotal campaign in the war, and it also is the one that most clearly displays British logistics inadequacies. On a strategic level, the impact of the Saratoga campaign was far reaching, for it brought France into the war. General Burgoyne, while not incompetent, did not devote the necessary attention to logistics concerns during the New York expedition, and the result was ultimately fatal for the British Empire.

Modern logisticians can learn much through careful analysis of previous campaigns. Although time and technology have altered warfare greatly in the 223 years since Burgoyne was forced to surrender at Saratoga, the Revolutionary War still holds truths that are valuable to today's soldier. **ALOG**

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Sustaining Combat in Korea

JOHN DI GENIO

A key factor in achieving a quick and decisive triumph in the Gulf War was Iraq's failure to take advantage of the Allies' weak theater-level support base during the early stages of their deployment. This costly error enabled the United States to build up a log base that facilitated victory with minimal casualties. Many lessons learned in that conflict can be applied in other situations. However, the Gulf War experience should not be used as the exclusive template for solving the logistics problems that our military forces could encounter in another theater or conflict. The Korean Peninsula is a case in point.

Almost 50 years after the end of the Korean War, Korea remains one of the world's flashpoints—a place where the flames of the Cold War have yet to be extinguished. North Korea maintains one of the largest armies in the world, and one that is forward deployed. Their offensive posture, coupled with their recent development of ballistic missiles and weapons of mass destruction, cause the Korean Peninsula to be highly volatile. Military planners within the United Nations Command (UNC)/Combined Forces Command (CFC)/U.S. Forces Korea (USFK)/Eighth U.S. Army (EUSA) expect that a resumption of hostilities will begin with a sudden, rapid North Korean invasion of South Korea. This command's logistics mandate therefore is twofold: timely, economic, and effective support of U.S., combined, and allied units deployed in a hostile environment, and swift evacuation of noncombatants from the area of operations.

Although some lessons learned in the Gulf War have been implemented in Korea, logistics concerns unique to this theater remain. Should hostilities resume, the United States will need to take advantage of force enablers, commercial initiatives, host nation infrastructure and support, and new logistics concepts to minimize those concerns during mobilization.

Force Enablers for Power Projection

During the Gulf War, the military required a means of projecting and sustaining a force capable of delivering a decisive victory, but the logistics arteries became clogged. Renewed conflict in Korea will create similar problems. General John G. Coburn, now Commander of the Army Materiel Command, observed in 1997—

Today's Army is a mostly continental U.S.- based power projection force that must be capable of rapidly deploying and sustaining its forces. The Army's strategic mobility program depends on a critical triad of pre-positioned unit equipment, strategic sealift, and strategic airlift.

Should fighting break out in Korea, power projection and reception platforms could prove to be inadequate to support the massive influx of manpower and materiel needed to deter one of the largest standing armies in the world. Offloading supplies and military personnel during actual combat poses another concern since the United States has not attempted such an operation in the last half century. Once in theater, large trucks and railcars will find it difficult to navigate Korea's narrow, winding roadways and railroads—potentially clogged with refugees—which will hinder timely delivery of essential personnel and materiel.

As the Army embraces the velocity management concept—substituting speed of supply delivery for forward-deployed stockpiles of materiel—sealift, airlift, and pre-positioned supplies should become the "force enabler triad" that will play a key role in the successful defense of the Korean theater.

Sealift and Airlift

Assuming that the Pacific sealanes remain open, the ocean will be a natural "highway" for personnel and materiel, much as it was during the Korean War of 1950 to 1953. Swiftness in getting needed personnel and materiel into Korea to sustain operations and throttle the rapid advances of the North Korean Army will be essential to achieving a decisive victory.

To project the force expeditiously anywhere in the world and to improve lift capabilities, the National Defense Authorization Act for 1999 authorized the Air Force to procure 13 C-17 aircraft for fiscal year (FY) 1999 and allotted over \$300 million for advanced procurement of 15 additional C-17's in FY 2000. The Navy, meanwhile, has been assembling a fleet of large, medium-speed roll-on-roll-off (RORO) vessels. A 1992 report to Congress addressing sealift and airlift capabilities during the Gulf War concluded—

The advantages of RORO and container vessels were clear . . . Most of the RRF [Ready Reserve Fleet] consists of breakbulk ships which generally have a smaller cargo capacity and take two or three days longer than RORO's to load and unload . . . Had events moved more quickly, the two or three days of delay caused by the lack of containerized cargo shipments might have been crucial.

These joint transportation initiatives are vital to responding quickly to crisis situations, especially in Korea, where the superior number of enemy forces will attempt to push combined and allied forces off the peninsula rapidly. The U.S. armed services continue to solicit commercial initiatives to provide superior airlift and sealift capabilities to sustain military operations.

Pre-positioned Supplies and Stockpiles

World War II reserve stocks in Japan proved to be a great force enhancer during the Korean War, supplying Korean and allied forces during the initial stages of the conflict. Today, USFK takes advantage of pre-positioned supplies as a force enabler. As reported in the Army Program Objective Memorandum for FY's 2001 to 2005, "The brigade set in Korea . . . will . . . be refurbished and stored inside newly completed humidity controlled warehouses." However, recent legislative initiatives are decreasing the value of additional stockpiles on the Korean Peninsula, opting instead to rely on the tenets of velocity management and thereby trading "speed" for "stockpiles."

During Operation Desert Storm, the Marine Corps successfully demonstrated how pre-positioned supplies and equipment could better support a rapid deployment force. The Marines offloaded pre-positioned supply ships early in that conflict to give their fighting forces an immediate armor and sustainment capability. Following the Marine Corps success, the Army adopted pre-positioning of equipment on ships to project the force rapidly anywhere in the world. Army Pre-positioned Stocks (APS)-3 consists of ship-loaded equipment and cargo that are forward deployed near major theaters of war.

The pre-positioned vessel forward deployed to support the Korean theater has been the *MV Gibson*, operated by Mearsk Lines. However, Mearsk Lines recently lost its contract to Crowley Maritime. So the supplies on the *MV Gibson*—consisting of 1,500 twenty-foot-equivalent units of sustainment stocks and 45,000 square feet of RORO cargo—had to be transferred to the Crowley Maritime vessel *MV Seawolf* (which was redesignated the *MV Gibson*). USFK used the transfer as an excellent training opportunity to rehearse the discharge of APS-3 cargo within an actual theater of operations. This training will prove invaluable to support expeditious reception, staging, and onward movement operations.

"Second Door" Transportation

Bringing personnel and war materiel to the port of Pusan in South Korea is one thing. Rapidly moving them forward to meet mission requirements is another matter. "Just-in-time" delivery is now the fundamental logistics strategy employed to sustain mobilization. In Korea, this is especially challenging because of the expectation that North Korea will commence hostilities with little warning. Just-in-time delivery would need to be expedited significantly to meet the threat of a massive, rapidly moving opponent.

Turbo Intermodal Surge (TIS) is a U.S. Transportation Command (USTRANSCOM) initiative that allows a contractor to move deploying-unit cargo to its final destination using containers. If successfully implemented, TIS can increase the load capacity of vessels coming into a theater by as much as 35 percent and expedite forward delivery of personnel and materiel. USTRANSCOM advertised this concept as a "door-to-door" move. That is, the "first door" can be anyplace within the continental United States (CONUS), while the "second door" can be anywhere in a deployment theater. Contractor support is a key element of this concept, because contractors will use commercial systems to move containers to their final destination. This can be very tricky in the Korean theater because of the total mobilization of assets in a contingency. In other words, contractors will have to work through military channels to move containers in Korea.

If military authorities in Korea allow contractors to move containers into and around the Korean Peninsula, then there are two options. First, the containers can be unloaded at the port (Pusan) and the unit moved through normal reception, staging, and onward movement procedures. This will cause the unit to stay in port longer, thereby delaying the delivery of precious materiel and personnel to forward-deployed forces and hindering just-in-time delivery.

The second option is for the contractors to offload the containers and move them through the military system further into the Korean theater, where the receiving unit can unload the containers and fall in on the equipment at a designated assembly area. USTRANSCOM tested this system during Exercise Foal Eagle 1999. The 4th Infantry Division (Mechanized) containerized cargo at the railhead at Fort Hood, Texas. The contractor loaded a number of containers and moved them to the port of Beaumont, Texas. The equipment was shipped to Pusan, where the contractor moved the containers to the "second door" near Camp Casey. The unit fell in on the equipment at this location and moved to the designated assembly area. If properly executed, this process will contribute greatly to the timely delivery of materiel to forward areas on the Korean Peninsula, thus reducing the risk of another "Task Force Smith" and the creation of another "Pusan Perimeter."

Commercial Initiatives

Delays caused by an inability to expeditiously deliver the right materiel to an exact location could have severe operational consequences in future deployments. Should hostilities resume on the Korean Peninsula, North Korea will not allow combined and allied forces the luxury of establishing a fully operational logistics base without opposition. Combined and allied forces expect that North Korea will take immediate action to disrupt logistics operations and lines of communication. Considering the anticipated swiftness of attack, time will be of the essence. The logistics elements in Korea during the early stages of the war probably will be forced to use offshore operations to unload vessels in a combat environment. The commander in chief (CINC) of the U.S. Pacific Command (USPACOM) and the CINC of the UNC/CFC/USFK will need the flexibility to direct cargo to a destination and determine the priority in which that cargo is offloaded. Cargo entering the Korean theater of operations that is not a "war stopper" will be given a lower priority.

Private sector transportation networks, such as railroads, use laser optics, radio frequency cards, and satellite tracking to monitor cargo while in transit. The Army currently is implementing total asset visibility through the use of these commercial off-the-shelf technologies. In Haiti, radio frequency tags and portable interrogators were used successfully to quickly identify assets needed to sustain operations. More importantly, transmitting cargo data by telephone lines or satellite to a central computer data base enables logisticians to perform ad hoc queries, track and locate assets, and provide the military departments with a sophisticated tool for achieving total asset visibility over the distribution systems. This technology will prove to be a force enhancer that will help to give combined and allied forces the materiel needed to counter any attack North Korea can muster. The professional military logistician now has the tools needed to meet the future challenges of supporting a modern projected force anyplace in the world. Host Nation Infrastructure

FM 100-10, Combat Service Support, states, "An objective area's infrastructure is a key source of support." Before the Gulf War, Saudi Arabia used the huge revenues it received during the 1973 oil embargo to build a modern transportation infrastructure that greatly facilitated military operations. However, one of U.S. Central Command's (CENTCOM's) shortcomings during the Gulf War, and a lesson learned for other unified commands, was its failure to establish host nation support agreements that specifically enumerated the responsibilities of local labor during the early stages of the conflict. Without this crucial support firmly established, military authorities had difficulty taking advantage of the technologically advanced Saudi Arabian infrastructure. A report presented to Congress on the conduct of the Gulf War stated—

Saudi Arabian infrastructure—especially airfields and ports—was well developed . . . Ramp space at these airfields was . . . limited, as were ground refueling facilities . . . These constraints highlight several key points. First, it is imperative to have pre-existing host nation support arrangements to ensure access to arrival facilities whenever possible. A second factor illustrated by air deployment is that there were difficulties in servicing aircraft, even though Saudi Arabia has some of the most up-to-date facilities in the world. These difficulties would certainly be exacerbated were there a requirement to deploy a similar sized force to less developed airfields.

Like Saudi Arabia, the Republic of Korea has a modern transportation and communications infrastructure. Unfortunately, roads through mountainous terrain tend to narrow, so huge trucks laden with heavy cargo find it difficult to navigate these steep, winding roadways. Main rail lines tunnel through mountains, but the tunnels are not wide enough to handle oversized shipments on a flatcar, such as a standard U.S. main battle tank. Consequently, before being transported, tank skirts have to be removed at the port so the railcars can fit through the tunnels. Host Nation Support

The Persian Gulf War demonstrated the need for solid host nation support. FM 100_10 asserts, "Provision of support from the host nation reduces the requirement to deploy Army CSS [combat service support] units. This allows more combat power to deploy quickly." During the Korean War, allied forces procured items from Japanese vendors. Should fighting resume, U.S. forces would contract for goods and services from Korean sources.

Fortunately, the Korean theater has a solid, functional wartime host nation support program. The Korean Government has pledged to provide facilities, materiel, and equipment to help sustain forces and maintain operations. The defense of the Korean peninsula and any attempt to deter North Korean aggression would be limited severely without adequate support from the Korean Government.

The Republic of Korea recognizes the need for an American presence to maintain stability in the Far East. Furthermore, the United States wishes to maintain a logistics infrastructure in this part of the world in the event hostilities resume. Under the provisions of the Special Measures Agreement for 1999 to 2001, the Korean Government agreed to furnish logistics equipment, supplies, and services in such areas as ammunition storage and maintenance, transportation, equipment repair and maintenance, and nontactical vehicles (to include railcars). The Mutual Logistics Support Program "buys" and "sells" supplies and services to and from the Republic of Korea. Under this program, supplies are limited to nonoffensive weaponry, spare automotive and machine parts, and general supplies.

USFK maintains a comprehensive data base that delineates the current level of support from Korea, the support that each Service within the theater requested, and the support that has been provided. Among the field services covered under the wartime host nation support umbrella are potable water, shower facilities, waste disposal, laundry and dry cleaning, ice, and selected mortuary affairs items. Korea also provides bulk fuel and several other items of support to U.S. forces. The establishment of bilateral agreements with Korea prevents any misunderstandings over host nation requirements needed to support a mobilization.

Host nation support has been one of the areas regularly practiced during major exercises in the theater. For example, recent exercises rehearsed the procedures for obtaining bottled water from the host nation and acquiring supplies to assist with mortuary affairs. During these exercises, the logistics and resource management communities have joined to develop the most economical and effective means of procuring quality support and sustainment items from local sources in a timely manner. Learning from past mistakes in Operation Desert Storm, and understanding the urgent requirement to maintain robust host nation support agreements and functional procedures, USFK will continue to work on wartime host nation support during exercises.

Logistics Concepts

Joint doctrine. Joint doctrine needs to be revised to standardize logistics and transportation concepts. For example, during the Gulf War, the differences in air clearance authorities caused confusion. The Air Force challenges any cargo intended for air shipment that weighs more than 250 pounds, but the Army will not challenge any cargo under 10,000 pounds. The lack of joint guidance in this area contributed greatly to the breakdown of the priority system during the war. A similar breakdown would have grave consequences during renewed war in Korea. Personnel and materiel would become backlogged, and moving wartime supplies would take longer. Transportation needs to be a joint endeavor to rapidly deploy and sustain a CONUS-based projection force. Parochialism within the Services will hinder future deployments.

Noncombatant evacuation operations (NEO). Removing noncombatants from a combat area expends logistics resources. NEO planners have to factor in the number of vehicles that will be used to transport noncombatants to evacuation sites within Korea and the fuel that will be expended in the effort. They also will have to consider the amount of provisions that will be required to house and feed large numbers of noncombatants. Given the probable suddenness of a North Korean attack, the processes of removing noncombatants and deploying troops could overlap. As NEO progress, military personnel and emergency-essential civilians will deploy to their wartime duty stations and reserve component personnel will begin to trickle into the theater. These military and civilian personnel will compete with evacuees for subsistence and supplies. To further complicate matters, military units will be tasked to move the families of those Korean national employees designated mission essential further south, past the Han River. So, if there should be fighting on the Korean Peninsula, the military logistician will have to plan for the support of military and emergency-essential civilians, the temporary provision of supplies and subsistence to noncombatants, and the movement of the families of the indigenous work force out of harm's way.

General Coburn has observed, "The revolution in military logistics is the catalyst for a new Army capable of decisive victory today, tomorrow, and into the next century." The tenets supporting velocity management—prepositioned supplies, airlift and sealift, host nation support, and total asset visibility—are the cornerstones to deploying a force rapidly to counter a swift and sudden North Korean attack. Joint operations will play a larger role in future deployments to the Korean Peninsula. Therefore, joint doctrine should be structured to include the tenets of velocity management and thus prevent some of the confusion and misunderstandings with the priority system encountered during the Gulf War. Pre-positioned vessels and modernized airlift and sealift capabilities will be force enhancers should hostilities resume in Korea. Commercial off-the-shelf technology will continue to be a major component to total asset visibility, ensuring that the CINC's of USPACOM and UNC/CFC/USFK get the right equipment into the theater to sustain operations. The professional logistician in the theater will have to plan to provide support to deployed personnel as well as to aid noncombatant evacuees. The primary purpose of this revolution in military logistics will be for the CINC's and all of their subordinate commanders to "stay focused." If the Korean Peninsula erupts into war, logistics preparations must be set to repel the attack. ALOG

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Combat Support in Korea

MARCUS E. COOPER, LIEUTENANT COLONEL, 1st Calvary Division, US Army

Throughout the first six months of 1950, the 1st Cavalry Division was so scattered that it was difficult for its 15th Quartermaster Company to support it. I recall that division headquarters, the 2d Battalion of the 7th Cavalry, and service troops were at Camp Drake; the 8th Cavalry and the 1st Battalion of the 7th were in Tokyo; the 5th Cavalry was at Camp McGill; Division Artillery was at Camp Drew. Early in May the 8th Cavalry was shifted with elements going to Camp Zama and Camp King.

About 25 January 1950, post quartermasters were assigned and army service units began supplying each of those camps. This left the division quartermaster with technical responsibility but no operational control of the division's supply operations. The extent to which this separation of functions took place is illustrated in the case of the quartermaster of Camp Drake. When the executive officer of the 15th QM Company was assigned this task, he was transferred to the 8013th Army Unit.

In 1950 the 1st Cavalry Division was emphasizing combat training of its units. The 15th QM Company, relieved of most of its operational responsibilities, spent most of its time learning combat principles. Little practical training was possible for the class II and class IV supply sections, but the class I and III groups were able to work in the maneuver area at Camp McNair. My company commander (Capt. Jenis C. McMillan) and I were working on a plan to train the quartermaster personnel by attaching them to the army service units when the Korean action broke out.

I believe it was 1 July 1950 that the division was alerted for an amphibious landing in Korea. Our original landing site was described only as "somewhere along the west coast of Korea." The assault wave was to outload by 14 July, the second wave on the 16th or 17th, and the third wave several days later.

I had been taught at the Command and General Staff College that it required sixty to ninety days to plan and outload a division for an assault landing. As this operation was to be accomplished in eight to twelve days, it seemed to be a tremendous task. It was.

The 1st Cavalry Division's strength was only 13,000 or 14,000, with a T/O&E in proportion. Quartermaster requirements for the landing were 22 days of class I (7 days operational, 15 days class B rations); 30 days maintenance factor of class II and class IV supplies; and 30 days of class III.

Although there was short supply of the operational rations, class I presented few problems. There were plenty of B rations available. Class II and class IV were more difficult, but class III gave us the most trouble. There were two problems: how many trucks we would have, and how far they would go. First our tank company was taken from us, then our vehicle strength was changed from day to day. We guessed that ten gallons per vehicle per day would be normal at first and, fortunately, we guessed fairly accurately.

I was charged with transporting class II and the operational rations of class I to shipside in the outloading. Army delivered the B rations. Class II and class IV were to be loaded by my personnel coming in with the third wave.

I was allotted space for 65 officers and men and 28 vehicles in the assault wave. I elected to go, and chose the purchasing and contract officer (Lt. Charles Lambert) and 4 men from the division quartermaster's office; the 2d Truck Platoon (Lt. James Evans); 28 men from the Supply Platoon (Lt. Albert N. Abelson); and the Field Service Platoon officer (Lt. George M. Gibbs). In the second wave my executive (Lt. Francis P. Cancelliere) and Captain McMillan were to bring the bulk of the quartermaster troops, while the remainder were to come in the third wave on D plus 5.

Space for class I and class III supplies was authorized on each of the three waves, but class II and class IV supplies were all to come in the third wave. Each individual was to carry two operational rations, two suits of fatigues, two pairs of combat boots, and necessary underwear and toilet articles. Other clothing was to be carried in duffel bags. Vehicles were fueled and carried extra cans of gasoline.

On the morning of 18 July the first landings were made without opposition, not on the west but on the east coast of Korea-near Pohangdong. The shore party received class I and class III supplies and our supply section began to issue

them on D plus 1. All units were issued B rations to maintain the two-day level per individual. Instructions were also given to use the B ration whenever possible.

I anticipated that the division would remain in the beachhead area until the second wave arrived. The urgent need for troops near Taejon, however, made necessary the immediate commitment of our first wave. A typhoon delayed the second wave, and the third was still in Japan waiting for ships.

On the afternoon of the 20th, the 5th Cavalry Regiment started for Taejon. At about 2000 my truck platoon and a supply detachment followed. The trucks carried 90 per cent class III and 10 per cent class I supplies, since we were less concerned with going hungry than with losing our mobility. I instructed Lieutenant Lambert, who commanded this force, to establish a supply point in the vicinity of Kumchon or Kwan-ni, the situation to determine which was the most desirable. That night the supply platoon began loading class I and class III in rail cars for shipment forward. I left the Pohang-dong area on the morning of the 21st with division headquarters. Lieutenant Abelson kept a detachment to finish the loading. At Kumchon I learned that Lieutenant Lambert had opened our supply point at Kwan-ni, and I sent this information back to Abelson. By the 23d we were receiving and issuing rations carried by rail from Pohang-dong.

On the 21st I placed my first order for class I and class III supplies directly with the quartermaster of Eighth Army (Col. James M. Lamont). Although we had fifteen days' B rations coming over the beach at Pohang-dong, these were divided among the different waves and we dared not chance a shortage. Army told me I could get B rations as I needed them, but few operational rations were available. I made every effort to have our operational rations forwarded from Pohang-dong in full car lots. These shipments were issued only to units whose patrols, drivers, and men were normally away from their kitchens at mealtime. We also had a heavy demand for the C ration because its greater variety of meat items made it popular.

The quartermaster of Eighth Army told me I would receive little in class II and class IV supplies, for his stocks were almost depleted. I didn't worry about this because I knew I had a thirty-day maintenance factor coming in the third wave, and I knew each man had been well equipped when he left Japan. I would not have been so unconcerned had I known that the thirty-day supply would not arrive, and that, because of confusion in shipment, 70 to 80 per cent of the personnel of the regiments would not receive their duffel bags. The rocky hills cut up a pair of boots in twelve to fourteen days, while the rain took its toll of boots, fatigues, and ponchos. It was 1 August before we received much class II and class IV assistance, and by then we needed clothing, shoes, stove parts, and cleaning and preserving materials.

On the 22d, at Kwan-ni, we opened the first cemetery for the division. We had no graves registration section or trained personnel, and our few graves registration supplies were with the second wave. Eighth Army could not evacuate bodies, and we had to provide for our own dead. Not only were we short of experience in graves registration, but I had no manual covering the subject. Fortunately, the division Gl had a manual with some information and the division chaplain had a pamphlet. I sent Lieutenant Evans to Eighth Army headquarters at Taegu and there he obtained a supply of burial bottles, personal-effects bags, mattress covers, and burial forms.

I searched the Kwan-ni area for a cemetery site but most of the flat ground consisted of unsuitable rice paddies. The most likely place for a cemetery was 400 or 500 yards from our class I and class II supply point, which was not ideal. G4 approved our location, and the first interments occurred on 23 July. We had no fingerprint kit, but we soon found that a regular stamp pad would work. Every man buried in our cemeteries was fingerprinted, regardless of whether he was identified or not. We made a careful note of all identifying marks, scars, and tattoos. Some 32 or 33 bodies were interred at Kwan-ni, only 2 of which were unidentified. Some bodies were returned by the regiments, some by the companies, others evacuated through medical channels, and occasionally a driver would find a body along the road and bring it to us.

We had trouble with the personal effects. If the effects were still on the body, we inventoried them. If the effects had already been inventoried, we checked to see that all were present and then forwarded them to Eighth Army. But army began to notice that our inventory of money sometimes did not tally with the amounts it received. Several times there were shortages of five or ten dollars, though never was the complete sum missing. We could not account for this. After I left the division I heard that some of the men in the graves registration section had been caught stealing.

We also had a case where a ring had been removed from the finger of a British major, but this occurred before the body reached us. I had heard that the body was being evacuated through medical channels, and was present when it arrived. That night a friend inquired whether a signet ring was among the effects, for he knew the major's family attached great sentimental value to it. The inventory did not list the ring, so we disinterred the body to make sure it had not been overlooked. It was obvious that the major had worn a ring a short time before, but it was not on his body when it reached our cemetery.

It was in Kwan-ni that our ration first included fresh meat. By mistake a carload of rations consigned to the 25th Division had been placed on our siding. The car, containing frozen ground beef, was not refrigerated, and it was obvious some spoilage had already occurred. I called army and received permission to utilize whatever I could. Mr. Kummer and his food service personnel checked each box, discarding all meat about which there was the least doubt. The over-all loss was about 35 per cent. The remainder would not feed the entire division, so we got in touch with the units' S4s and told them, "first come, first served." We had no trouble clearing the shipment.

The bulk of the quartermaster company, coming in the second wave, joined us in Kwan-ni during the night of the 24th. We selected a school building as a billet but never occupied it. The order came to displace our class I and class III supply points to Kumchon because the infantry was being pushed back. Our evacuation was somewhat confused in this, our first experience in withdrawal. We issued two days of B rations to every unit that would accept them. This cut our load and at the same time insured against need if there were any delay in opening our new supply point. We loaded both the railroad cars and the trucks. There wasn't enough transportation, so we had to shuttle with the trucks. We got all of the supplies out, but the last two trucks were still being loaded after the infantry had cleared the area. Several rounds of mortar fire landed nearby but caused no damage.

We opened our new supply point in Kumchon without delay. Everything at Kumchon was kept mobile and, as much as we could, we left supplies in boxcars until we actually issued them. Rations were coming to us direct from Pusan, but carloads of supplies from Pohang-dong, which had been delayed or misshipped, were still arriving. In Kumchon I found that the quartermaster of the 25th Division (Major John Pachomski) had his distribution point in the marshaling area. The desirability of our companies working together was obvious, and my company moved next to his. The 25th QM Company helped tremendously by giving us cleaning and preserving materials, soaps, mops, brooms, and a few items of clothing.

While we were in Kumchon we began to receive our first shipments of fresh vegetables. These were airlifted from the hydroponic farms in Japan. The vegetables came in limited quantity every second day. Rather than issue a little to each unit, we rotated the delivery and gave enough for an ample serving. We had a standing priority on fresh foods for the hospital, then for the front-line troops. These vegetables were a real morale-builder.

We opened our second cemetery in Kumchon on the 26th. It was our smallest, for by now it was nearly impossible for the infantry to recover its dead as it fell back. It was in Kumchon that the 1st Cavalry Division received Eighth Army's famous "last stand" order which forbade us to fall back. This order was rescinded, however, and on the 31st we moved to Poksong-dong for two days.

In late August, division ordered 100 men and 4 officers of the quartermaster company to be held on five-minute alert. These men were part of Task Force Allen-our last reserve. Fortunately, this force was never needed.

The Eighth Army supply points in Taegu were located in the railroad area. We got permission to locate our class I point nearby, and obtained the use of a siding and shed area for our class III supplies. The II and IV area was six or eight blocks away from the marshaling yards. Eighth Army had five large warehouses for class II and class IV supplies, and it turned two of these over to us. In these warehouses we stored PX supplies and beer-when they were available. To save needless handling, our supplies came directly from Pusan by rail instead of stopping off in the army depots.

The fighting came close to Taegu and several nights enemy tanks ineffectively lobbed shells into town. It was a real convenience to have our warehouses near those of army. Army moved its depot troops out of Taegu several times, and turned its dumps directly over to me. In turn, I issued supplies to everyone in the area. At one time or another I supplied the 9th Infantry (2d Infantry Division), the 27th Infantry (25th Infantry Division), the 21st Infantry (24th Infantry Division), and numerous nondivisional units.

Each time the depot troops pulled out of Taegu they would tell me approximately how many troops I would be expected to supply. When I submitted requisitions to Pusan they were honored without question— even when I drew for 35,000 instead of 13,000. Class III items were usually in good supply except for an occasional shortage of 80-octane aviation gasoline. Some components of the B ration would build up and I returned flour and meat to Pusan whenever I feared the surplus was great enough to embarrass me if we had to move quickly.

At Taegu we received our first bath trailers. The third wave leaving Japan received these, though not in time to test them. We found that two of the four did not work, and the diaphragms and other parts could be repaired only in Japan. So back they went.

We used the civilian laundries in Taegu, but their capacity was insufficient. We hired men, women, and children, furnished them soap, and had them washing clothing by hand in the Sin-chon River. In September our first laundry unit was in operation under the control of Capt. Carl D. Hennessy, who had recently joined us. We continued to use the Taegu laundry, but now dispensed with the hand-washing.

Soon we received six ice-cream machines. These were much too bulky; two 2-1/2-ton trucks were required to move each machine. We turned them back to army immediately. In 1951, the division received improved, portable machines which supplied ice cream to the entire division on a once-a-week basis. Eighth Army took over operation of the Taegu ice plant. The medics approved the plant for sanitation and the engineers chlorinated the water. Ice was issued daily to every unit. An unusual use of the ice came when the enemy surrounded a company of the British 27th Brigade (attached to the 1st Cavalry Division for logistical support as well as operations). The isolated troops suffered from a water shortage. Attempts were made to airdrop water in one-gallon canvas bags, but these split and the water ran out. One of my officers (Lt. McGail C. Baker) suggested that we drop ice. We placed 15- to 20-pound blocks in barrack bags and dropped them with great success.

The truck platoon I had brought with me in the first wave was now strengthened by the arrival of the other two. One platoon I did not control, however, for it was attached to the 2d Battalion, 7th Cavalry. This battalion was kept mobile as a part of the Eighth Army "fire brigade" system. Although we were short of trucks, we were not hampered since we depended on rail to bring us our supplies.

Early in August I discussed with the Eighth Army quartermaster the need for winter clothing. Already it was cool at night in the hills where our infantry was fighting. Eighth Army was aware of the need and had established a three-phase program for issuing winter uniforms— contingent upon delivery of clothing from the United States on the dates requested. The first phase included the delivery of winter underwear, M43 jackets, and gloves by 15 September. The second phase was to bring wool clothing by 1 October. The last phase would deliver sleeping bags, pile-lined jackets, overcoats, and wet-cold climate clothing by 15 October.

The underwear, jackets, and gloves arrived about the middle of September and we issued them as fast as possible. Unfortunately, before all our clothing could be issued to the units, the breakout from the Pusan perimeter took place and we had no chance to complete delivery for some weeks. By 24 September, the 1st Cavalry Division's progress was such that we believed it was time to push out class I and class III distribution points. Lieutenant Cancelliere and one of our new arrivals (Lt. Earl W. Gallert) located these at Chongju on the 25th. Our three truck platoons were with the infantry, and army furnished us two truck companies to move supplies. I stayed with the company in Taegu until 2 October.

It was about 130 miles to Chongju and bad roads made it a full-day trip each way. On the 26th, the division advanced more than a hundred miles to make a junction at Osan with the 7th Infantry Division, which had landed at Inchon. On the 29th, Cancelliere established another class I and class III point at Ansong to receive supplies that had been airlifted to Kimpo. I sent some B rations to Ansong by truck, but army stopped this. Division supply points were located at Taegu, Chongju, and Ansong with supplies furnished from both the north and south ends. I had no communications faster than messenger, and I soon lost touch with the situation. I hoped that class I and class III supplies were being issued, and I learned later that they were. One of our truck platoons returned on 2 October, and I moved the company to Suwon. I left enough personnel in Taegu to operate the class II and class IV points, for I wanted to be sure these items got forward to us. Small class I and class III distribution points remained in Taegu to supply the division's rear-echelon troops, but had I known the situation forward I would have arranged for the rear echelon to use army supply points in Taegu.

Driving north we carried enough winter underwear, M43 jackets, and gloves to supply the units that had not drawn them in Taegu. We did not get to issue the clothing until the troops were in Kaesong on 9 October. I found that on the rapid march of the division those men who had received underwear and jackets took care to hold on to them.

Our Suwon distribution points opened on 3 October. For about a week we were issuing everything on hand and replacing nothing. Then we closed the I and III points in Taegu but left the II and IV supply personnel there until they could get the clothing forward. The shortage of both rail facilities and trucks kept us from moving the clothing at this time, even though the weather was getting cold.

In late September, 3d Logistical Command opened at Ascom City— between Inchon and Seoul. I opened a class III distribution point at Yongdungpo on 5 October. On the 9th we started an all-class supply point at Kaesong, and here we opened our fifth cemetery. When we moved from Kaesong on the 15th we began a series of class I and class III supply operations that were little more than one-night stands. Nothing was dumped on the ground, and we loaded from tail gate onto tail gate. We opened at Hanpo-ri on the lath and closed on the 18th. We opened at Sinmak on the 18th and closed on the 21st. Hwangju opened on the 19th and closed on the 20th. On the 21st we opened a distribution point at Pyongyang and it remained open until 4 December. On 30 October we were to establish a dump just south of Unsan, but the men found the town in enemy hands, so they set up some eight or ten miles to the south. On 31 October, we opened a dump at Anju to receive airlifted supplies landed at Sinanju for I Corps. We later turned this operation over to Eighth Army. On 2 November we opened a supply point at Pakchon but we had to evacuate it hurriedly the next day. The quartermaster company did not lose anything there. However, part of the 8th Cavalry, one company of the tank battalion, and one company of the engineers came out light and fast. We had to replace a thousand sleeping bags, two or three kitchens, most of the mess gear, and a lot of clothing.

The bulk of the division's winter clothing was still in the Taegu warehouses—400 to 500 miles away. As soon as the railroads began operating as far north as Seoul, we moved several carloads of winter clothing to that point. That meant the clothing was still 170 miles from us, but division G4 began to canvass all units for trucks we could borrow to make the trip to Seoul. It was very cold now and everyone supplied trucks until it hurt. We sent 180 from Pyongyang to Seoul in convoys of 30 and 40. The roads were so bad that there was about a 30 per cent truck casualty rate from broken springs.

Our boxcars had not been guarded on the railroad, and some pilfering had taken place. But we had anticipated a strength of 18,000 U.S. and 8,500 KATUSA personnel in our requisitions, whereas we now had 18,000 U.S. and only 3,500 KATUSA personnel. An officer in Pyongyang separated the clothing and issued it in the priority: infantry, engineers, artillery, other units. In no case did a service unit or headquarters draw anything out of sequence, but a fast-talking division headquarters supply sergeant almost succeeded until I learned about it. We outfitted U.S. and KATUSA personnel alike except that the OD7 overcoats went to the U.S. soldiers and the men of KATUSA drew wool overcoats.

After the rail lines were open to South Pyongyang, we received the rest of our own clothing from Taegu and also some from other sources. Soon we had an overage in certain types of winter clothing. Instead of moving this clothing to Eighth Army dumps we issued it to nondivisional units when directed by army. We also issued some clothing to British and other UN troops.

In September a wet-cold climate instruction team arrived from the United States. It consisted of Lt.Col. James P. Streetman and an enlisted man. We were in Pyongyang before they were able to instruct the troops, but fortunately this coincided with the issue of winter clothing. I believe their opportune lectures did much to prevent nonbattle casualties.

In Pyongyang an attached platoon of the 549th Laundry Company (Lt. Upshaw Sams) gave the division more laundry service than it could use. The tactical situation was so fluid that regiments often could not return their dirty clothing. In their free time we let the laundry platoon work for anyone—after they took care of the needs of the hospitals.

We opened class I and class III supply points at Sapyong-ni on 27 November and closed them on the 29th. The 29th was the day Lieutenant Evans's truck platoon got caught in a roadblock while carrying troops of the 5th Cavalry, and the day we began our long withdrawal. On the 29th, we opened a supply point at Sunchon, and hurriedly withdraw

before we issued anything. At 1800 of that day we were returning to Sainjang, and on 1 December our most advanced supply point was Pyongyang.

On 2 December we began to clear our class II and class IV supplies out of the Pyongyang area. I got in touch with the assistant G4 of Eighth Army and requested ten or twelve boxcars to evacuate supplies, but he was unable to furnish them. I had two partly loaded boxcars at my siding, so I filled them as quickly as I could and they were moved that night. On the morning of the 3d, Colonel Streetman and Lt. W. T. Niedermeyer found 4 empty boxcars and 2 gondolas of empty gasoline drums on the freight yard. The rail transportation officer agreed to let us unload the drums and use the cars and gondolas. We loaded them with class II and class IV supplies.

At 2045, before our cars were removed, an ammunition dump several blocks from our warehouse caught fire. When the shells began to explode, the locomotives left our area. One or two of our warehouses burned and so did our gondolas. The boxcars were spared. On the morning of the 4th, the locomotives came to pull out our loaded cars. Unfortunately, the ties had burned under the track and our cars were derailed. We loaded all available trucks with class II and class IV supplies and I put a man out on the road to offer units anything they would take. The only II and IV supplies we lost were those that burned in the fire.

On the night of the 3d, and during the 4th, we hauled class I and class III supplies from Pyongyang across the river. Again we stopped vehicles and offered gasoline and food. At 1800 on 4 December we destroyed the surplus gasoline and rations that we could not evacuate. This amounted to 15,000 to 30,000 gallons of gas-all in drums. That was the first time in Korea our company had to destroy anything to keep it out of enemy hands.

On the 5th we opened a supply point at Namchonjon; we closed it on the 8th. On the morning of the 8th we moved to Kumchon (in North Korea) and sent all our class II and class IV supplies to Ascom City.

On 8 December 1950 I was relieved of my assignment and returned to the United States on emergency leave. Colonel Streetman was assigned in my place. After I returned to Korea from my leave I spent eight months in the operations division of Eighth Army's quartermaster section.

2. Quartermaster Problems and Services

Lt.Col. Homer P. Harris, Quartermaster, 2d Infantry Division

Korea is a paradise for the artilleryman, but not for the quartermaster. I've served with armored divisions and there the quartermaster component is a battalion. I feel that an infantry division needs more than a quartermaster company. The infantry division has been beefed up by the addition of numerous automatic weapons, recoilless rifles, bazookas, and a tank company for each regiment plus a tank battalion for the division. Our present ammunition requirements are beyond the hauling capacity of the using organizations, even when they are augmented by the trucks of the division's quartermaster company. Artillery battalions are firing twelve thousand rounds a day, and the infantry is firing mortars and recoilless rifles at a prodigious rate.

In the spring and summer of 1951, to meet the overload placed upon the 2d Quartermaster Company, we had to have an overstrength unit. Instead of the authorized 11 officers, 2 warrant officers and 216 enlisted men, the division G1 knowingly let me accumulate a strength of 19 officers, 3 warrant officers and 311 men. By this method we approached battalion strength.

Another way to support the division was to overload the equipment and overwork the men. Overloading has to be supervised, for while a 2-1/2-ton truck will easily carry a 100 per cent overload without injury, it does have limitations. I caught people at an ammunition supply point trying to load 14 tons on a 2-1/2-ton truck! After that I made out a weight chart for various types of truck loads, and made the drivers responsible for seeing that extreme overloading did not occur.

The overworking of men also occurred in Korea. In spite of an occasional movie or band concert, there was little release for the men, and no place to go. As a result, the tendency was for soldiers to work around the clock. Even now that I have returned, I find it difficult to break away from the habit of sleeping three hours and then working eight or nine. But, under the stress of operations like these at Heartbreak Ridge, we had to work our truck drivers so constantly hauling ammunition that three or four accidents occurred in the mountains when the drivers fell asleep.

The overloading of equipment and the overworking of 'men will not pay off in sustained operations. I have reported this many times when I have recommended a quartermaster battalion for the infantry division.

In addition to hauling huge quantities of ammunition in Korea, we were responsible logistically for too many persons. Normally I drew rations for 35,000 troops and petroleum products for 44,000. Any way you figure it, that's an army-size job. We supplied our own division, men of KATUSA, Korean laborers, UN battalions of French, Dutch and Thailanders, and we were even saddled with the job of drawing rations for the indigenous laborers of a Marine division located fifty miles away. At one time, we supported two Marine artillery battalions with class I and class III supplies. The marines liked our support and were disappointed when they had to return to their own supply channels.

The problem of supplying bulk rations was further complicated by the special rations and supplements we had to furnish the other UN troops. This varied from additional bread and potatoes for the French and Dutch to special spice supplements for the Thailanders.

Our food was the best any army in the field has ever received. One actually got tired of so much steak, chicken, and turkey, and I occasionally longed for stew. Fresh eggs, when on the menu, were issued 22S per 100 servings, with 5 per cent allowance for breakage.

We served ice cream weekly to the troops. When the paper container supply was exhausted, we distributed the ice cream in the regular insulated food containers. I was always worried about the possibility of sickness should the ice cream get contaminated, but we never had a case of this. My ice-cream man improvised a device to sterilize our serving containers by using live steam, and it was by this method that we eliminated bacteria. I steered VIPs away from the ice-cream plant to avoid contamination and to avoid serving samples of our work. News of that kind might cause a "run on the bank."

In the fall of 1951, Maj.Gen. Robert N. Young replaced Maj.Gen. Clark L. Ruffner as commander of the 2d Infantry Division. General Young soon showed evidence of his airborne training. We began experiments in airdropping supplies and equipment to small detachments or units that had special needs. The flame thrower is one example. It is very useful to the infantry in certain operations, but is most often left behind because of its weight. General Young figured that if we could airdrop a flame thrower to the right men at the right time, it would be used. In addition, there was the need to air-supply patrols, outposts, and other groups in mountains too steep to be reached any other way. The division air officer (Major Linton S. Boatwright) worked with me on a series of experimental drops. I soon realized that the problem was complicated, so I suggested to General Young that two officers be sent to the 187th Airborne RCT to learn about airdrop. This was done. We received fifty parachutes, and after each drop we repacked them ourselves. Our cargo planes were the division's own L-19s, and using six different packs, we loaded as much as 120 pounds under each wing. At the division airstrip we maintained a quartermaster detachment and a ready line consisting of priority supplies. When Eighth Army's air section learned of what we were doing, it ordered us to stop, since our L-19s were not properly braced to carry such a weight. When we received a group of new L-19s, this prohibition was lifted. So far as I know, we pioneered this division airdrop, but other divisions are using it now.

Along with General Young's airdrop idea came his plan for a daily laundering of socks. Here the division's policy of performing the maximum service for the individual soldier applied. Each company sent to the laundry a barrack bag containing all the socks worn the previous day. We gave bundle service, returning the same socks to the unit that delivered them. I know that full use was not always made of this service, but General Young insisted on a daily sock inspection and close attention to the men's feet. We had only sixteen cases of frostbite in the division during the winter of 1951-52—and most of those cases didn't involve feet. Every report of a frostbite case was followed by an inspector general's investigation, and the blame determined.

Our quartermaster company set up a fix-it shop along with its other services. Weather, dust, and mistreatment took a heavy toll of typewriters, office machines, fire units in field ranges, and Coleman stoves. We repaired all these items and centralized all replacement parts at division for that purpose. Unfortunately, we were often out of parts because our kits did not seem to contain the parts we needed. Several investigations of this were made, but the situation did not change. I did not evacuate any of our office machines, for generally if we didn't have a spare part, neither did the army service center which supported us.

We did call on the service centers for covers for typewriters and office machines. When a machine came to us for repair it was returned with a cover-and a strong suggestion that the cover be used. We pointed out that all machines should be covered, even during the short period when operators knocked off for lunch.

The 2d Quartermaster Company in Korea gave an outstanding performance. It supplied more men with more items and more service than our doctrine ever anticipated.

3. Delivery by Air

Capt. William J. Dawson, Jr., 8081st Quartermaster Airborne Air Supply and Packaging Company

The 8081st Quartermaster Airborne Air Supply and Packaging Company is the most-decorated quartermaster company in the U.S. Army, and the only Army unit in Japan to earn combat credit. But if you ever saw these men at work, with their tails hanging out of the rear of a C-119 while they got their cargo ready to drop, you'd know they earn their points, decorations, renown, and jump pay. We drilled into our men this motto: "Lives of individuals in combat depend on the supplies we deliver. Risk yours, if necessary, to get them there."

I reported to Ashiya Air Base, on Kyushu, on 14 February 1951. At that time the company had 4 officers and approximately 88 men. Capt. Cecil W. Hospelhorn, who organized the company, was in the United States presenting his packaging and airdrop experiences in lectures and demonstrations. The operational procedures I mention are sometimes modifications of the methods he initiated.

At this time the company was commanded by Lt. Claude A. Jones, and I became his executive officer. We had a company headquarters, a parachute maintenance section, an air-supply section, a manifest section, and two air-delivery platoons.

The air-delivery platoons were responsible for loading the planes and dropping the cargo. The 1st Air Delivery Platoon (Lt. Paul E. Smith), in addition to its general duties, was responsible for all heavy drops. These men were all old-timers and persons Captain Hospelhorn had known for a long time.

The 2d Platoon (Lt. Billy G. Bishop) repacked all parachutes as its secondary job. Ashiya Air Base is on the beaches of the Sea of Japan, and the humidity there is high. For this reason personnel chutes had to be repacked every thirty days and cargo chutes every sixty days. We used Japanese employees to repack the cargo chutes, but the personnel chutes were never turned over to anyone outside the company.

When I arrived at Ashiya the company was working full-time. The men were loading and dropping an average of 3S planes every day. That is beyond the normal expected capability of an air-delivery company, but this rate continued for six weeks. In February 1951, X Corps turned to airdrop to build a stockpile of gasoline and rations, since land transportation was inadequate. We were pushed to operate at this level and could not have maintained it had we not been assisted by several hundred Japanese civilians. Later our load leveled off at five to ten planes a day, four or five days a week.

The air-delivery platoons worked in shifts. One platoon would do all the loading for a week while the other platoon had its men ride the planes and discharge the cargo. Assignments changed every Sunday. During the time our work was so heavy it was normal for our officers to spend their evenings in the orderly room, where they could play cards while waiting for the loading orders to arrive. We rarely bothered to go to the movies since we expected to be pulled out before the first show was over.

Orders for an operation normally came to us between 2000 and 2400. Requests came through G4 of Eighth Army, to 8247th Army Headquarters, Troop Movement Section, and then to us. Our first alert would tell us the number of planes to be loaded and the type of cargo. Our manifest section, which operated on a 24-hour basis, would receive the serial number of each plane, its capacity, the amount and type of cargo it would carry, and the on-station time (an hour before take-off). The capacity of planes varied greatly-largely because of fuel loads. The manifest section worked with these data, broke down the loads, and make a working manifest for each plane. They followed a few simple rules. For example, gasoline and rations were not to be loaded in the same plane, but gasoline and ammunition could go together.

While the manifest section was working, the commander of the loading platoon would send out his alert squad to the planes to check the tie-down bolts and put in the rollers. Either the company commander or the executive officer called the motor pool and ordered the vehicles for hauling the cargo from the ready line to the planes. We had available, on thirty-minute call, ten semitrailers and ninety 2- 1/2 -ton trucks. The drivers were Japanese who worked on an around-the-clock schedule. We always preferred the semis because they would carry more cargo, and their higher beds made it possible to slide the cargo straight into the rear of the plane. With the trucks we had about an 18-inch lift. It took four 2- 1/2 -ton trucks to carry the cargo to one plane, while it took one and a half semis to do the same job. We never placed cargos for more than one plane on a truck for fear of confusion. At the ready line the trucks were loaded by Japanese laborers according to the working manifests.

While the trucks were being loaded and the alerted squad was placing the rollers in the planes, the loading platoon was assembling. The loaders reported to the hangars at the same time that the cargos arrived. From a central point the loading officer (platoon leader) ordered two American soldiers and four Japanese laborers to each plane, with the trucks and cargo. As each truck was unloaded it was released. Before the loaders left the plane they made up a white loading card giving all pertinent facts. They then returned to the hangar with the last vehicle and reported to the loading officer to be assigned other trucks and cargo for another plane. The loading officer sent his platoon sergeant to inspect each loading job, and before leaving the field he personally checked each plane. No one left the area until all inspections were finished. Normally a platoon could load five or six planes an hour.

It was informally understood that if the loading crews finished their work before 2400 they would not be called for training until 1300 the next day. If they finished after 2400 they were off all day. Actually, however, it meant very little to give them the day off, for most of their loading was done at night. Finally, under the pressure of work the training schedule broke down anyway.

Shortly after we received an operations order we notified the consolidated Air Force-Army mess of the number of in-flight lunches our men would need. The hour of assembly for the platoon assigned to fly depended on the length of the flight. The normal time from Japan to drop zone in Korea varied between two and three hours. An hour before take-off all crews and quartermaster flight personnel were due at the planes. An hour before on-station time the flight platoon began drawing their parachutes, pistols, in-flight lunches, emergency rations, and equipment. For example, if the drop were scheduled for 0800 and the flying time consumed two hours, then take-off was at 0700, on-stations at 0500, and assembly at 0400.

On arrival at their plane the quartermaster crew obtained the white loading card, checked the cargo to be sure it was safe, and then notified the crew chief they were ready. A copy of the manifest was turned over to the pilot, who had the final responsibility for proper loading. By the time I arrived at Ashiya the pilots had so much confidence in our men they rarely checked our work. I would say the best pilots still checked and never took our word for it, but usually the check was omitted. Our pilots were first-rate.

After take-off the dropmaster and his assistant continued to check the cargo. While the plane was climbing they checked the front cables. When the plane leveled off they checked the rear cables. Periodic checks were made if there was any unusual motion while in flight.

Usually the flight was monotonous and often uncomfortable. The turnaround time was four to six hours. The cabin of a C-119 contains only four seats, and those are occupied by the crew. If the Army men moved forward, they had to sit on the floor with their legs out straight —and that is uncomfortable over a period of time. Lots of times there wasn't room up front because of cameramen, passengers, or flyers riding to get in their flight time. In the winter, or when the planes flew at high altitude, it was cold in the back of the plane. And looking out the open end of the plane always made me nervous in spite of my being called "Ace" Dawson.

Twenty minutes before we came over the drop zone the crew chief gave us a signal and our men moved to the rear of the plane to remove cables. The ties between bundles were removed; then the forward cable safeties were severed but remained taut against the bundles. When everything was ready the dropmaster and his assistant moved to the front of the cargo compartment and waited for the two-minute warning. At two minutes the bomb-shackle-release safety (a little red disc) was removed, and the men returned forward to await the signal to drop.

Over the drop zone the plane came in at an altitude of about 800 feet and at a speed of only 110 miles an hour. This is dangerous flying because of the low altitude and near-stalling speed. When dropping right on the front lines the plane makes an excellent target for small-arms fire. The planes approaching the drop zone came in trail at about 1,000 feet apart. This increased their accuracy but it also added to the danger of collision or other accident. At the instant the bell rings the pilot pulls up the nose of the plane and jams the throttle open. This lurch causes the load to move down the rollers in the floor and out the open end of the plane. The dropmaster and his assistant run to the rear of the plane and count the bundles as they open, so they can figure the number of malfunctions. The rate normally ran to about 3 per cent. After the count it was necessary to reach out of the open end of the plane and pull in the static lines. If any of the cargo failed to clear from the plane the dropmaster informed the crew chief, who told the pilot to make another run. Then it was just a matter of flying home, checking in the equipment, and waiting for the next day-unless there was a second flight.

These are the broad outlines of the air-delivery system, but of course there were many ramifications and problems. To speed up operations we normally kept all classes of supplies packaged and ready to drop on our ready line. The ready line was actually a small dump with the supplies on skids and the ropes tied. We ran out of containers and used rope to hold the items together. In fact, we used nine million feet of rope-some 1,700 miles of it-in one year. Most of the packaging was done by Japanese, and they were good at it. Without their help we could have never packaged the loads we did. Parachutes are expensive, the large G-11 costing \$1,300. Some idea of the cost of our operation can be obtained from these figures: we dropped 73,000 G-1 chutes (24 feet) which cost \$43 each, and 70,000 G-9 chutes (18 feet), each costing \$25. Dealing in those numbers and costs, it was essential to get the chutes returned from the drop zone whenever possible. Each division receiving a drop was supposed to get the parachutes to the nearest air base, and from there it was up to the Air Force to return them to Ashlya. No one really knows how good our recovery rate was, but I'd guess perhaps 40 per cent.

Although the Air Force was given the drop-zone location, the exact spot was marked on the ground with a T panel. Soon the Chinese got wise to this system, and-they placed panels and received several of our drops. Then it became customary to have an Air Force Mosquito plane meet the C-119s ten minutes away from the drop zone and escort them in. On rear-area flights we sometimes dropped cargo along the sides of airfields.

Our men tried to see how close the drop came to the T and sometimes they could see that it went wide. When the unit being supplied was on the line this sometimes meant they could not gather the supplies. They immediately notified army G4, who passed the message to the 8247th, and then we got it. The notification of a bad drop normally reached the company before the planes returned. If it appeared to have resulted from a pilot failure, the Air Force usually made the same crew fly the second mission and hit the drop zone. Usually we sent our same men along. But when a plane developed engine trouble and had to jettison its cargo and limp home, we had someone else go on the replacement flight.

Sometimes the first effort to drop the cargo would be ineffective and the plane would have to make several passes over the DZ. One officer normally flew each day for morale purposes, and when an officer flew he took the place of an enlisted man and carried out the same duties. In November 1951, CWO Byron Kirkman and I were flying a mission together. We carried concertina wire for use along the Imjin River. The coils were wide and the bundles overlapped in the center of the plane. Just as the plane started to dump its load we hit an air pocket and the wire jammed. Nothing went out on that pass, so we notified the crew chief, then went to the rear to loosen the wire. The best we could do was to drop one bundle from each side of the plane on each pass. It took five more passes to complete the job.

On my last flight there were six planes in the flight and the drop was on the front line. To hit the DZ we had to cross into enemy territory after the drop. The lead pilot did not give the signal to drop. Maybe the DZ wasn't marked, because the other pilots followed his lead. We moved over enemy territory going 110 miles per hour at 800 feet. Enemy small arms cut up to thirty holes in each plane. In my plane, the Plexiglas windshield was shattered and both pilots were seriously cut in the face. The sergeant with mewas wounded, and only the chute he wore saved his life. One other dropmaster was injured. In spite of the fire and their wounds, the pilots turned, made another sweep over the DZ, dropped their cargos, went again over the enemy, and flew back to Japan. When we reached Ashiya Air Base all the emergency crews and ambulances were waiting and I felt as though we had returned from a bombing mission.

While no one was killed on this flight, we did have two dropmasters killed in May 1951, when a failure to stop our artillery fire allowed one C-119 to be hit. A second plane crashed right behind the first. On this day, fortunately, we had only one soldier in each plane. We had five other emergency free-fall drops when our men bailed out of falling planes. We had three or four more men wounded on flights, and of course we had the famous case of Sgt. Robert Hale and Corporal Page who "just happened" to fall out of their plane right after they had dropped a cargo to the 187th Airborne RCT. Page was back in two days, but Hale was wounded by a sniper and did not return to duty for weeks. We took no disciplinary action, but we never believed their story of their "fall." Jumping wasn't much to these men, for all were rated. We did a lot of jumping—even on Saturdays and Sundays if business wasn't too heavy. We landed on the beach along the ocean, and sometimes we alerted the air-sea rescue people and jumped into the ocean for practice. We neverhad any casualties in our unit, but one lieutenant colonel who got permission to jump with us was killed on a water jump when he became confused and inflated his Mae West before he got out of his harness.

We tested a lot of Japanese parachutes for G4, and some of them were pretty good. We also ran a lot of tests to determine what items could be given a free drop. Concertina wire was dropped free but broke its securing wires and unraveled. What a mess! To counteract this we placed small chutes on the wire-just enough to slow it down. Canned rations smashed badly when dropped free. The new rubber containers for water landed in good shape, but they were small and frequently were lost. Blankets and all types of clothing came through the free-drop process very well.

One of our men (Sergeant Gordon) devised a bomb-shackle release that worked well in loosening cargo. The load was emptied by nosing the plane up. This was simpler than the standard practice of having the pilot operate the glider-tow device and sending out a pilot chute to pull out the cargo. We showed the Gordon device to one observer who came over from The Quartermaster School, and we even gave him one, but it hasn't been adopted.

One thing our men were proud of was the magazine drops. Knowing that men on the front appreciate any kind of reading, we used to tie bundles of magazines into the cargoes we dropped. We heard from those men at times, and their appreciation made us feel good. In spite of continuous hazards and combat rating, we lived the Air Force life and came home to clean sheets, hot meals, and movies. Helping the infantry out there made us feel more a part of it.

4. Service Company Runs Depot Lt. John Douthitt, 545th Quartermaster Service Company

The 545th Quartermaster Service Company was an integrated unit with Negro and white officers and enlisted men. At various times men of both races held the positions of company commander and first sergeant, but the whites held a greater relative proportion of the noncommissioned ratings. There was no problem of the men getting along, although some dissatisfaction existed among a small minority of whites because they were serving in an integrated unit. We had only one period of tension-after a fight-but it did not last long. At no time did race antagonism impede our work.

The mission of a quartermaster service company is to provide a labor force for attachment to depots and other installations. But from the time the 545th withdrew from Pyongyang, it was assigned missions very different from its intended one. For a year we operated major supply depots ourselves. This difference was especially evident at Chunchon.

The company reached Chunchon on 23 July 1951, with instructions to open a class I and class III supply point. When we arrived we found only a rice paddy. We had just three days in which to receive our supplies, organize our depot, and begin to issue rations. On the 26th we issued rations to 26,000 troops, and on the next day to 50,000. During the fall of 1951 we were supplying 90,000 troops, including three divisions and adjacent units.

As soon as we arrived at Chunchon, we received ninety rail cars of supplies, and our battalion commander was yelling for the return of the empties. Little local labor was available, so we put every man on the job, including the first sergeant and the cooks. We cleared our siding in fortyeight hours!

On the 25th we received our first refrigerated supplies, and by the 26th we had ten to twelve carloads of perishables. We had no refrigeration facilities or additional ice, and this was the hottest part of the summer. We issued perishables as fast as we could, and salvaged ice from every car unloaded. Eventually we received a half car of ice, and that was a help. It was a close race between issuance and spoilage, but we won. We kept a veterinarian busy

inspecting the food before we released it. A month later we received a number of permanent refrigerators and an engineer to service the machinery.

We opened our Chunchon supply point with 3 officers 165 men. In the next few months we received 3 additional officers while the enlisted strength varied between 170 and 190. This becomes significant if two facts are kept in mind. First, this company was doing a job not suited to its organization, training, or strength. Secondly, 90,000 troops were being supplied by one company. At Wonju, 8,000 to 10,000 troops were supplied by a service company minus one platoon, a subsistence company minus a platoon, a petroleum platoon, and a refrigeration platoon.

While we carried out our mission, our overload of work led to certain problems. Security was one. We were augmented by a few Korean National Police, but they controlled only Koreans and would not halt Americans who entered our area illegally.

Our men also suffered from a lack of time off. They worked seven days a week and had no other outlet for their energy. A leave in Japan every six months was not enough. Some visited that inevitable Korean shack which was set up in the neighborhood of our installations. There they found liquor and prostitutes. We had several men ill from bad liquor and several cases of venereal disease. We also had several cases of drug addiction.

A few men of the 545th were difficult to control. The working, living and recreational facilities could not be improved, and Eighth Army would not allow us to use confinement to enforce discipline. Company punishment meant nothing, yet confinement was not authorized unless a dishonorable discharge or a bad-conduct discharge followed. Our battalion tried to bring pressure on offenders by ordering a delay in rotation for a man who committed a court-martial offense. This was countermanded by Eighth Army, even though it brought results.

In Korea the 545th had no shortage of reports. The company commander, the first sergeant, and two clerks were kept busy with paper work, and later an administrative officer was assigned to us full-time. We had to prepare twenty-one different monthly reports, and many daily and weekly reports. Battalion finally had to send us a calendar each month showing the date on which each report was due.

5. Testing Equipment in Korea

Capt. Fred C. Jacoby, Observer for The Quartermaster Board

I was sent to Korea with a detachment of enlisted men in March 1951 to conduct a special series of on-the-spot tests of equipment for The Quartermaster General and The Quartermaster Board. After I received my instructions in Washington and Fort Lee, I entrained for Oakland, California.

At the Oakland Quartermaster Depot the equipment to be tested arrived direct from the manufacturers. I received the following untested items: 130 unit burners for field ranges, 5 cabinets for a new field range, 1,000 one-burner stoves for small detachments, 5 cleaners for 55-gallon drums, and 150 rain suits. All this material was loaded on board a cargo vessel.

My men accompanied the equipment but I flew to Japan to report to the quartermaster of General Headquarters, Far East Command. In Tokyo I was told to report to the quartermaster of Eighth Army and work out the details of the testing program direct. Eighth Army designated the 7th Infantry Division as the testing organization.

When the test equipment arrived at Yokohama it was transferred to a ship sailing to Korea. At Pusan all of my equipment, except the drum cleaners and field-range cabinets, was loaded on trucks and taken to the 7th Division. The men of the 7th Division were pleased to have been selected to make the test. The division commander personally assisted in the selection of units to use the equipment. The burners for the field ranges (which were installed in the standard-type range) and the one-burner stoves went primarily to the infantry. The rain suits were issued to the engineers, military police, and the reconnaissance company. I stayed most of the time in the division's area, checking the users' opinions of the equipment and examining items for evidence of wear.

The one-burner stoves, the burners for field ranges, and the rain suits were well liked. I recommended one modification to the field-range burner as the result of a fire. I left all the test items with the 7th Division when I returned to the United States, except representative samples brought back for study.

The gasoline-drum cleaners had been distributed in Pusan and Osan and were well liked except that they would not work on nonstandard drums manufactured in Japan. I recommended a slight modification that would allow the cleaners to be used with any drum. The cabinets for the field ranges were recalled for modification before I finished my testing.

I feel that this testing program was quite successful. The realistic conditions were the key to this. The trip overseas, with its transshipments, demonstrated that the test items were capable of standing actual wear and tear. The men who made the tests lived or worked with each item all the time and not just during work hours. Troops in the field are always critical in their judgment of equipment and most outspoken in expressing their likes and dislikes. When they said they liked a fire-burner, I knew they weren't trying to spare my feelings or hold onto their lobs.

One element of the testing program deserves some consideration. The men who came into contact with the program felt that the United States Army was sincerely interested in their welfare. They felt they were being consulted by the high command about an item, and not being given something that looked good to a desk soldier being pressured by a manufacturer's agent. The final seal of approval of a product came when men from adjacent units asked me when each item would be available for issue. I could only give the stock answer: "Soon, I hope."

6. Rations in Korea

Major Lawrence Dobson, Observer for The Quartermaster General. (From an oral report, 25 April 1951.)

To accomplish my subsistence and packaging mission, I visited the three corps headquarters, all division headquarters, and units within the divisions. In addition, I visited all the army supply points and the mobile bakeries. I would like to start with a discussion of the operational ration since I feel that was the major portion of my mission. As you have heard, the troops in Korea are fed two hot meals a day whenever it is tactically possible. It is desirable, of course, to have three hot meals, but we say a minimum of two: normally, breakfast and supper. Noon meals are an operational ration. Hot meals were started by necessity because of a shortage of operational rations. Today we have plenty of rations, but the troops and the leaders appreciate the benefit of kitchen-prepared meals. It is a terrific morale builder among the forward elements.

First, I would like to discuss the 5-in-1 ration. During the last part of February 1951, Eighth Army asked that no more 5-in-1 rations be sent to Korea. That was quite a shock because we in the States had always considered the 5-in-1 our most acceptable ration.

Its military description said it would be used to serve small detachments-tank crews, gun crews, isolated units. I found that Eighth Army did not want the 5-in-1 ration because it was not satisfactory for the forward units. The men of these units do not have their mess gear or heating equipment with them; they travel as light as possible. Therefore, the 5-in-1 was difficult to break down and eat. I found that the ration was unacceptable when consumed cold. Still, that was the way it had to be consumed when it was issued to forward units.

I found that the armored battalions followed the same system of two hot meals a day, so that a case of 5-in-1 rations would be the noon meal for three days for the five men of a tank crew. The first day they cooked a pretty good meal; on the second day it was fairly good; by the third day they had no food left. The tankers had to draw another ration, and there we have a terrific waste. Also, the men did not want to cook when they could take the C ration, open one can, and be done with it.

The 5-in-1 was used in several cases as an emergency B ration. For example, the 31st Infantry was well advanced when a thaw hit. Roads were impassable, the regiment's kitchens were forward, and the men had to be supplied by air. So the 5-in-1 ration was dropped and used as a B ration. It was quite successful, but the mess stewards complained that there were not enough vegetables.

Before its cancellation request, Eighth Army decided there was insufficient food in a case for five men, and changed the basis of issue from 5-in-1 to 4-in-1. That again caused waste, since the accessory items—candy, chewing gum, cigarettes, peanuts-were put into the ration on the basis of five men. Still, four men used it. I said that the 5-in-1 was unacceptable cold. When heated, the men did not care for the beef and gravy or the pork and gravy. They complained that there was too much fat, too much gravy, and that the meat appeared over-processed—just a mess of shreds and nothing to chew on. As for fruit and jam-well, the best-accepted item is canned fruit. You can't give the

men too much of it and, if you ask which is the most acceptable, they will think a while and then they might say "peaches," or they might say any of the other fruits. Vegetables are the same as in the B ration, and are a matter of preference. Canned puddings and desserts were well received. The precooked cereal in the ration was rated very low to fair. If the men had to add hot water to it themselves, it had poor acceptance. If the mess sergeants added milk and heated the cereal, it had very high acceptance. If only cold milk was provided, it had fair acceptance.

In addition to the use of the 5-in-1 as a B ration, and because there was a surplus on hand, Eighth Army at present is making some forced issues of 5-in-1 to the troops, and is also utilizing it as the ration to feed troops on trains. For troop-train feeding it again had very poor acceptance because of absence of heating equipment and, in many cases, lack of mess kits.

I would therefore recommend that the 5-in-1 no longer be considered a combat ration, but rather a ration to be used by small detachments in a semipermanent location with ample cooking facilities available to them; and that the ration also be considered an emergency B ration— one that can be moved in as I have explained.

When we started, we had the C-4 ration. We procured the C-6 ration and, later, we had a C-7. The C ration is the most acceptable ration we have in use in Korea. Everyone likes it. The relative acceptance ratings of the meat items are: (1) beans and frankfurters; (2) beans with pork; (3) meat and beans; (4) ham and lima beans; (5) spaghetti and meat; (6) hamburgers with gravy; (7) pork sausage patties with gravy; (8) meat and noodles; (9) chicken and vegetables; (10) beef stew; (11) corned-beef hash.

This ration is a combat ration, and one of its characteristics is its capability of being consumed hot or cold. The reaction of the men was that the only items acceptable cold were the three bean items. The principal complaints were against the meat-and-spaghetti and the meat-and-noodle combinations. Both items were too dry, and when heated they would burn. The hamburgers and the sausage patties had too much fat and too much gravy. It is difficult to determine the acceptance of the chicken and vegetables. In the C-4 and the C-6 we had a chicken-and-vegetables combination. The men disliked it. We had previously received reports on this, and in the C-7 we have a product of the same name but from a different formula. The men interviewed who have eaten the C-7 reported that the acceptance on the chicken-and-vegetables was very high. It is a very good product.

The corned-beef hash and the beef stew had very low acceptance ratings. Part of this can be attributed to the fact that, when operations started in Korea, we had a limited stock of meat items to be issued in the B ration. Supply Bulletin 10-495 has the menus we had planned to use, but we didn't have the items in stock. We had quantities of beef stew and corned-beef hash on hand, so they were shipped. The men had corned-beef hash and beef stew; beef stew and corned-beef hash. So the principal objection to the corned-beef hash in the C ration is that it has become the Spam of the Korean campaign. Beef stew-well, too much fat; very poor acceptance when cold.

It had been reported previously that there was too much meat in the C ration. I found that for those men in the rear areas-those who used the ration only when they were making a movement-there may be too much meat. But we must remember that this ration was designed for the fighting man. He is a young man-old men cannot climb hills. Fighters work hard. They will eat practically all you can carry up to them.

When talking to them, I asked, "Is there too much meat?"

"No."

"Is there too much in the ration?"

"No: we will eat it ale"

Even to the cocoa disc and the coffee. If they cannot prepare them at the time they are eating the ration, they will save them for later. An interesting comment was that they liked the cocoa but sometimes do not have the fire to heat the water. So the cocoa is being eaten as a chocolate bar. They wondered if we could not improve the eating quality of the cocoa disc and still save its quality for reconstituting it into cocoa.

The B units-that is, bread-type units in the C-7—were slightly different from those in the C-4 and the C-6. In the C-7, we attempted to put in each can all the components that would be required for a meal, so that a man would not have to open a second can or open an accessory packet. As a result, the arrangement of components within the C-7 was very well received and liked better than our previous arrangement. Also, in the C-7 for the first time we had a soluble milk product for coffee and that had high acceptance.

The chocolate and the starch-jelly discs are liked. Complaints were made of the starch-jelly discs being too hard to eat during the cold months. Also, the men got a little tired of having the same thing repeatedly, and requested additional types of confection.

Before I went to Korea, complaints had been reported that there were not enough crackers. I could not substantiate this. Colonel Jackson, of the Quartermaster Section, Japan Logistical Command, stated that some of the men wanted more crackers with the hamburgers and sausage patties. I heard one medical officer say he wanted more crackers, and he didn't like the candy. He was the exception to the rule. I would say the quantity of crackers we have is just about right. I would ask a soldier, "Do you want more crackers?"

"Well, maybe."

"What would you want us to take out of the B units so that we can put in crackers?"

"Don't take out a thing. Leave it all in and don't increase the weight."

The most acceptable item is fruit. In the C-4 and in the C-6 we had two 6-ounce cans of fruit. In the C-7 we had one 8-ounce can of fruit. The first reaction soldiers have to the C-7 is: "What? Only one can of fruit?" Mess sergeants, platoon leaders, and everyone else complained. It was too difficult to divide the ration. They tell of fights among the men over who is going to get the fruit. So I would recommend that in the future we change from the one 8-ounce can back to our two 6-ounce cans.

When I asked, "What do you think of the individual combat ration?" the first thing said was, "Where is the spoon in the C-6?" And the next thing: "The C-7 is a lot better ration; it has a spoon."

As I mentioned before, the men carry nothing. Mess kits are kept in kitchen trucks. Soldiers are stripped down-no packs-just the clothes they wear. We also used to think a man would never lose his eating utensils. That is not so. They lose them, and unit commanders cannot have them resupplied as fast as they are needed. In many cases knives, forks and spoons are kept in the kitchen. At first the C ration came without spoons, and we got reports of men eating beans with their fingers. One Marine colonel cut his finger in trying to make a spoon from the top of a can. I would say-and I am stating the opinion of everyone I interviewed-that plastic spoons are a must in the operational rations.

In the past we included a can opener in each accessory packet. Every soldier I saw had a can opener in his pocket or on his dogtag chain. He was afraid he would not have a can opener when he wanted to eat. If he had a can opener and got hold of another, he saved it. My prize example is a colonel who had one can opener on his dogtag chain and nine in his pack. So my recommendation is that the can openers be reduced to either two or three per case and that they no longer be packed in the accessory pack, but be placed on top.

The condiment issue in Korea has been very poor. The troops did not have enough spices, and those they did have arrived spasmodically. Condiments reached Pusan in bulk, but there wasn't time to break them down. In Japan a spice pack was made up-three thousand rations to a pack. I feel there is a definite need for a spice pack. If we ship loose condiments, they will get lost at a depot. They will not be broken down and sent forward. Supply points have difficulty in issuing them to small units.

The cooks were doing a great deal of extra baking, but they were not getting condiments. I found, in some companies, that when a soldier was going on rest and recreation in Japan, his company commander would have him report to the mess sergeant to determine what was needed. The company commander then gave him money from the company fund and the soldier bought condiments in Japan so the company's kitchen would have nutmeg, cinnamon, cloves, vanilla, maple, and the like. I think this shows a definite requirement for a spice pack.

The fire units actually are holding up well, but spare parts are a problem. For instance, the 3d Infantry Division followed the book and issued all the spare parts. As a result, spare parts were all over the division but not in the place where they were needed. In the 24th and 25th Infantry Divisions, the food-service supervisors set up equipment repair shops. Faulty field ranges, Coleman lanterns, and one-burner stoves were turned in to the regimental supply officer, taken to the quartermaster when the regiments drew their rations, and exchanged for serviceable units at once. It was surprising how few unserviceable units were in these divisions. The repair men are better mechanics and better at improvising than the average cook.

The cooks in the forward areas appreciate their position. Part of that might be attributed to the policy in some divisions that each cook must go forward once a week and spend twenty-four hours with the riflemen of his company. I found that the cooks are really doing more than I thought they would. Our cooks are doing a marvelous job. They know how to prepare dehydrated eggs and milk, and have made granular potatoes more acceptable when mashed than fresh potatoes. I recommend we reduce the quantities of fresh potatoes and limit the use of fresh potatoes to French fries and an occasional boiled potato. Cooks are baking pastry and rolls far more often than the menu calls for. The men like the baked products.

I hope I have not left the impression that our cooks are perfect. Not all our replacement cooks are adequately trained. They can cook, but some do not know how to clean a field range. Others do not know how to light one. On care and maintenance of field equipment, not all have the knowledge and training. Some do not know how to put up a tent, and it is quite difficult for a person who has never erected one himself to direct a crew of Korean laborers who don't know either. Field sanitation is sometimes poor. The plea of the people in the field to the food-service school is, "Give more field training."

The farther forward you go in Korea, the better you eat. In Pusan menus are planned for three areas: Pusan, Taegu, and north of Taegu. In other words, north of Taegu is the fighting front; Taegu includes Eighth Army headquarters and its supporting units; and Pusan is the dock area. When any item is in short supply, it is distributed first north of Taegu, then to Taegu, and finally to Pusan. If the quartermaster had limited supplies of frankfurters and frozen turkey, the frozen turkey would go north of Taegu, the frankfurters to Taegu, and corned-beef hash to Pusan.

I am sure you have been told before of the method of feeding forward elements in Korea. The meals are cooked in the battalion areas, then carried forward in jeeps as far as possible, and finally packed by the Korean bearers using carrier straps or A-frames. Now, there are problems involved. Bearers cannot carry water up to the top of the hill except for drinking, and they cannot carry a stove to heat mess-kit water, so no one on the hill keeps his mess kit. The kits are all kept back in the kitchen and are carried forward with the food. This is a problem, since the meat cans do not nest very well. Fifty mess kits to take care of an average platoon will fill a foot locker, so the mess kits are carried forward in foot lockers, boxes, or duffel bags. They are washed first in the kitchen, but they become dusty on the trip forward.

Everyone asked: "What are we doing with the mess kit? It is no good. Throw it out. Give us a tray." All except one cavalry colonel who asked: "What would the men do if they found some eggs? How would they cook them?" When I inquired where his unit carried their meat cans, his reply was that they kept the mess kits in the kitchen. I asked how they would cook the eggs then, and he answered that they might have the meat can with them.

The bakeries are operating in the vicinity of the supply points. The bread is very good and the bakeries are doing a fine job. They are having terrific maintenance difficulties, but I found an additional problem. When I visited the 1st Cavalry Division, it was 93 miles from its supply point. Its infantry regiments were 40 miles from the rest of the division. That meant the bread was hauled about 130 miles over the dustiest roads I have ever seen. All the bakery had to pack the bread in was kraft paper bags sealed with gummed tape. Well, I'll grant the bags could have been handled a little more delicately, but it was amazing to see the number of bags that became torn between the bakery and the units. Several times the surgeon came along and condemned some of the bread.

There were a few people in Eighth Army who felt that the bakeries were not far enough forward. In one sense I agree with them. The main problem was that the road nets are so terrible and the bakery had to supply so many units that it could not get close to one division, because the other divisions would have too far to go.

The average age of bread was five days when it was consumed by the men and, in some cases, it was running to seven days. Still, they liked it. To give you an example of how well it is liked, the French and Belgians, when they first came in, would not accept our bread, but would take bread ingredients and do their own baking. They are either getting accustomed to our bread or their cooks are getting lazy, because gradually they are reducing the quantity of bread ingredients they are drawing and increasing the quantity of bread baked by us.

7. UN Approval of U.S. Products

Capt. Richard A. Johnson, Observer for The Quartermaster General. (From an oral report, 22 August 1951.)

My primary mission was to determine the degree of acceptance of Quartermaster Corps clothing, equipment, and subsistence items by United Nations troops in the Far East Command other than those of the United States. I visited troops from Turkey, the Philippines, Thailand, the United Kingdom, Australia, New Zealand, Canada, India, Norway, Sweden, Belgium, and some forces of the Republic of Korea.

There is an expression in Korea that if anything is "tops"—if it is really good-it is called "Number One." When talking to UN soldiers, I asked how they felt about U.S. clothing, equipment, and subsistence. They answered, "It is Number One." But we know there is still room for improvement on everything we have.

First, I will talk about subsistence. The remark was made to me several times that no army has been as well fed as Eighth Army in Korea. I think the Quartermaster Corps deserves a hand for the amount of food being supplied and the way it is prepared.

In my opinion, the U.S. rations are suitable for all UN troops with minor changes, except for Oriental troops. The Turks will not eat pork, and the Greeks delete sweet potatoes, corn, peas, and other items. Most European soldiers draw additional bread, and those from Mediterranean areas draw vegetable oils and olives. Some of the extra issues are made from U.S. stocks, and others are shipped to them from their own countries. The Greek Government, for instance, ships olive oil to Pusan. It is then forwarded with the regular rations to the division supplying the Greeks. These supplementary foods are not a problem that need worry us in the United States unless we feed a much larger number of UN troops.

Our rations are not suitable for Oriental troops because their basic food is rice. If they get rice they are happy. Anything else they draw merely supplements the rice portion of the meal. If you give them a fine steak, they cut it up and boil it with rice, so I don't see the necessity of issuing them steak when they are going to cook it in that way. I feel some work should be done to develop a menu for Oriental troops if we are to continue to supply them. Start from scratch, find out what they like, and issue that instead of the U.S. menu plus rice. In our present system a lot of items are wasted.

A special operational ration has been developed for the South Koreans called the 12-in-1, or J. ration. It is made in Japan. The Korean soldiers like it; however, like all combat rations; it becomes tiresome when eaten over long periods. No particular difficulty is found with the package marking. At first, when a Turkish soldier got a can of U.S. food, he wouldn't know what was in it. However, after using a particular item for a month or so he learned to associate the writing on the can with its contents. So, if the troops are going to use an item over an extended period, there will not be any particular difficulty with markings.

Next, I will discuss clothing and equipment. I am not blowing the Quartermaster Corps horn by saying everything the U.S. has is the best in the world. But the U.S. items are generally of better design and of better quality than those manufactured in other UN countries represented in Korea. For that reason, the UN troops prefer the American items. The Turks, in speaking of many items will say, "We like the U.S. item because it is more convenient to use." In other words, our design is better.

The main difficulty with U.S. clothing for UN troops is sizing. The Turks and Greeks are about the same size as American soldiers except that their feet are quite a bit wider. Oriental troops are smaller than the average American soldier and their feet are small but wide. So far as equipment is concerned, many of the UN troops are not mechanically inclined or have not worked with mechanical equipment. For example, Thai officers say that many of their soldiers come from farms and have never used anything mechanical. They probably have been following a plow all their lives-and a wooden plow at that. So you will find they have difficulty with what we consider simple mechanical items such as the immersion heater, the Coleman lantern, and the fire unit. Rather than go through the ordeal of setting up the immersion heater, they go down to the nearest stream and wash their mess gear.

Many UN troops do not understand the layer principle as we apply it to our winter clothing or, if they do understand it, they don't agree with us. They told me they like American equipment because of its lighness, but they felt that for warmth they should have much heavier clothing-something that will keep out the cold. They don't believe that two layers of light clothing keeps out the cold much better than one heavy layer.

As much as the UN soldiers like to wear the U.S. uniform, when they go on leave to Japan they want to be known as Turks, or Greeks, and not as U.S. soldiers. They are, however, very proud of their association with a U.S. division, and will wear the shoulder insignia of their own country on one shoulder, and that of the U.S. division on the other.

I want to mention that I think the United States Army has forgotten that the American soldier is also proud of the fact that he is an American soldier. Many American soldiers in Korea remarked, "Why doesn't the United States Army have a uniform of its own-a uniform that every Tom, Dick and Harry in the world isn't wearing?" So I believe some thought should be given to esprit de corps in the U.S. Army, to give the American soldier a uniform he can be proud of-and that only he will be wearing.

8. Wet-Cold Clothing Indoctrination

William F. Pounder, Civilian Observer for The Quartermaster General. (From an oral report, 19 January 1951.)

The primary reason for my trip to the Far East was to establish and execute a broad training program for all troops in Korea in the proper issuing, fitting, use, and maintenance of the wet-cold and dry-cold climate clothing. I left the United States for this mission on 22 September 1950, with 6 officers and 3 enlisted men.

After arriving in Japan our party set about establishing a wet-cold training program. Since we sent troops to Korea through the replacement training center in Japan, we first had to set up a training program in Japan itself. At Camp Drake we had our most experienced officer (Capt. James D. Norman) establish a wet-cold training program. We worked in spurts-sometimes from 0600 until 2100 or 2200-then waited until new troops arrived. Sometimes we taught as many as three thousand during two-day periods.

During the slack periods we trained new instructors, for we realized that six teams would not be adequate in Korea. After the training team had its program well under way in Japan, the remaining teams left for Korea.

There we established a training program within Eighth Army, and within every corps, division and separate unit. We had training teams in the 1st Cavalry Division, in the 2d, 3d, 7th, 24th, and 25th Infantry Divisions, and in the 1st Marine Division. As we moved from division to division, the unit "next door" would hear that we had trained instructors, and would immediately request a team. We kept calling on the replacement training center for additional instructors and assigned them permanently to divisions.

We also worked with the logistical commands because personnel were being taken from rear-area units and sent into the combat zone. We didn't have enough instructors for every unit, so we used "indirect training." We did this in a large church in Pusan, where we spread the gospel of wet-cold and dry-cold training to the 2d Logistical Command. At least two persons came from each separate unit, and we trained 86 instructors. To help them conduct training in their own units, we equipped each with complete issues of clothing, an outline of his talk, and all his training aids.

As the training progressed we realized there would also be the problem of instructing the other United Nations troops, so we began to expand even further. The first UN troops we came in contact with were the South Koreans. To augment U.S. units, there were as many as eight thousand ROKs interspersed in each of our divisions. Only a few of these could speak English. We had to translate our talks and our outlines into the Korean language and have them published. We also had the talks distributed to the ROK divisions.

Later we got in touch with the British brigade, the Turkish brigade, the Thai regiment, the Filipino battalion, and the French battalion. I have just received a letter saying they are now working with the Canadians and New Zealanders. In all, the wet-cold and dry-cold gospel has been translated into Korean, Turkish, Spanish, and French.

I said that we had six teams. When I left Korea there were seventeen teams in operation. We are proud that when the Chinese Communists attacked, we had teams with the 7th Division at the Yalu River, with the 1st Marine Division in the Changjin Reservoir area, with the 1st Cavalry Division in the northwest, and at the front line with every one of our divisions.

It was difficult to operate a wet-cold indoctrination program in the field, especially near the front lines, where we had to instruct units as they came into reserve for an overnight rest. In Japan, where we could seat 700 or 800 men in a theater and show our movie, it was far more satisfactory.

Our teams did more than just instruct the troops. Sometimes they helped the quartermasters prepare requisitions. At other times they aided in locating and expediting shipments of winter clothing. It was a terrific problem to haul all this clothing long distances, over a disrupted transportation system, and a few shipments did get lost. Sometimes a unit had the clothing but could not move it forward because of the presence of guerrillas. Since the division quartermasters were short of personnel, they gave our teams transportation and sent them hundreds of miles to locate the shipments and bring the clothing forward.

We made physical inspections of clothing and equipment to separate superior items from old or inferior ones. This was extremely important, because we had several types of footwear and clothing. The old shoepac is not as good as the new type, and our men made sure the best were issued to combat troops. The teams made certain that circulars about the prevention of cold injuries reached the company level. Then we made spot inspections, beginning with the front-line private, to check on understanding and compliance with the circular. When our teams found noncompliance, they reported it to Eighth Army. We also checked to see that each company had a cold-injury prevention team of its own.

Our teams checked the progress and adequacy of the sock-exchange system within the combat elements. Clean, dry socks are important in preventing cold-weather injury. It is not enough to put this in a circular. You must go forward and actually see that the units have set up a sock exchange program. Our teams assumed almost complete responsibility for getting changes of dry socks up with the rations.

We worked hard to insure adequate numbers of warm-up and drying out tents and rooms. Again, you must go up there and be sure there are tents or rooms, and that there are stoves. When a soldier feels or sees that he is getting a cold-weather injury, he needs a place to go where he can warm up and get a change of socks.

The last function of our team was to report the cold-weather injuries that occurred. The 24th Infantry (25th Infantry Division) in a two-week period had 169 cases of trench foot and frostbite, while a unit operating right next to it had only 20! These units were in reserve. When this report arrived, it was relayed to the surgeon of Eighth Army. A member of his office and one from the quartermaster's office visited the regimental commander.

Now let's look at the results of the cold-weather indoctrination. We have long been trying to get complete casualty reports from Korea, but it is difficult and we are getting them only periodically. While I was there I made a check into weather casualties and I found that from 28 November to 7 December 1950—the period of the Chinese Communist breakthrough—there were 1,500 such casualties. Of these casualties, 1,100 had to be evacuated to Osaka General Hospital in Japan. We have another report on weather casualties after things quieted down. For the week 22-29 December, we had 223 casualties, 184 of which were frostbite cases.

At the time I left Japan, we estimated that weather casualties during the worst of the fighting in Korea totaled about 4 per cent. In winter campaigns in Europe and Italy during World War II, under conditions not so severe, we found there had been an average of 8 per cent of such casualties. We like to think that part of this reduction was due to our wet-cold indoctrination; not only by team instruction, but by making sure that the sock-exchange system, the dry-out tent, and proper care were forced on the individual soldier.

Now let's look at some causes of cold-weather injuries in Korea. First, I feel that many staff officers are ignorant of proper clothing needs for cold-weather warfare. In October 1950, at the time of our northern push, the troops left Seoul, Taegu, and Pusan—areas where the weather is comparable to that of Washington or Baltimore—and moved 150 or 200 miles north into areas with the climate of Maine—with only one layer of wool clothing. We discussed this with the staff while I was there, and told them that cold weather was coming soon. We explained that the supply of cold-weather clothing was a complex affair. I was told that, at this time, ammunition, POL, and rations had No. 1 priority, and that when the cold weather came the supply of overcoats would be taken care of in due course. "The supply of overcoats"! The supply of overcoats is not all that is concerned in cold-weather clothing.

The second cause of cold-weather injuries was ignorance and lack of supervision by troop officers in the wearing of winter clothing. In some areas, where the temperature was zero, the officers told the troops to wear the combat boot in snow rather than the shoepac because it was lighter and would be better for marching. They did not know that a leather boot will get wet and soon freeze. No matter how many times you change your socks, you do not get a dry change of footgear.

The third reason for injuries was that the temperature was extremely low at a time when enemy pressure made it almost impossible for some men to take proper care. We made a survey at Osaka General Hospital to find out how the patients became casualties. We found three hundred of the weather casualties were men who had been wounded and, in some cases, had been lying on the snow, ice, and frozen ground for as long as two or three days. These men were in very serious condition and some needed amputations.

We talked to others who had been wounded, and asked if they had had the two-hour training. We found no one who had not been indoctrinated in proper clothing. We asked why they didn't carry out their training and they gave several reasons. First of all, they didn't know how close the enemy was to them and they didn't dare take off their shoepacs for fear they might get caught in their stocking feet and have to continue without footgear.

Others, in the Marine division, had to go through a river about sixty yards wide and partially frozen over. One tenyard section forced men to wade through water almost up to their knees. Some of the men were fortunate enough to get on vehicles and get through. Those who were well trained knew enough to take off their footwear and walk barefoot through that water, dry their feet, and put on their footwear at the far side. Others, who were not so well trained, walked through the water with their footwear on. They might just as well have been hit by machine-gun fire. To make it worse, some of those who walked through the water got on vehicles and rode for several hours without giving their feet any exercise. These were the main causes for the cold injuries, and it showed that we needed training. Before Korea, our troops did not receive wet-cold training. Most of the troops we are sending into arctic and wet-cold areas have been trained in the South.

We visited the units that had trained in cold-climate areas. In the Marine units that had trained in Greenland, the Id Infantry Division units that had trained in the mountains of northwestern United States, and the 7th Infantry Division units that had trained in northern Japan, not one man became a cold-weather casualty! Think that over. You cannot make clothing and equipment foolproof under all conditions, so we must train our troops. That does not mean a two-hour instruction period. It means living under actual wet-cold conditions. And living under those conditions is an acquired skill you can get only through training.

9. Command Action in Korea

Prepared for the Army Field Forces Commanders Preventive Maintenance Course, Aberdeen Proving Ground, 1952

Soldiers of the United States Army are issued large quantities of clothing and equipment in accordance with existing tables of allowances. The soldier stores some of them in his duffel bag, some in his cargo pack, and some in his combat pack. When the time comes to shake down to minimum essential equipment for his first combat, the average soldier is reluctant to part with many of the articles he has been issued. As a result, he attempts to carry on his back everything which will contribute to his comfort in the field.

The soldiers of the 7th Infantry Division were no exception, and they were overburdened when they landed at Inchon in September 1950. The inevitable soon happened: equipment was abandoned. The commanding officer of the 32d Infantry (Col. Charles E. Beauchamp) determined to do something about it. During the planning phase of a later amphibious operation in which his unit was to land at Iwon, Colonel Beauchamp limited the items his men could wear and carry to: helmet, complete with liner; cotton field cap, with visor; wool muffler; two sets of winter underwear; high-neck sweater; pile field jacket; M43 field jacket, with hood; a pair of wool field trousers; a pair of cotton field trousers; four pairs of ski socks; a pair of combat boots, fitted over ski socks; a pair of shoepacs, with two pairs of flat insoles; poncho; mountain sleeping bag, with case; cargo and combat field pack; cartridge or pistol belt; canteen, with cup and cover; first-aid packet, with pouch; toilet articles and insecticides; individual arms and ammunition: C ration (three meals maximum).

Colonel Beauchamp compiled his list after a consideration of what a soldier could carry and what was absolutely essential. Shelter halves, pins and poles, and intrenching tools were eliminated because the frozen ground would make them useless. Flannel shirts were omitted because of their binding qualities.

In a showdown inspection, Colonel Beauchamp collected all items in excess of his list and turned them over to his S4. With the concurrence of the division quartermaster, quantities of some items were retained. Among these were 2,000 suits of woolen underwear, 4,000 pairs of ski socks, and 2,000 pairs of woolen trousers.

A standing operating procedure was developed that established the various articles and combinations of articles to be worn. Experience had demonstrated that the combat boot was better than the shoepac for marching and climbing the rugged terrain; therefore, Colonel Beauchamp directed that combat boots be worn under these conditions. When the march ended, or a static situation developed, the shoepacs, with two pairs of ski socks and a pair of felt insoles, were substituted for combat boots.

The regiment initiated a training program to insure that all troops understood the layer principle of insulation. This was conducted by a wet-cold climate instruction team assigned to the 7th Infantry Division. Finally, Colonel Beauchamp directed that officers and NCOs make frequent inspections of their men to make certain his instructions were strictly obeyed. He placed particular emphasis upon the importance of foot care, including changing of socks at the conclusion of each march, and massaging the feet to restore circulation. Troops were also required to change underwear after each period of exertion, when the situation permitted.

The results obtained in the 32d Infantry were noteworthy. Wanton abandonment of equipment was practically eliminated; care and maintenance of clothing and individual equipment improved. The incidence of frostbite, frozen feet, trench foot, and other cold injuries was extremely light. Through experience, the regimental S4 further reduced his clothing stocks. In time, other commanders in the division adopted Colonel Beauchamp's methods.

10. Clothing Exchange

Lt.Col. Kenneth O. Schellberg, Quartermaster, 7th Infantry Division

We learned that the quartermaster's shower and clothing exchange was a great economy in spite of the additional equipment necessary to allow the men to bathe and to launder their clothing. The 7th Infantry Division began its clothing exchange in February 1951. Before that each man wore and carried two sets of clothing, and reserve supplies in the division held at least one other complete uniform per man. When the clothing exchange began, we collected all the duffel bags and limited each soldier to the clothing on his back plus a change of underclothing and socks. Clothing at the shower points and laundry equaled one half uniform per soldier. Thus the total number of uniforms per man dropped from three sets to one and a half.

Our quartermaster company drew its four shower units in Japan just before embarking for Korea, but we didn't establish a clothing exchange for six months. This delay was caused partly by inadequate laundry facilities. It was also a matter of selling the idea to regimental commanders.

There were many advantages to the clothing exchange system. It cut down the weight the soldier had to carry; it also eliminated duffel bags and the thirty-man detail in each regiment to guard and handle them. This increased our mobility. The cleaner clothing improved the hygiene of the troops, and the automatic exchange of clothing eliminated all requisitions below division. Exchange made possible early repair before shirts and trousers became unsalvageable, and it eliminated the old practice of mutilating Government property in order to get the supply sergeant to issue a new item. Reduced stocks also lessened the possibility of the enemy's capturing valuable supplies.

We learned that in combat there is no need to publish a shower schedule because company commanders preferred to send men to get showers whenever the tactical situation permitted. From experience we learned that the shower units should not be moved farther forward than regiment. Some regimental commanders tried parceling out the showers for several days at a time to each battalion. This made for time lost in moving, wear on equipment, and irregular treatment of the operators. Moving the shower into a battalion zone made it unavailable to most of the regiment; yet it was not always busy at battalion. It was easier to transport the men than to move the equipment.

The shower and clothing exchange was a great morale builder for the men. After an attack in which a regiment was unable to release men to get showers, we would augment its bathing facilities and see that every man could bathe and change within four days. Normally, however, the men had a shower once a week. Company commanders watched their men for signs of excessive fatigue and sent them to the showers when a relief seemed necessary. Often a shower and a hot meal at regiment were enough to restore a soldier's efficiency. If the fatigue were dangerous, the soldier could be sent to the regimental rest camp for a day or two of sleep, hot meals, and regular baths. This was an excellent way to prevent combat fatigue.

11. QM Service Center No. 3

Lt. Bevan R. Alexander, 5th Historical Detachment. (Narrative based on interviews of the following personnel of Service Center No. 3: Capt. Alfred G. Rollins, Capt. Henry L. Cody, Lt. Dewey Washington, Jr., and Sgt. Carrol L. Veach.)

During World War II, U.S. Fifth Army in Italy developed what became known as the quartermaster service center. The service center is a grouping, in one area, of separate quartermaster units that provide related services. After World War II, no service center was established until the spring of 1951, when Eighth Army activated one for each of its corps.

The first to begin operations was Quartermaster Service Center No. 3, serving X Corps. From Eighth Army were assembled two and one half platoons of the 549th Quartermaster Laundry Company; one platoon of the 505th Quartermaster Reclamation and Maintenance Company; one section of the 821st Quartermaster Bath Company; and the 580th Quartermaster Office Machine Repair Detachment. Officers of the several units took over duties in the service center, with the commander of the laundry company (Capt. Alfred G. Rollins) as officer in charge. The officers and men of each unit cooperated so successfully that, to all intents and purposes, the service center became a regularly constituted unit.

The service center was laid out in a compact area near a stream. The laundry was close to the repair and maintenance platoon. The clothing exchange of the bath company was near the laundry. Mess facilities were centralized but apart from the operations area.

The most important service of a center is laundering. During the first nineteen weeks of our operations (1 May to 8 September 1951), the laundry averaged 13,617 pounds of wash daily, for a total of 1,968,730 pounds. Thus, 1,462,890 individual items were cleaned.

The wash is normally received in bulk, laundered, put in stock, and reissued. When a unit or individual brings dirty clothing to the laundry, an exchange is made from the company's stocks. Trucks bringing soiled clothing arrive at the laundry's check point. Here a checker counts the individual pieces. The agent receives a turn-in slip which he takes to the nearby stock tent and exchanges for an equal number of items of clean clothing.

The clothing is exchanged rather than returned because of the time lag and accounting. Since all clothing is of the same design and material, sizing is the only problem. In addition to the bulk laundry, a small amount of bundle work is provided for units or individuals near the service center.

At the laundry there are five separate washing machines. Each section contains a washing machine and a dryer, which are individually mounted on trailers. Dirty clothing is sorted and placed in front of each of the washers. After loading, it goes through a nineteen-minute cycle, during which it is completely washed and 75 per cent dried. Then the clothing is placed in a tumble dryer for eight to ten minutes. The entire laundering process lasts less than a half hour.

The dry clothing is next taken to a nearby inspection tent. Here each item is checked to determine whether it should be placed in stock, repaired, or discarded. If a piece of clothing needs repair, it is sent to the reclamation and maintenance platoon. The reclamation and maintenance platoon repairs clothing, canvas and heavy textiles, and shoes. A secondary function of office-machine repair is handled in conjunction with the center's office-machine repair detachment.

The clothing section is equipped with fourteen standard textile sewing machines for use in repairing uniforms. All clothing received is inspected to determine if it can be repaired. Most of the clothing received comes from the laundry, but some repair work is submitted directly by units.

The textile section is equipped to repair tentage and other heavy textiles. The section uses two heavy-duty textile-sewing machines and tent-repair kits, which contain rubber cement, glue, and patches. .

The shoe-repair section is equipped to repair all types of service footwear. This section repaired 9,926 pairs of shoes and boots in nineteen weeks. Footwear is delivered to the section by the agents who bring laundry to the center. If

the boots and shoes can be repaired, they are processed and returned. If they cannot be repaired, they are returned to the sender for salvage through the regular supply channels.

The office-machine repair detachment repairs all types of office machinery. The typewriter is the machine most frequently repaired because it is the most widely used. However, almost anything may come in for repair—adding machines, calculators, mimeograph machines—and the detachment has even repaired a time clock.

The greatest problem has been replacement of parts. Until the fall of 1951 the typewriter-repair kits received from the Zone of the Interior were not much use. Often only two or three parts of any of the kits were needed. For example, in one manufacturer's kit only the variable linespace clutch and the line-space-wheel assembly could be used, although the kit contained a hundred separate typewriter parts. This was more or less true of other kits. A change in the method of procuring replacement parts has been instituted, and all replacement parts are now requisitioned individually. Typewriter platens have never been available in Korea, however.

Expediency has proved the best way to obtain parts for office machines. Damaged machines have been cannibalized, and the machine shop of the reclamation and maintenance platoon has manufactured some unobtainable parts.

The heavy dust, the high humidity, and the extremes of temperature have reduced the effective operation of office machines, but the greatest unkeep problem has been neglect. "People just don't take care of their machines," said Sgt. Carrol L. Veach. "Sometimes I'll clean up a machine and tell the person who comes for it to keep it covered. They often reply, 'Why should I worry about it? It's not mine."

Another problem for the repairmen has been the misguided effort of the novice repair mechanic. This character, when his machine begins to work improperly, takes it apart. He usually has it entirely disassembled before it dawns on him that he cannot fix it. Then, in its still disassembled condition, he brings it to the detachment, losing about half the parts along the way. Sometimes such a machine can be repaired, but often it can only be used as a source of parts.

Showers and clothing exchange are provided for troops near the service center. The single shower unit is capable of serving 4,400 men in a tenhour day. A man who wants a bath need bring only himself. The exchange provides clean clothing, hot water, free towels, soap, and even shaving cream and razor blades.

12. Pukehon Cemetery

Major Jacob W. Kurtz, Graves Registration Officer, 7th Infantry Division

The 7th Infantry Division did not have a graves registration section in Japan, and one had to be created before we made our assault landing at Inchon. I received ten men from various sections of the quartermaster company—none of whom had had any burial experience. I organized the section with a section chief, two clerks, four body processors, two supervisors of Korean labor, and a driver. Although these men developed competence in their work, one sergeant was disinterested and one other soldier was an Army misfit.

Before leaving Japan I assumed that casualties might be high and that burial items might not be supplied for several months. I requisitioned five thousand mattress covers and large quantities of identification tags, burial forms, temporary grave markers, personal-effects bags, burial bottles, a fingerprint kit, and an addressing machine. The supplies were carried jointly by the infantry regiments (as evacuators of bodies) and the quartermaster company.

At Inchon the graves registration section learned how to receive and process bodies. No channel existed for evacuating bodies beyond division, so we shared a cemetery opened by the Marine Corps. Our large stock of burial items came in handy here, for the marines exhausted their supply and called on us for more.

At Inchon we learned not only from our own mistakes, but also from those of the marines. The cemetery was located only 250 yards off the main supply road and in view of all who passed. In the first days it was not possible even to screen off the bodies awaiting burial. I believe this affected many who passed.

In October 1950 the 7th Division made its landing at Iwon. Here the division's casualties were evacuated directly to Navy craft and the graves registration section did not operate until the division headquarters was established at Pukchon. Our section contained seven of the ten men who had been at Inchon, and we were familiar with our duties.

We remained at Pukchon, even though division headquarters moved to Pungsan, and the infantry regiments were scattered from the Yalu River to Chosin Reservoir.

Whenever possible, a division evacuates its dead to an army graves registration detachment. At Pukchon we did not have this army support. On approval of the division quartermaster (Lt.Col. Kenneth O. Schellberg) we established a division cemetery. I reconnoitered the Pukchon area and quickly found an adequate site, a half mile south of town and a half mile from the MSR. The dry, rocky soil had good drainage, and the area was not under cultivation.

In Pukchon my section was quartered with the other quartermaster troops. We had a clerical office with the quartermaster company and an obscure building nearby for processing the bodies. Our operation was so quiet that few people noticed it.

When a body arrived we encased it in a mattress cover, if this had not already been done. We checked to see that each body had an emergency medical tag, and, if it did not, that the unit of the deceased supplied one. Fortunately, every American body received at Pukchon was identified. We then checked the personal-effects inventory to see that everything listed was present, and made an additional search to be sure no effects had been overlooked.

We hired a dozen laborers to dig graves. While a ten-man section is adequate for operating a division graves registration point, it is inadequate for operating a cemetery. The Koreans were employed voluntarily and worked faithfully at a wage of two canteen cups of polished rice daily.

We opened our cemetery on 4 November 1950. Four or five open graves were maintained at all times, and no body was taken from the processing building to the cemetery until all preparations were complete. At the cemetery we maintained a pyramidal tent to protect the crews against the weather, and to screen the bodies during the brief period between their arrival and burial. No equipment was ever left in the tent and no guard was left in the area at night.

When a body arrived it was lowered into the open grave, face up. Then one of my men would reach into the mattress cover and place the burial bottle, containing a report of interment, under the left arm. The grave was closed and a temporary marker placed.

Unless a chaplain happened to be present when the body was interred, there was no ceremony at that time. Sometime during the day of interment, however, a chaplain of the soldier's faith came to the grave for a short service. If the soldier's faith was unknown, chaplains of all faiths visited the site. Several times we had a ceremony in honor of an individual, but in each case it was after the grave was closed. A memorial ceremony was held each Sunday.

As division cemeteries are temporary, regulations do not provide for any beautification. In digging graves our laborers turned up many stones. With these we built a cemetery wall. Three flags flew over the cemetery: the United Nations color at the front entrance, the United States color in the center of the cemetery, and the Republic of Korea color toward the rear.

We closed our cemetery about 1 December 1950, as the division began its march toward Hungnam. During November we had buried 50 Americans and 24 ROKs. Sketches of the location of the cemetery and a register of those interred were forwarded to the Eighth Army's graves registration section.

13. Repatriation of American Dead

Lt. Bevan R. Alexander, 5th Historical Detachment. (Condensed from an article based on information supplied by Lt. William F. Wurz, Sgt. James H. Deisenroth, and Cpl. Paul R. Imwalle, Id Quartermaster Company.)

The evacuation of the dead resembles other quartermaster operations—in reverse. Bodies of the dead are brought from their units to a division graves registration point, then evacuated through corps, army, and theater installations to the United States.

The remains are processed at a division collecting point and forwarded within twenty-four hours to a corps collecting point. Accompanying each body is an emergency medical tag, and with each shipment is an evacuation list. The list serves as a letter of transmittal.

At corps the remains are forwarded to the army's collecting point. Here the fingertips of the dead are embalmed and fingerprints are taken. The bodies are then packed in ice and shipped to Pusan, then to Japan. In Japan, unidentified bodies are examined by experts in anthropology, chemistry, and dentistry. Careful records are kept in hope that identification can be made. The bodies are totally embalmed, placed in military caskets, and shipped to the United States for burial either in a U.S. military cemetery or near the soldier's home. Under present policy, no bodies are being permanently interred either in Korea or in Japan.

Personal effects follow a similar path. The property of persons killed, wounded, or missing in action, those who die of natural causes, and those who are evacuated through medical channels, is divided into two classes. Class I includes trophies, keepsakes, and items of sentimental value. Class II items are those of specific value.

An inventory of the property of each casualty is made by his commanding officer or some other officer. Every item is listed—even if it consists of only two pennies or fifteen pictures. If the money belonging to the individual is worth \$4.99 or less, it is sent with his effects, regardless of whether it is in dollars, scrip, Avon, or yen. If the money is worth \$5.00 or more, it is converted into a U.S. Government check.

The effects of a person killed in action must be forwarded to his division's personal effects section, usually within eight days. For a person missing in action, the time is twenty to thirty days. From the division's personal effects section the articles follow channels to the rear until they reach the Effects Center at Kansas City, Missouri. Here they are checked again and arrangements are made for transmission to the next of kin.

14. Supply Lessons

Lt.Col. Charles R. Scherer, Assistant G4, 7th Infantry Division

Korea made several things very obvious. We had forgotten many of the lessons of mobility and small detachment operations learned in World War II, and we had to relearn them. We found that units must expect to serve more troops and work with less corps and army support than Quartermaster Corps doctrine prescribes. Above all, we learned about distance.

The occupation of Japan prevented normal training. Understrength battalions and regiments were scattered in small garrisons around the islands. Regiments maintained separate posts and S4s operated the combined technical services. Commanders forgot that division would normally provide most of their supplies and services. Once the dependence on S4s was formed, it was hard to break.

In Japan some of our technical services were performed by Japanese civilians. This was necessary because of troop shortages and the lack of qualified Army technicians. Our own men were thus prevented from getting the necessary training and experience. This, coupled with inadequate SOPs and field training, prevented the technical service troops on occupation duty from being ready for combat.

The 7th Infantry Division was the last of the occupation divisions to leave for Korea. As the other divisions left, we were levied for personnel and lost many of our key officers and NCOs. This didn't hurt the service troops as much as it hurt the infantry and artillery, but it did lower the efficiency of our division. We were preparing to go to Korea with a strength of about 9,000 when, about three weeks before our departure, we received 10,000 American and 8,000 Korean replacements to integrate into our division.

The Koreans we received looked as though they had been herded together to get them off the streets of Pusan. They spent their first week in Japan in quarantine, since they had to be deloused and cleaned. Then we had to equip them completely. Japan Logistical Command did a wonderful job of getting the articles of clothing and equipment to us, but it was a real problem to teach the Koreans how to live in a camp.

They could not speak English and we had few interpreters. Our instruction was given primarily by sign language and making simple motions for them to watch and imitate. We had a long way to go in two weeks. These men had no idea of sanitation, let alone the more complicated activities of military life. Yet high-level policy dictated that we treat them as our equals in every respect. They were to receive the same clothing and equipment, the same treatment, the same rations. Later, they even had to have chocolate bars and "comic" books!

We Americans have much to learn about handling troops of the so-called backward nations who may come under our control. They do not understand democracy, our ideals, our methods of discipline, and the forces that motivate our actions. The Koreans have not lived as we have, and our easy-going discipline did not work with them. In their own army discipline was strict, arbitrary, and often brutal. They had been reared under such discipline and seemed to understand no other kind.

The integration of Koreans was unsatisfactory. They ate our rations, rode our trucks, used our supplies. But except for menial tasks, they were a performance cipher. We lost a great deal of mobility because of our overload of supplies. Our men had too much equipment in Japan and they did not strip down to prepare for combat. Regiments committed the same error. Used to depending on their own S4 sections for garrison supplies, they continued to carry large stocks of clothing and equipment in their own trains. S4s made "deals" in Pusan and carried their acquisitions around in their trucks. At Pukchon we found one regiment hiding three hundred cases of C rations among the men's duffel bags, while the division quartermaster was trying unsuccessfully to obtain operational rations! When the 31st Infantry was overrun near Chosin Reservoir, it lost ten to twenty truckloads of clothing. Critical types of ammunition would be concealed by one unit while greatly needed by another.

During our first six months in Korea, the infantry regiments did not trust the ability of their divisional service units to keep them adequately supplied. Occasionally a regimental commander would test our ability to produce. One regimental commander, while advancing to the Yalu River against moderate resistance, insisted on 50 tons of 4.2-inch mortar ammunition. We figured he didn't need that much, but we piled it right in his front yard so he could see we could deliver it. Unfortunately, we could not evacuate it when we withdrew, and it had to be destroyed. The artillery battalions near the Yalu River requested two extra basic loads of fire to be stored in a division ammunition supply point, and they gave strong arguments for it. I had mental reservations about getting so much heavy ammunition so far forward when resistance was light. When the fighting around Chosin Reservoir forced us to leave our exposed position on the Yalu River, this ammunition too had to be destroyed.

All the hoarding and all the demands for extra supplies took extra transportation at the very time such great operating distances put vehicles in shorter supply. When we first came to Korea, division headquarters could move in 25 trucks, but soon it took 50. Everyone had acquired a Korean desk and chair. Regiments called for 200 additional trucks when they made a move, although movement tables show they should have been able to motorize themselves with a 90-truck augmentation.

Lest it seem our regiments alone were guilty of poor supply discipline, I will point out that some of the patterns of waste were established at the top. Higher headquarters sometimes caused us to overload our units. Once, while inspecting a unit, a general officer found a man who had only two pairs of socks. He ordered that every man in the division carry six pairs! We had to issue these over the protest of commanders who knew that their men would soon throw away the extra pairs. Colonel S. L. A. Marshall (in The Soldier's Load and the Mobility of a Nation) is right in his statement that when you overload a soldier you decrease his efficiency. Yet we had pressure in 1950 to draw every piece of impedimenta that the Army designed.

In Korea there were some increases in our loads that were very necessary and justifiable, such as tents and stoves. The extreme cold of northern Korea made it absolutely essential to have shelter throughout the division. It was necessary that each infantry platoon have a squad tent and stove so it could rotate its men and allow them to get warm. But enough tents for a division certainly complicated our transportation situation.

The distance from army supply dumps to us made it necessary for quartermasters to carry more clothing, shoes, mess gear, stove parts, and other supplies than normal. We tried to get permission to store these stocks in boxcars on sidings, but this was refused.

We usually think of the company or platoon as being the smallest work unit among service troops. In Korea we learned the need to operate in smaller detachments. The quartermasters often had to maintain four or five class I and class III supply points, and maybe two II and IV points. It took a lot of detachments to accomplish this. Typically, one officer and a composite squad would run a small distributing point. The ordnance company sent semipermanent detachments to the regiments because of the distances separating them. Here was a place where leadership was necessary on the part of junior officers and NCOs. We often hear of the need for leadership among combat troops. It is no less necessary among service troops.

The rations in Korea were out of this world. I had more fresh meat in Korea in a month's time than I received in three and a half years of Pacific service in World War II. We also had fresh vegetables in limited quantities. The food was so good that we got few complaints from commanders except about an occasional shortage in Worcestershire sauce, catsup, or black pepper! I doubt if we could have maintained this quality of food were we operating on the scale of World War II.

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15. The Failure of Support

Major James W. Spellman, Executive Officer to the Quartermaster, 24th Infantry Division. (Condensed from a statement written on 15 November 1950.)

From the first day they spent in Korea, members of the 24th Division's quartermaster section have had mixed feelings about quartermaster support. We remember with pride the difficult being done immediately, and the impossible taking a little longer. Then we shudder as we recall how often we failed in those hectic days of defeat, victory, and stalemate. We don't like to remember how many times we have had to turn down requests. "How about the mantle for my Coleman lantern?" "How about a generator for my field range?" "How about . . ." stencil paper, GI soap, trousers, tent poles, paper clips, underwear, cigarettes?

We seldom had to make excuses for lack of rations or gasoline. But yeast, baking powder, shoestrings, toilet paper, and forks were not available. It has been weeks since many of the small but very important items have been received. Shoes are tied with scraps of cord and kitchens are using toilet soap received from home by mail. I do not doubt that hundreds of soldiers are writing home for items of quartermaster issue because they are not available, or because they come more quickly by mail. After all, our requisitions are often still unfilled after a month of waiting.

From the tragic days in Tacjon we have sensed a passive indifference to our requirements for individual and unit equipment. In the heat of summer we begged for even salvaged fatigue jackets and trousers to be shipped from Japan to cover our semi-naked soldiers, for salt tablets, and for mess kits to replace those lost by our troops as they withdrew over the mountains, carrying only their rifles.

It was understandable that supply confusion should exist at first. But I do not understand why the supply authorities should resist our legitimate requests with criticisms that we were using too much. How were we using too much? What known yardstick of modern U.S. logistics could be applied to this long series of defeats and withdrawals?

From the first telephone request—ignored—for minimum clothing and equipment, through the present requirement of six copies of every requisition, we have felt the antagonistic, unsympathetic reaction on the part of Eighth Army's minor quartermaster personnel. They have minutely questioned every item of even emergency requirements, and deliberately delayed supplies while they checked and rechecked requests against noncombat-type statistical status reports. There has been an almost comical questioning of requirements, delving into the microscopic details of why a company, outnumbered 30 to 1, did not evacuate kitchen equipment under small-arms fire. A directive stated that when damaged equipment was not submitted for exchange, a formal certificate must be submitted giving all details of loss.

So long as Pusan remained within truck distance, it was possible to bypass approving authorities and go directly to the mountains of supplies in the port. Often we obtained supplies in Pusan that were impossible to get through the red-tape maze of proper channels. Personnel in charge of warehouse operations frequently begged us to take supplies so they could make room for those being unloaded from ships.

After we crossed the Naktong River, efforts of the army quartermaster to supply class II and class IV items to the 24th Division were conspicuous by their absence. It is true that great efforts were made to supply class I and class III items, but it only made the indifference to II and IV more apparent. Even now, if a unit is willing to send its trucks 230 miles to Ascom City, or 400 miles to Pusan, supplies can be obtained. But the price in broken springs and deadlined trucks is prohibitive.

As the drive passed Kaesong, Pyongyang, and points north, frantically worded requests to Pusan awaited the opening of a shaky rail system for delivery. On 10 November, the 24th Division had just completed a forty-mile withdrawal of its forward elements. The quartermaster section, then at Sukchon, received a placid notification of a

boxcar of class II and class IV supplies—complete with car, engine and train numbers, and hour of departure from Pusan on 9 November—destined for "24th Division, Waegwan." Our rear echelons had cleared Waegwan nearly two months earlier.

A long time would be required to list the major deficiencies in our supply line. In the prosecution of a war the lack of a generator for a field range is not vital. But the result of poor meals is lowered morale—which is vital. When repeated supply failures occur, when indifference is shown, troops often become discouraged and indifferent. Supply failures at this level cost men their lives.

Logistics: The Past is Prologue

ERIC A. ORSINI

In the plethora of initiatives on efficiencies, some favorite buzz words are two-level maintenance, outsourcing to original manufacturers and just-in-time inventory. The judgment is that the infrastructure is bloated, systems are archaic and we are living in the past. These charges are not coming from battle-hardened commanders but from industry representatives, think tanks and academia. We "loggies" are con-stantly berated by business community neophytes to look "outside the box." The problem is some of us dinosaurs have "been there-done that" and learned a lesson or two.

I am reminded of a 1950s Center of Military History study to gather lessons learned about World War II German tank maintenance. European Command selected a German general, who commanded an armor regiment on the Russian front and who later was a Panzer corps and a Panzer army chief of staff, to head the study. The German army had developed the blitzkrieg, where a highly mobile tank force would crush the enemy's static line along paths of least resistance, allowing the infantry to seize and hold terrain. The Germans also had an 88-millimeter armorpiercing round, STUKA dive bombers and silent U-2 submarines. The German military was the high-tech force of the 1940s.

The German force was best exemplified by the Panzer units that engulfed most of Europe in a matter of weeks. The units had their own efficiency programs, and one of their initiatives was two-level maintenance combined with just-in-time inventory. They developed a centralized system in which only minor repairs would be performed in the field.

Tanks that sustained more serious damage were to be returned to the original manufacturer in Germany.

During the Polish campaign in September 1939, the system, field-tested under combat conditions, worked well with few difficulties. However, the campaign was of short duration, there was little effective resistance and little if any combat damage. The French campaign from May to June 1940 also went reasonably well except that just-in-time inventory was augmented with a spare parts depot in northern France, and the number of organic maintenance personnel was increased. The Balkan campaign, also of short duration, convinced the Germans that the two-level maintenance system was a success and should be implemented.

For the Russian campaign, the Germans intended to apply a slightly modified, but essentially identical, system of tank maintenance. Most of the tank repairs were still to be performed in Germany. However, each of the three army groups in the Russian Theater was to have a spare-parts depot that stored critical parts, thereby tailoring an approach between just-in-time and just-in-case. Also, improved maintenance vehicles, recovery vehicles and better shop equipment were issued to the maintenance units in the field. No further planning was considered necessary. Both military and political leaders assumed military operations would reach their climax in autumn 1941 and that most of the armored forces would return to Germany before winter. Forces remaining in the Russian Theater were to be withdrawn from action and refurbished in suitable areas during the winter months.

Once the Russian campaign began, the need for tank maintenance installations and the demand for spare parts also increased. German tank losses in Russia were far heavier than during preceding campaigns. For the first time, large numbers of tanks were put out of action by enemy fire and mines. With operations occurring over great distances under unusual conditions, such as extreme heat and dust in summer and sub-zero temperatures in winter, the tanks' mechanical operation was greatly affected, resulting in an unexpectedly high attrition rate. Tank maintenance services were handicapped because only the larger towns contained buildings that provided even minimum shop and billeting facilities. Despite strenuous efforts, maintenance personnel could not cope with the ever-increasing volume of repair work.

The German army's requirements for supplies-particularly ammunition, fuel and medical supplies-exceeded all expectations. Inadequate road and rail nets, plus an inadequate logistics infrastructure, made it impossible to support the rapidly advancing armor columns. Since the Germans captured little rolling stock, they had to convert railroad tracks from the wide Russian gage to standard European gage. Moreover, the Russians demolished most railroad bridges and locomotive maintenance shops during their withdrawal. The unsatisfactory rail transportation situation had a disastrous effect on the tank maintenance system at a time when the number of disabled tanks reached an all-

time high. Obviously, the two-level system of maintenance was no longer practical, and major changes had to be introduced without delay.

Given the lack of trained organic maintenance specialists and the absence of a transportation and supply infrastructure, such a comprehensive reorganization program could not materialize overnight. It was not until late 1942 that a new system became operational-and it was only marginally effective because new problems developed.

The Tiger tank, the German answer to the Russian T-34, was rushed into action in autumn 1942. Within a short time almost all the new tanks were sidelined because of parts shortages. The Germans had failed to anticipate the high failure rate and had not made provision for sufficient parts.

A similar mistake with even farther reaching consequences occurred with the introduction of the new Panther tanks. In a desperate attempt to speed up production, the Ministry of Armaments had ordered mass production of the new model before it had been properly tested. Early in 1943, the first Panther tanks arrived in the Russian Theater and were immediately committed. Almost at once major defects in design and production, particularly of the steering and control mechanisms, were discovered. The result was that all 325 Panther tanks were returned to Germany for complete rebuilding. To perform the necessary work, a special tank-rebuild plant was established near Berlin. However, by the time the initial deficiencies had been corrected, the engine proved to be inadequate. It was not until autumn 1943 that a fully satisfactory engine became available. Under these circumstances it was hardly surprising that most of the Panther tanks shipped to Russia arrived without sufficient spare parts. Many Panthers were lost because of the shortage of some elementary spare part or because they could not be repaired in time.

The Center of Military History, with its German Report Series, provides a couple of lessons learned. For example, prepare for the worst-case scenario and do not shortchange logistics. Wars are won or lost depending on the degree of support. Factor in supportability of new systems up front. Though the initial cost may seem high, doing so will save operation and support (O&S) costs after fielding. Mandate supportability equal with cost, schedule and performance. Continuing supportability as a subset of performance exacerbates the O&S problem.

For those who would attribute these comments as the product of a Cold War warrior (which is true), remember the Department of Defense's core competencies-to organize, train and equip primarily for prompt and sustained combat incident to operations on land. We all agree that we must take advantage of the best business practices, maximize efficiency, minimize redundancy and seek the best value. But let us not veer too far off base and overly skew our projections on experience in Grenada, Panama, the Persian Gulf, Haiti or Bosnia-all of which were of short duration, produced few casualties and caused minimum combat damage. War plans must anticipate the worst case-a lesson the German general staff learned too late. In Supplying War, Martin van Creveld wrote: "Among the many thousands of books that have been written about Hitler's Russian adventure, there is probably not one that does not, at some point, attribute the Wehrmacht's failure, in part at least, to logistic factors."

History is replete with military failures because of logistic inadequacies-Hannibal's crossing of the Alps, Rommel's African campaign, Patton's drive to Hammelburg. Surely we are forewarned. In the 1500s, Niccolo Machiavelli stated: "Whoever has not taken proper care to furnish himself with a sufficient supply of provisions and ammunition bids fair to be vanquished without striking a stroke." Or, to put it another way: "An alligator with no tail ain't nothing but a jaw full of worthless teeth." *MR*

Logistical Planning for War ROBERT B. CARNEY, VICE ADMIRAL, US Navy

From Our October 1948 Issue . . .

LOGISTICAL PLANNING FOR WAR IS a vast effort involving the Joint Chiefs of Staff, the Security Resources Board, the Munitions Board, the Research and Development Board, the Chief of Naval Operations' strategic and logistical planners, the bureaus, the field commands, and the Army and Air Force counterparts to the Navy agencies I have mentioned. Be of good cheer--I shall make no attempt to give any all-inclusive coverage to the subject. Elsewhere, you will read or hear competent discussions on the various specialized aspects of logistical planning; so, today, I shall content myself with acquainting you with some of the broad problems which constitute a challenge to those who must shape logistical policies in the national military establishment. If I digress from time to time, it will be in the hope that by so doing I may here and there leave a thought worthy of your consideration, as officers interested in acquiring, fostering, and furthering knowledge of logistics.

Last year, as the first class in logistics was getting under way, I expressed the great satisfaction I felt on that occasion. Today, I know an even more profound satisfaction in which there is a good leaven of relief that so many obstacles have been overcome in launching the Logistics Course, and confidence in the assured preservation of the Navy's hard-earned logistical know-how.

But the launching is only the beginning of the voyage. The lessons of the past, however well learned, will not entirely suffice for the fluid and mercurial times that are upon us and ahead of us. History alone might lead to false conclusions, and history's basic principles can easily be confused with history's special lessons. The bony framework of truth will often be difficult to discern through new garments and in the tricky lighting of enthusiasm or prejudice. The magic of the future must be weighed against the proofs of the past, for the new and fantastic of today frequently become tomorrow's commonplace. So there devolves a special burden of imaginative, yet practical, foresight on the planners of today.

"Imaginative, yet practical"--a not-too-common combination, but one which is especially needed in logistical planning. "Practical" encompasses technical competence, and to the qualities of imagination and professional competence must be added a capacity for work, for there is no shortcut to excellence in logistical planning.

All of these necessary attributes can be summed up under the heading of clear, energetic, and articulate thinking.

Clarity of thinking is a priceless commodity in our profession or in any other great and complex enterprise. Its intrinsic value is established both by its rarity and by the dividends it yields to the stockholders. Many years ago, a group of far-sighted naval officers turned to the formal mechanics of logic as a method of insuring the evaluation of all pertinent factors in the solving of our problems. You are all familiar with the results of that project, which became second nature to most of us; I refer, of course, to the time-honored order form and method of estimating the situation. From time to time, we have elaborated on the format, but the basic principles are still immutable and provide the best known structure for building toward sound decision.

However, even with a prefabricated framework available to us, there is always the danger of fallibility inherent in ignorance or disregard of factors which should properly be considered. Our system of military reasoning can be likened to the business machines and electronic computers in that the final answers can be no better than the statistical input; the complexities of modern logistics do not alter the principles of reasoning, but they do vastly increase the difficulty of listing all pertinent factors. The Naval War College is now firmly committed to a project which can do much toward instilling a general understanding of the proper approach to this difficult business of logistical planning.

Expanding that thought, we come to another essential strength element in which the Naval War College has a profound and influencing interest: indoctrination.

The great strength of our Navy in earlier days lay in the fact that we had a relatively small, compact, like-thinking officer corps which could be depended on, from top to bottom, to advocate and pursue actions which in the final analysis would support our policies, plans, and programs. Our leadership, our size, and the circumstances of the

times all conspired to produce this fortunate result; the situation today in an expanded, heterogeneous, and more complex Navy is such that many serious obstacles have been raised to militate against the re-establishment of that splendid and necessary spiritual and mental cohesion.

In order that I may indelibly impress on you the need for and importance of sound universal indoctrination, let me go back to a day in October, 1944. Admiral [Thomas C.] Kinkaid and his Seventh Fleet were under General [Douglas] MacArthur's command; the Third Fleet, under Admiral [William F.] Halsey's tactical command, was a component of Admiral [Chester] Nimitz's Pacific Ocean Areas forces; the submarines of the Pacific Fleet were positioned by remote control from Pearl Harbor. The sum total of the American naval forces in the Philippine Sea area constituted the greatest assembly of naval might the world has ever seen or may ever see again--far greater than the strength which the Japanese Navy could muster in that area. And yet, mark you, there was no effective single command agency which could weld all of our naval forces into a single fleet under a single command; Admiral Nimitz did not have that authority, nor did General MacArthur; and no higher echelon could or would step into the breach. The details of the second battle of the Philippine Sea will keep you, and the student generations to follow you, occupied for decades to come. Obviously, there were many things done which could have been done differently in the light of hindsight; obviously, there were things left undone which could have been undertaken to great advantage. But to me, in retrospect, the vital and important thing is that, although not unified under a single authoritative command, all of those separated commanders were thinking in sufficiently like terms to construct a mosaic of tactical victories fitting together into a greater mural of strategic victory which effectively terminated Japanese sea power. There were gaps in communications and gaps in mutual understandings among the commanders, but the great principles of sea power had been inculcated in all of those commanders and were literally second nature to them, so that even without authoritative coordinating command, they instinctively moved in directions which were basically sound. Some critics have said that disaster was narrowly averted--we can not concede that: the "ifs" of the critics are too improbable if one understands the profound basic indoctrination that actuated Admiral Nimitz, Admiral Halsey, Admiral Kinkaid, Admiral [Jesse B.] Oldendorf, Admiral [Charles A.] Lockwood, and all of those who derived their own tasks and contributed their own parts to the over-all victory. The War College played an important part in that indoctrination--and the War College must continue to exercise leadership in channeling Navy thinking along indoctrinated lines which will meet tomorrow's innovations and complexities.

I have stressed certain mental attributes and emphasized sound indoctrination, because without them the achievement of good logistical planning is impossible.

Your reading will have highlighted the evolution of logistical planning prior to World War II and during the war years, and you are aware of the evolutionary gropings that characterized the period immediately following the beginning of hostilities. I shall therefore waste no time on the past, but will sketch a vignette of the Washington logistics workshop as it is today in Year One of unification.

Let me say first, that the title of my discussion today--Logistical Planning for War--is not merely academic. Regardless of the strivings of men of good will, powerful national pressures are still being exerted in furtherance of national policies; nations still seek and use coercive devices for imposing their national wills upon others. Even the most hopeful and altruistic person must realize that we are being pressured from without and within, by unpeaceful methods, to bend our will to conform to other views; this pressuring, so far, has not involved shooting or the overt use of force, but we are sitting on a powder keg which could be ignited by a careless spark. The recent governmental and congressional record of action is prima-facie evidence that the nation recognizes the danger of war and is strengthening its defenses. Therefore, I say that the logistical planning which we are doing today is in every sense logistical planning against the tragic contingency of war, even while it is our earnest hope that diplomacy, firmness, and our latent power may serve as deterrents to another holocaust.

The genesis of our security thinking and the sequence of planning events are, although altered in the detail by unification, essentially the same as in former years: national objectives are weighed against national capabilities—suitable strategic plans are drawn and their feasibility tested and the ultimate plan is shaped to conform to our national capabilities.

The formulation of the National Security Act of 1947 was largely predicated on the need to be able to do those things more efficiently at the highest government level, and I firmly believe that the creation of the [National]

Security Council and the Security Resources Board, together with the staff agencies of the Secretary of Defense, has provided a mechanism which will enable us to make a far more accurate estimate of our national needs and capabilities than was ever possible before.

But here is an interesting point: unification has complicated the job for military planners rather than simplified it. Formerly, each service derived its own statement of its own needs and passed the buck to the Bureau of the Budget and the Congress for decision. Now, however, the military planners are confronted with the necessity for presenting a mutually reconciled recommendation, arrived at within the military establishment. Needless to say, strong and enthusiastic proponents of the various arms and weapons are often in disagreement and, therefore, I say again that unification has increased the burden and complexities confronting the military planners.

The recent supplementary appropriations, the passage of draft legislation, and other legislative and executive actions clearly support the military belief that our defenses need strengthening, and clearly reflect the popular acceptance of that thinking. Consequently, I am violating no confidence when I say that we are building up toward a goal of greater strength: nor am I violating any confidence when I state the obvious truism that we have calculated to the best of our ability the intent and capabilities of those who may well be inimical to American hopes and ideals.

Having faced the reality that armed conflict is a dangerous possibility in today's surcharged atmosphere, the next question is: How and where shall we fight if conflict is thrust upon us?

Unfortunately, a peaceful nation without aggressive objectives must wait for the first blow to fall, and can not surely select, in advance, its initial area of conflict and its initial objectives. We are, therefore, forced to a position of watchful waiting, and to the maintaining of forces and the formulation of plans which will care for every reasonable contingency. Possibly, we can eliminate some geographical areas as possibilities for the enemy's early use; nevertheless, we must be sufficiently flexible in our thinking and preparations to weather the first unpredictable squall, and enable us to build up toward a winning offensive. We must at least have some agreed-upon concept as to the general scheme of waging war. It should be noted here that radical changes from the broad concept will surely involve radical changes in production schedules, which, in turn, take time. And right at this point comes the first impact of logistics on our broad military thinking.

It is a matter of public knowledge, through the medium of the press, that the Joint Chiefs for a long time could not agree upon a general plan of action. Nevertheless, the need for procurement planning and mobilization planning was so urgent that the three departments initially proceeded on a unilateral basis to derive their own missions and tasks and to translate those missions and tasks into a statement of requirements and end products, in order that the Munitions Board might canvass industry as to our ability to meet the military demands. In the Navy Department a strategic plan was evolved together with a statement of necessary forces and desired phasing for reactivation, mobilization, and the initiation of offensive operations. These requirements were, in turn, translated into procurement items and schedules, and, concurrently, the logistical feasibility of the strategic plans and requirements were subjected to test. Aside from any impact on industry which the requirements of the Army and the Air Force might have, it became apparent that we in the Navy had set our sights too high, and it became necessary to inform the strategic planners of the forces and equipment which could actually be made available on a phased schedule after the outbreak of hostilities. This statement of bold fact automatically places restrictions on Navy strategic planners, and brings home the fact that logistical feasibility is an inescapable control.

Each of the other services must go through the same process--and yet, even when they have done so, the logistical planners still will lack the refinement of directive which they need in order to finally firm up the difficult and detailed business transactions necessary to fulfill the operator's "what, when, and where." The second-run refinements of the three services must again be evaluated by the Munitions Board in terms of industrial capacity, and by the Resources Board in terms of the relative needs of the supporting civilian economy, and of the requirements of our potential allies. If industry can not meet military requirements, even as revised downward, then the Joint Chiefs of Staff must review the strategic requirements and, in the last analysis, it may be even necessary, at the government level, to drastically revise our national policies and aims.

Up to this point, I have philosophized, in more or less general terms, on the interlocking difficulties of arriving at a coordinated statement of requirements which will put the three military services in balance, put military demands in balance with the requirements of the civilian economy, and put American requirements in balance with the needs of

those who will support us in varying degree throughout the world. Now, I must come down to some of the day-to-day realities if you are to understand the problems of the logistics planner.

It is axiomatic that the elements of our national strength entail far more than weapons and men in uniform. Our total strength is made up of the elements of moral strength and courage, spiritual strength, fiscal and economic strength, strength in resources, strength in international ties which may yield support in men and materials. That being so, an inordinate percentage of the national peacetime income spent for military purposes can weaken the greater strength structure. For that reason, the administration has imposed a dollar ceiling on our expenditures even while it recognizes the urgent need to build up our military strength.

So, on the table there is a round sum which must be prorated between the three military services. If each of the services were to acquire the things that it undoubtedly needs to provide perfect security, that available sum would not be enough. Obviously, then, someone must make the decision as to how much of the pie goes to each of the services.

And therein lies the nub of the most complex and vexatious problem confronting the national military establishment today.

The Joint Chiefs of Staff must evaluate the programs of each of the departments and must determine those areas of principal emphasis which must be favored and those areas of less importance which can be shaved with the least detriment to national security. If the Joint Chiefs of Staff do not agree--and any understanding person will perceive the strong possibility of such a situation --someone must make that decision. Let me say, rather, that someone in the military establishment must make a recommendation; decisions can only be made by the Congress of the United States through its power to appropriate public monies.

These difficulties and problems are not the prime nor sole responsibility of the logistic planner, but he is frequently called into consultation and he waits impatiently for the decision which will permit him to go ahead with final detailed planning.

I should say here that if the Joint Chiefs of Staff fail to agree, such lack of agreement can not be allowed to block the entire process of government, and it is inevitable that in the case of such disagreement the Secretary of Defense must assume the grave burden of "formulating the national military budget" with all of the strategic implications involved.

One of the greatest bars to effective coordinated planning has been the lack of an inter-service Esperanto which will permit us to discuss our needs and deficiencies in terms that are mutually understandable. For example, the total Navy effort is broken down into such plans and programs as Fleet Employment, Shore Station Development, Material Improvement, Shipbuilding and Conversion, Aircraft Procurement, Personnel Allocation, Shore Station Operating Plan, Research and Development, etc. The very nature of Army and Air Force operations is such that their approach to program and budgetary planning is on an entirely different basis in many respects, and we find it mutually difficult to identify similar activities within the three services by reason of operational and administrative differences, as well as by reason of different terminology. Obviously, if the Joint Chiefs and the Secretary of Defense are to compare the relative desirabilities of various Army, Navy, and Air Force programs (for the purpose of making budgetary cuts), there must be common language and common definitions to enable the arbiter to understand what he is cutting, and what the penalties of such cuts will be. This need is in the process of development, and it will be necessary to give wide distribution to the common vocabulary if we of the different services are to really accomplish a tolerant and mutual understanding of our problems and difficulties.

The logistic planner, concerned as he is with strategic directives, calculating requirements, dealing with technical people, and rubbing elbows with industrial mobilization, must have an extraordinarily broad professional grounding. Furthermore, he has great and constant need for the mental attainment and indoctrination which I stressed in my early remarks. In these days of unification, there is now added the necessity for an understanding of the logistical workings of the other departments also.

These new problems which I have cited, arising from the new requirements of unification, afford a valid and logical explanation of what might otherwise appear to be extremely slow progress in the implementing of the National Security Act. It is only human that the administration and the legislative branch at times have become exasperated

with the apparent lack of progress. It is also quite understandable that failures to reach early agreements in the military establishment would be subjected to criticism by a public and a press that expected miracles from unification. Nevertheless, the accomplishments of unification are real. For example, they are virtually complete in the field of procurement, despite some ill-advised statements to the contrary.

I could not dismiss the subject of unification without commenting on an oddity which seems to have escaped the attention of nearly all observers; I refer to the general assumption that with authoritative unification there should automatically follow a complete eradication of argument and disagreement. To expect such a result is to completely ignore the basic philosophy of the Constitution of the United States and the basic tenets of our American principles of government. For example, when it comes to the public's attention that there are differences of opinion within the military establishment, we hear that unification is a "flop" or that so-and-so is insubordinate; and yet an examination of the fundamentals of our form of government immediately indicates that an honest argument before the proper forum is valuable assurance that our democratic processes are still functioning. Suppose that differences of opinion exist, but that under the scheme of unification the Secretary of Defense were empowered to make a decision and to suppress the opinions of the departmental secretaries and service chiefs; when the matter came to a head before the appropriations committees, the Congress would thereby be denied the opportunity to hear the conflicting views. Extending that thought a little farther, such a system would prevent Congress from having access to any technical and professional opinion which was not in accordance with the thought of the Secretary of Defense. Obviously, unless the Congress of the United States were to abdicate its rights and responsibilities in the matter of sifting out the facts before granting appropriations, there could never be any unification founded on the right of one individual to make sole decisions.

If this aspect of the problem is fully appreciated by the American people, they will make sure that Congress never does so abdicate and will make sure that no arbitrary military authority will ever be in position to hide fact and opinion from the representatives of the people sitting in the Congress.

There has been public criticism also of the fact that the Joint Chiefs of Staff have difficulty agreeing on the roles and missions of the three services. The same thinking with respect to the rights and responsibilities of the Congress applies here as well. The fixing of roles and missions has obvious merit as a means of eliminating certain undesirable overlaps and duplications, but it also has profound inherent possibilities for danger. Conceivably, the designation of one service as the sole agent for employing some weapon or type of attack might well deprive the United States of an opportunity to exert earlier pressure through the use of one of the other services. Such an arbitrary restriction could delay victory or have even more serious consequences. Such a contingency is minimized when the Congress is actually the final denominator of unification through its appropriating power--and we may be thankful that that is so.

New high planning levels in the government structure--unification with its superimposed demands and controls-integration of military and civilian effort—guided missiles and galloping scientific development--mass destruction weapons--new equipment to meet the challenge of supersonic flight--arctic implications in today's strategy-electronic computers to work out logistics programs--all of these factors now further complicate the business of logistic planning, and they offer a worthy challenge to the best-trained thinkers the Navy, the military establishment, and the country can produce. Logistical planning for war--or even for the peace which may only be preceding war-may well hold the key to our future in the future's deadlier and swifter tempo. It is an all hands maneuver--Line and Staff--soldier, sailor, and flyer--military and civilian. Every rank will encounter it in some degree.

And I regretfully tell you that, from my own observation, the future holds no promise of relief for you gentlemenno rest for the weary and no reward of idleness for the venerable. Flag officers must, because of their responsibilities, struggle even harder than their subordinates, if they are to keep au courant with the kaleidoscopic changes in the professional pattern. And the specifications for the good logistical planner are growing increasingly exacting with time and with advancing rank.

My contemporaries are making their land-fall on Snug Harbor, and with our passing from the scene, the Navy will undoubtedly go to hell, as it always does. But if the War College fulfills its high mission of sound indoctrination, the up-and-coming reinforcements will improve on the work of their predecessors --as they always have in a dynamic, forward-moving Navy.

And now one last word. As Deputy Chief of Naval Operations for Logistics, I am deeply appreciative of the support which Admiral [Raymond A.] Spruance gave to the launching of the Logistics Course. But, more than that, I feel an admiration for the man which needs expression. Battle--grave responsibility –prolonged strain--none of these things ever visibly dented the armor of his resolution and integrity; no stress ever changed the quiet warmth and friendliness of his personality. Nothing ever distorted his thinking or warped his even disposition. The War College and the Navy were fortunate that the last tempered years of his active service were devoted to imparting something of his wisdom to the Navy he has served so splendidly.

This lecture was the first article ever published in the Naval War College Review, then known as the Naval War College Information Service for Officers. Vice Admiral Carney, who during World War II had served as Admiral William F. Halsey's chief of staff, was at the time of this undated address to the College's students the Deputy chief of Naval Operations for Logistics. From 17 August 1953 to 17 August 1955 Admiral Carney was Chief of Naval Operations. He passed away in 1990.

World War II Logistics (A Review Essay)

CHARLES R. SHRADER

The 50th anniversary of the Second World War has prompted a spate of books and articles on the campaigns, battles, and combat leaders of both sides, but the single most important factor in the Allied victory--superior logistics--remains relatively unexplored. Despite a general recognition of the fact that World War II was indeed "a war of logistics" in which logistical considerations shaped every strategic decision and most operational ones, only a trickle of new books have addressed the crucial problems of mobilization, production, transportation, and support of forces in the field. Fortunately, the lack of quantity is more than compensated by the high quality of the few works which have appeared.

One of the most useful and interesting of the "new" books on logistics in World War II is in fact a reprint. The 1993 edition of Logistics in World War II: Final Report of the Army Service Forces, first issued in 1948, forms part of an effort by the US Army Center of Military History to ensure that the key volumes of the Army's official history of World War II are available. Few books, old or new, more clearly outline the importance of logistics in modern war. Although larded with the usual self-congratulation of any after-action report, Logistics in World War II is chock full of statistics and interesting details of how the enormous industrial potential of the United States was converted into overwhelming combat power on the battlefields of Europe, Asia, and the Pacific. The book focuses on the achievements of the Army Service Forces in the fields of manpower and industrial mobilization and the production and distribution of "the tools with which our air, ground, and sea forces fashioned victory." Logistics in World War II provides a concise explanation of the problems we faced and how they were or were not overcome as the US Army expanded from 174,000 men in mid-1939 to over 8,290,000 men in 1945, of whom 7,300,000 were deployed overseas. Created as part of the so-called Marshall reorganization of the War Department in March 1942, the Army Service Forces became the focal point of the Army's efforts to manage the complex and difficult problems of supporting large combat forces in an all-out global war. Of particular interest in the story of the Army Service Forces in World War II are the management techniques developed to control mobilization, worldwide operations, and demobilization of military forces on an unprecedented scale. Logistics in World War II covers these important developments in some detail, and 116 of the most important Army management improvements introduced during the war are listed at the end of the volume. The concluding chapter on "Logistic Lessons of World War II" should also be of particular interest to modern readers who will recognize that many of those lessons are still valid half a century later.

One of the more dubious conceits of modern historians is to deny the influence of individual personality on the course of historical events. The hero has largely been replaced in recent historical works by the collective effect of teeming masses and faceless bureaucracies. John Kennedy Ohl's Supplying the Troops: General Somervell and American Logistics in WW II clearly contradicts such an approach. The author demonstrates convincingly that the tremendous achievements of the Army Service Forces in World War II were not obtained by some anonymous organization but resulted directly from the personal efforts of specific individuals, the most prominent of whom was General Brehon B. Somervell, the commander of Army Service Forces and the key Army logistician in World War II. Ohl's biography of General Somervell makes crystal clear how the personality and energy of one man can shape large organizations and influence the course of world events. It earns Somervell a place in the front rank with George C. Marshall, Douglas MacArthur, and Dwight D. Eisenhower as a shaper of the Allied victory.

Ohl quickly covers the early career of Somervell as a means of explaining his subject's character and early development and then focuses on the role played by General Somervell in World War II. Energetic, efficient, strong-willed, and intolerant of failure are all terms which describe the commander of Army Service Forces. The degree to which the major logistical organizations and decisions of the American effort in World War II were shaped directly by the personality of Brehon B. Somervell is clearly brought out in Ohl's discussion of Somervell's many conflicts with the other civilian and military leaders during the war. Ohl reviews Somervell's battles to subdue the once all-powerful chiefs of the Army's logistical services, his conflicts with the civilian heads of the War Production Board and the War Shipping Administration, and his stubborn resistance to the strategic prima donnas of the Operations Division of the War Department General Staff. By describing these conflicts in some detail, Ohl provides a number of important insights into the principal issues and personalities, the problems solved and unsolved, and the significant defects of the American mobilization and logistical effort in the Second World War.

The World War II activities of General Somervell and his close associates, LeRoy Lutes, Lucius Clay, and John C. H. Lee among others, highlight several of the important general themes in 20th-century US Army logistics: the imposition of centralized direction and decentralized operations; the increasing use of civilian personnel and business techniques in the conduct of military affairs; the changing relationship of logistics and strategy; and the increasing manpower requirements of the logistical "tail." These key themes all receive detailed attention in Supplying the Troops.

General Somervell's persistent drive for centralized control over the Army's logistical system is the continuous thread which binds Ohl's narrative. Somervell saw centralization merely as a means of increasing the efficiency and effectiveness of Army logistics. However, his single-minded pursuit of organizational efficiency has often been interpreted as nothing more than egoism and personal "empire-building." But as Ohl convincingly demonstrates, Somervell was motivated not by considerations of personal power but by his perceptions of how the challenges of providing logistical support in a global war could best be met. In retrospect the accuracy of General Somervell's perceptions are undeniable; strong centralized control over the complex, diverse, and enormous mobilization, production, and distribution activities of the Army in World War II probably ensured the results obtained in the end. It is ironic that having achieved an unprecedented centralization of control over the Army's logistical activities, Somervell then saw the centrifugal forces of a petulant Army bureaucracy dismantle his carefully constructed system the moment victory was achieved. Somervell's vindication came 20 years later with the thorough reorganization of defense logistics by Secretary of Defense Robert S. McNamara in the early 1960s.

General Somervell also took the lead in applying methods drawn from American business to the management of the Army's logistical effort. During World War II hundreds of America's most prominent business leaders served in the Army Service Forces, where they were able to apply the lessons they had learned in managing a variety of business enterprises to the problems of supporting the Army on a global scale. One of the most significant of Somervell's innovations in the area of management practice was the introduction of the Control Division at Headquarters, Army Service Forces, and in the subordinate commands. Using established goals, periodic reports, statistics, and other measurement tools already common in business, the Control Division acted as the commander's eyes and ears, informing him of areas in which matters were proceeding well and alerting him to the areas most in need of attention. Many of the management techniques now taken for granted by senior Army commanders were first tested and proven in the Control Division of Army Service Forces headquarters during World War II; the concept of management and control by statistical appraisal of progress toward stated goals and objectives is perhaps General Somervell's most lasting legacy to the Army.

The third major area in which General Somervell made his personality felt during World War II was in the fight over the relative importance of logistics and strategy. In retrospect few would deny that logistical considerations dominated every aspect of strategy and operations in World War II, but at the time the strategists and the logisticians faced off on nearly every prominent issue with the strategists usually denying that the logisticians were anything other than second-string players. Somervell entered the battle with the full weight of his forceful personality, arguing that strategy could not be formulated apart from the logistical considerations which limited it and that the logisticians merited equal status with the strategists in the planning process. For the most part Somervell's attempts to ensure that strategy and logistics were developed in coordination were ignored by the strategic planners, often with predictable results. Ultimately, however, Somervell's forceful representations and the unfolding course of events made clear that strategy was indeed determined by the logistically possible and could not be formulated without the active participation of the logisticians. Even today the point is only grudgingly conceded by strategists, many of whom would prefer to never see or hear a logistician.

Another aspect of the struggle waged by Somervell and the logisticians against the strategists and combat commanders centered on the number of service troops to be provided in the various theaters of war. This conflict reflected the growing necessity in modern war for a large proportion of the available manpower to be in the logistical "tail" rather than in the combat "teeth." US forces deployed overseas in World War II were chronically short of logistical personnel to operate the ports and lines of communications, handle the supplies, and provide the necessary logistical support to the troops in the field. General Somervell consistently argued for the provision of larger proportions of service troops in every theater, but the theater commanders opted on every occasion for additional combat troops rather than additional service troops. The result was not greater combat power, but rather a reduction in combat effectiveness. It is not altogether certain that this lesson has yet been learned, as an examination of the time-phased force deployment list for any recent contingency operation will attest.

The effect of logistics on strategy and operations was nowhere more obvious than in the European Theater of Operations during 1944 and 1945. All of the key decisions--the when and where of Operation Overlord; the rate and duration of the pursuit across France and into Germany; the Anglo-American controversy over the "broad vs. narrow front" strategy; and even the decision as to whether or not the Western Allies should race to Berlin ahead of the Red Army--were determined by logistical considerations. Both Logistics in World War II and Ohl's Supplying the Troops contain a good deal of material on the effect of logistics on the campaign in northwestern Europe, but some of the most stimulating recent work on the topic has appeared in the form of book chapters or articles in anthologies.

The efficacy of logistical planning for Operation Overlord and the subsequent logistical operations in Europe was called into question by Martin van Creveld some years ago in a chapter from his 1977 book, Supplying War: Logistics from Wallenstein to Patton, entitled "The War of the Accountants." Van Creveld asserted that the pace of the Allied advance against Germany after the St. Lô breakout was severely limited by the timidity and rigidity of Allied logisticians and their failure to keep pace with the fast-moving combat forces. As Van Creveld himself chose to express it: "The Allied advance from Normandy to the Seine, however successful and even spectacular strategically, was an exercise in logistic pusillanimity unparalleled in modern military history." Although Van Creveld's criticism of the logisticians at first glance seems convincing, if overdrawn, the facts of the matter seem to distribute the blame more evenly--the natural caution of the logisticians being a much-needed brake on the extravagant plans and hopes of the strategists and combat commanders.

The necessary corrective to Van Creveld's frequent preference for polemic over fact is contained in an introductory essay by John A. Lynn entitled "The History of Logistics and Supplying War" which appears in the excellent anthology, edited by Lynn, Feeding Mars: Logistics in Western Warfare from the Middle Ages to the Present. Lynn's effective critique of Van Creveld's errors of fact and method as well as his cavalier approach to documentary evidence and the use of numbers does much to balance Van Creveld's disparaging portrayal of Army logistical planning for Operation Overlord and the subsequent operations on the Continent from 6 June 1944 to 8 May 1945. It should be noted that the interesting collection of articles on the history of military logistics from the Middle Ages through World War II which Lynn and his contributors have produced is perhaps the best such work yet to appear anywhere. Feeding Mars is thus well worth reading not only for its stimulating examination of World War II logistics but also for the other outstanding articles on logistical history which set the World War II logistical issues neatly in context.

Although one may justly question Van Creveld's method and the vehemence of his condemnation of the logisticians in the European Theater, he does correctly point out that despite the strenuous efforts of General Somervell and his associates, the support of Allied forces on the Continent after D-Day left much to be desired. A somewhat better reasoned and more thoroughly documented discussion of the matter is provided by Steve R. Waddell in United States Army Logistics: The Normandy Campaign, 1944. Waddell examines in some depth the key issues surrounding the logistical organization and planning for Operation Overlord and concludes that the Allied supply system on the Continent suffered from several serious defects which could, and should, have been avoided. By virtue of its more thorough documentation and attention to detail, Waddell's analysis is altogether more satisfying than Van Creveld's purple prose.

Fifty years have passed since the end of World War II, during which time the nature of warfare has been transformed by technology and the changing political environment in ways only dimly foreseen by the logistical planners and operators of the earlier period. However, the passage of time and the changes in the nature of warfare have only proven the prescience of the authors of Logistics in World War II who noted in 1948: "Warfare will become more mobile, more mechanical, more destructive, and more dependent upon science and technology. . . . It is inescapable that logistics will play a predominant role in any future conflict." Their predictions having proven altogether accurate, their prescription for the future should carry added weight: "Granting the fundamental importance of logistics in modern war, it follows that military leaders must have a thorough appreciation and knowledge of the subject as a prerequisite to top command."

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The Decision To Launch Operation MARKET-GARDEN CHARLES B. MACDONALD

Was the decision to launch the largest airborne attack of World War II right or wrong?

It was the decision of a theater commander to commit what was, in effect, his strategic reserve. It was a decision to reinforce one success among a number of successes that had been achieved.

The commander was General Dwight D. Eisenhower, Supreme Allied Commander in the invasion of Europe during World War II. The operation was an airborne attack deep in the enemy's rear areas to be launched in mid-September 1944 in conjunction with a ground attack by the British Second Army. The two attacks were known collectively as Operation MARKET-GARDEN. [1]

The airborne attack was designed to lay a carpet of airborne troops along a narrow corridor extending approximately eighty miles into Holland from Eindhoven northward to Arnhem. The airborne troops were to secure bridges across a number of canals as well as across three major water barriers-the Maas, the Waal (the main downstream branch of the Rhine), and the Neder Rijn (Lower Rhine) Rivers. Through this corridor were to pass British ground troops in a push beyond Arnhem to the IJsselmeer (Zuider Zee). The principal objective of the operation was to get Allied troops across the Rhine. Three main advantages were expected to accrue: cutting the land exit of those Germans remaining in western Holland; outflanking the enemy's frontier defenses, the West Wall or Siegfried Line; and positioning British ground forces for a subsequent drive into Germany along the North German plain.

In retrospect, General Eisenhower's decision can be analyzed by means of three questions:

- (1) Was an airborne attack of any kind to exploit success advisable at the time?
- (2) Was General Eisenhower justified in delaying opening the port of Antwerp while the airborne attack took place?
- (3) If an airborne assault was advisable, why Operation MARKET instead of some other airborne attack?

Consideration of the first question involves recalling the aura of optimism which pervaded Allied ranks in September 1944. These were the glorious days, the halcyon days of pursuit. The heartbreak of near stalemate among the hedgerows of Normandy, which had followed close on the Allied cross-Channel invasion of France, was past, an event belonging, it seemed, to yesteryear when the war still had to be won. In the place of heartbreak had come heady optimism. Having crossed the Seine, Allied commanders had raised their sights, not to the next obstacle, the West Wall, but beyond the West Wall to the Rhine itself. [2] No less an authority than the G-2 at Supreme Headquarters, Allied Expeditionary Force (SHAEF), had put the matter this way: "The August battles have done it and the enemy in the West has had it. Two and a half months of bitter fighting have brought the end of the war in Europe within sight, almost within reach." [3]

More specifically, the 21 Army Group, composed of British and Canadian troops, had dashed more than 250 miles since the breakout in Normandy. The lowlands of Flanders and the V-bomb launching sites in the Pas-de-Calais were behind. Brussels had fallen. A rapid armored thrust had taken Antwerp. As the day of the decision to launch Operation MARKET approached, the British reached the Dutch-Belgian frontier.

The First U.S. Army had raced across Belgium and Luxembourg to the very gates of Germany. The Third U.S. Army had reached and crossed the Moselle River in northeastern France. The newly created Ninth U.S. Army was operational in Brittany and engaged in besieging the port of Brest. The 6th Army Group, arriving from southern France, was at the point of uniting with the Third Army to create a unified Western Front that would stretch from Antwerp to Switzerland.

There was one cloud in this bright blue sky. Those who looked carefully at the scene of intertwined Allied success and German chaos could see that the Allies had their own private chaos in the field of logistics. [4] For logistical purposes, the invasion of Europe had been geared to a methodical advance. Yet Allied moves from the beaches to

the Seine had been erratic, culminating in an explosive dash that secured the line of the Seine eleven days ahead of schedule and neared the German border on D plus 96 as against a predicted date of about D plus 300. The supply services could not keep up with this advance. The difficulty at first was not a lack of sufficient supplies on the Continent, for the build-up of supplies in Normandy had exceeded expectations. The difficulty was transport. With depots far behind the front and the continental railway system crippled by Allied bombing and German destruction, the logisticians did not have the means of getting the supplies to the armies, which in some instances were 500 miles away. The situation spawned many supply problems, the most dramatic being a gasoline drought which immobilized the Third Army for five days at the Meuse River and a corps of the First Army for four days at the Belgian frontier. [5] A corps of the British Second Army was held for about two weeks west of the Seine so that its vehicles could augment the transport of the remainder of the army. [6]

It was obvious that a solution of the transportation problem could not be found until ports nearer the fighting front were secured. As consumption of supplies mounted and as prospects of approaching winter and bad weather threatened the unprotected Norman beaches, where the bulk of supplies was still arriving, the question of ports assumed increasing importance. As General Eisenhower put it on 13 September: "Our port position today is such that any stretch of a week or ten days of bad Channel weather-a condition that grows increasingly probable with the receding summer-would paralyze our activities and make the maintenance of our forces even in defensive roles exceedingly difficult." [7]

In early September the Allies were using only Cherbourg, though they hoped soon to open a badly damaged Le Havre. Antwerp, captured virtually intact, could not be utilized until the Germans were cleared from the banks of the Schelde estuary, a sixty-mile long waterway connecting Antwerp with the sea.

General Eisenhower and his tactical commanders were not unaware of the logistical problems. But the tactical opportunities that lay before them were irresistible. If the Supreme Commander thought in terms of immediate objectives-like destroying enemy reserves in the Pas-de-Calais-his subordinates accepted no such mental discipline. As early as the latter part of August, the army groups and the armies were issuing operational orders couched in terms of the cities along the Rhine River-Mannheim, Darmstadt, Frankfurt, Koblenz. "It is contemplated," noted the 12th Army Group on 27 August, "that the Armies will go as far as practicable and then wait until the supply system in rear will permit further advance." Yet the operational orders made clear that the 12th Army Group hoped that "as far as practicable" meant the Rhine. [8]

The Americans by 10 September were no more than forty miles from the Rhine, the British no more than sixty. Yet the Allied war machine was showing signs of creaking to a halt because of logistical weakness. Should the Allies stop for repairs, or should they try to get across the last big ditch-the Rhine River-that separated them from quick and apparently certain victory?

Paved with opportunity, the road taken by the Allies in late August and early September had not been without rough spots that assumed the form of controversy. Basically, these were the conflicts of opinion over the much discussed theories of what have come to be called the broad-front strategy and the one-thrust concept. The aptness of General Eisenhower's decision-in effect a compromise between the two-is of concern here only insofar as it affected the alignment of the Allied forces at the time of Operation MARKET.

During the preinvasion planning, four routes leading from northern France toward the objective of the Ruhr industrial area had been considered: (1) through the flatlands and Flanders, crisscrossed by waterways; (2) northeast via Liege and Aachen along the northern edge of the Ardennes; (3) across the Ardennes via Metz, the Saar, and Frankfurt. Terrain considerations having largely eliminated two of the routes, General Eisenhower had determined to advance Field Marshal Sir Bernard L. Montgomery's 21 Army Group (British and Canadian armies) along the route north of the Ardennes, Lt. Gen. Omar N. Bradley's 12th Army Group (American armies) south of the Ardennes. The main effort was to be vested in the former. Eisenhower allotted Montgomery the airborne forces available in the theater. [10]

As the pursuit toward the German border during late August and early September gathered momentum, Montgomery called for additional assistance. He wanted the entire American army to move along his right flank north of the Ardennes. Though Bradley thought a corps would be sufficient and though Eisenhower believed Montgomery was being overcautious, the Supreme Commander was inclined to favor Montgomery's request.

Eisenhower was particularly anxious to attain the objectives that lay to the north. Montgomery might trap the remaining German reserves in the Pas-de-Calais; he would secure the Channel ports as far as Antwerp; and he would eliminate the flying bomb launching sites in the Pas-de-Calais. Acceding to Montgomery's request, Eisenhower directed the First U.S. Army to advance alongside the British north of the Ardennes. At the same time, Eisenhower emphasized his desire to gain the objectives in the north by reaffirming his earlier decision to put the airborne forces in the theater at Montgomery's disposal. [11]

The change in plans-shifting the First Army to the right of the northern force-placed that army along what has been considered the best route into Germany, the route via Liege and Aachen. The British and the Canadians, the latter scheduled to invest the Channel ports, were to push directly through Flanders, a region earlier ruled out for major advance by the planners because of its many water barriers. This divergence from plan affected Operation MARKET, for, as it turned out, the main Allied effort did not go through the Aachen Gap, the route recommended by the planners, by through the canal-creased lowlands of Holland, virtually the same type of terrain as in Flanders, rejected as a main route of advance.

The airborne forces General Eisenhower allotted to the 21 Army Group were organized under the newly created headquarters of the First Allied Airborne Army. Commanded by Lt. Gen. Lewis H. Brereton, the headquarters controlled two British and three American airborne divisions, a Polish parachute brigade, the American troop carrier command, and two British troop carrier groups. [12]

One of the principal reasons underlying the creation of the First Allied Airborne Army was the insistence by the U.S. War Department on greater strategic use of airborne troops. From February 1944 Generals George C. Marshall, U.S. Chief of Staff, and Henry H. Arnold, commander of the Army Air Forces, had let General Eisenhower know unmistakably that they attached great importance to the employment of airborne units in actual operations deep in enemy territory. [13]

As had been contemplated, creation of the airborne army facilitated planning for airborne operations. The first plan was tentatively scheduled for execution on 20 August but was canceled, presumably because of concern over supply to the ground forces, since supplies were being delivered by aircraft that would have to transport the airborne troops, and because the ground troops would soon overrun the target area of the airborne forces. Even as the first plan withered, alternative plans were under consideration. By early September when American patrols approached the German border, eighteen separate airborne plans had been considered. Five had reached the stage of detailed planning; three had progressed almost to the point of launching; but none had matured. In most cases, the cancellations had been prompted by recognition that the fast-moving ground troops would overrun the objectives before an airborne force could land. [14]

The fact was that the paratroopers and glidermen resting and training in England had in effect become coins burning holes in SHAEF's pocket. That is not to say that SHAEF intended to spend the airborne troops in a wild or extravagant fashion. Rather, SHAEF had decided to buy an airborne product and was shopping around. The impetus to buy did not come from General Eisenhower alone. As late as August, General Arnold had again voiced his desire for an airborne operation that would have strategic implications. The War Department obviously wanted to see what airborne troops could do in actual combat; pursuit warfare, many believed, provided an excellent opportunity for their use.

Not everyone advocated this approach at this particular time. General Arnold wanted the airborne army used because he felt that missions of troop carrier planes were not "comparing at all favorably with combat plane missions (other than supply and training).... [15] But some commanders, notably General Bradley, believed that this was as it should be. Impressed by the success his ground troops were achieving, Bradley wanted continued use of the aircraft to supply his ground columns. [16]

The most notable example of General Bradley's antipathy to an airborne operation occurred at Tournai. Though this city lay outside his 12th Army Group sector and inside the British zone, Bradley ensured its capture before an airdrop could be staged by ordering the First Army to rush ahead and take it. The ground troops arrived in good time to make an airborne operation there unnecessary. But Bradley had nevertheless lost a measure of air supply because the troop carrier planes had been withdrawn from supply missions to prepare for the drop. "Although we had made good on our boast and Ike's air drop was washed out," General Bradley later wrote, "even our smugness could not

compensate for the critical loss we had suffered in tonnage.... During the six-day stoppage that had resulted from SHAEF's planned drop at Tournai, we lost an average of 823 tons per day. In gasoline, this loss would have equaled one and a half million gallons...." [17]

Whether General Bradley's armies could have gone considerably farther than they did had air supply not again been halted by Operation MARKET is a matter of conjecture. It should be noted that the halt of both the First and the Third Armies in mid-September cannot be attributed specifically to the lack of everyday supplies that airlift might have provided. The halts were due more to a combination of many causes, among them the rugged terrain along the German frontier, the presence of the West Wall, the exhaustion of American combat units, the worn-out condition of their equipment, the rebirth of German strength, and, it has been argued, the thinly spread formation in which American troops approached the German frontier.

In any plan for an airborne operation the matter of weather was important. For Operation MARKET, the planners before the attack were fairly optimistic on this point. One of the field orders noted that the weather in the region was "very unreliable and subject to rapid change," but that conditions were supposed to be at their best during summer and early autumn. Yet the First Allied Airborne Army after the event admitted that though the weather had been poor during the operation, it had been no worse than could have been expected. [18] It is hard to say which view General Eisenhower had before him at the time of his decision.

Along with the question whether an airborne attack of any kind was called for should be considered also the matter of Allied intelligence. Accurate or not, the intelligence estimates current when General Eisenhower decided to approve Operation MARKET were the only basis available to the Supreme Commander for evaluating the enemy. These were the times when the First Army G-2 was predicting the possibility of German political upheaval within thirty to sixty days. [19] Some intelligence officers, notably the Third Army G-2, expressed more caution. [20] But SHAEF's estimate of the situation a week before the airborne attack was fairly typical of the optimistic Allied point of view. [21]

According to this estimate, the SHAEF intelligence chief believed that the enemy force available to defend the entire West Wall was no greater than eleven infantry and four armored divisions at full strength. As for reinforcements, an estimate believed to be unduly generous noted that a "speculative dozen" divisions might "struggle up" in the course of the month. It was considered "most unlikely that more than the true equivalent of four panzer grenadier divisions with 600 tanks" would be found. The G-2 declared flatly: "The West Wall cannot be held with this amount...." [22] Four days before the attack the headquarters of the British Airborne Corps noted that the enemy's total armored strength in the Netherlands and vicinity amounted to not more than fifty to a hundred tanks. [23] The only warning sounded before the operation was that two SS panzer divisions might be refitting near Arnhem. [24] This turned out to be true, but the warning had come too late to affect Eisenhower's decision.

Thus, in considering the question whether an airborne attack of any kind was justified at the time of Operation MARKET, points for and against emerge. Most significantly, the tactical picture, from the Allied outlook and from intelligence estimates, was receptive to an exploitation maneuver. Also, demands for an airborne operation were great; the troops were at hand and military leaders, on the high echelons of command as well as in the field, wanted to see them used. On the other side, antipathy to an airborne operation did exist on the part of at least one army group commander who did not want the troop carrier aircraft diverted from supply missions to ground forces. Also, since the airborne troops would support the 21 Army Group, they would not be employed to reinforce the attack along the axis that the Allied planners had deemed most advantageous for entrance into Germany.

The second question-was General Eisenhower justified in delaying the opening of the port of Antwerp in favor of the airborne attack?-is pertinent because British ground troops would be tied up in Operation MARKET'S companion piece, Operation GARDEN. Thus, to authorize the airborne attack was to give tacit approval to delay at Antwerp. [25]

The principal factor in this discussion was the preoccupation of Allied commanders with the Rhine River. General Montgomery's main objective was "to 'bounce' a crossing over the Rhine with the utmost speed." Some of the Allied preoccupation was based on a natural desire to gain and cross this formidable historic water barrier before the Germans could recoup behind it. Also, the Rhine was virtually synonymous with what the Supreme Commander considered his primary objective-the Ruhr industrial area. Anything short of the Ruhr-and thus by inference the

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Rhine-was in effect an intermediate objective, even secondary. "The envelopment of the Ruhr from the north by 21st Army Group, supported by 1st Army," General Eisenhower said, even after the success of Operation MARKET was in doubt, "is the main effort of the present phase of operations." [26]

It would be quoting out of context not to mention that almost every time General Eisenhower made this stipulation about the Ruhr, which he did on several occasions, he added that "on the way" the Allies wanted Antwerp "as a matter of urgency." [27] Nevertheless, in the Supreme Commander's words, written after the war, "The attractive possibility of quickly turning the German north flank [that is, of getting across the Rhine] led me to approve the temporary delay in freeing the vital port of Antwerp...." [28]

It should also be noted that General Eisenhower's concern about the port situation during the pursuit appears to date only from 10 September, the day he agreed to delay on Antwerp. The Supreme Commander had made little written comment about the port situation up to that time, but the failure to secure hoped-for usable ports was only then becoming marked. Little more than a week before 10 September, the possibility still existed of using the Brittany ports, in particular Brest and Quiberon Bay. Because the entire 12th Army Group was scheduled at that time to advance south of the Ardennes, these ports would still have been valuable. The Channel ports, except for Antwerp, were likely to be open to shipping in the near future. And in any event, the invasion beaches and Cherbourg were operating efficiently. A minor delay in opening Antwerp, it seemed, could well be countenanced.

This is not to try in any way to minimize the importance of Antwerp to the eventual Allied victory. Even before the invasion Allied planners had noted that "until after the development of Antwerp, the availability of port capacity will ... limit the forces which can be maintained." [29] Getting Antwerp was one of the main reasons why Eisenhower had strengthened Montgomery's northern thrust. With the possible exception of Rotterdam, which seemed out of reach at the moment there was no substitute for Antwerp. Eisenhower appreciated this. Yet he knew also how formidable the Rhine was.

Though Antwerp would have to wait, the airborne attack, if successful, might facilitate the task of opening the port. From the bridgehead that airborne troops were to establish across the Lower Rhine in Operation MARKET, British ground troops were to push on to the IJsselmeer. Thus Holland would be split in two and all Germans in western Holland isolated, including those denying both Antwerp and Rotterdam to the Allies. Though the Germans were great ones for wringing the most from bypassed, so-called "fortress defenses," it is axiomatic that an enemy who is isolated is more easily subdued. Even if Operation MARKET-GARDEN failed to achieve more than a bridgehead beyond the Lower Rhine, the territory gained might serve as a buffer for subsequent moves to open Antwerp. From the Lower Rhine to the IJsselmeer the Germans would retain only a narrow corridor little more than twenty-five miles wide, and through that they would have to funnel the supplies for all their forces in western Holland, a distinct disadvantage.

The fact remained that if Operation MARKET was launched, an all-out campaign to open Antwerp would be delayed. The MARKET-GARDEN maneuver would in any case have to be staged on a thin logistical margin. As it turned out, three newly arrived American divisions had to be immobilized in Normandy so that their vehicles might be used to rush five hundred tons of supply per day to the British. Obviously, little or no supply would be left over for Antwerp. In manpower, MARKET-GARDEN would tie up the entire British Second Army; only the First Canadian Army, already busy with investiture of other Channel ports, would be available to open Antwerp. [30]

Among responsible Allied commanders were some who believed in early September that Antwerp was a dead issue. They remembered World War I, when the pursuit phase had marked the beginning of the end, the start of swift German collapse. If events ran true to the earlier experience, neither Antwerp nor any other port would be needed except to support the occupation of Germany. Whether General Eisenhower entertained similar thoughts is pure conjecture; but there is no doubt that some of his subordinates did. The First Army G-2 estimate of possible political upheaval is a clear example.

To recapitulate, the Ruhr-and thus by inference getting across the Rhine-was the main objective of operations at the time of Eisenhower's decision in regard to MARKET. Antwerp, for all its value, was a secondary objective, perhaps more correctly, an intermediate objective. The port situation had not become critical by 10 September, despite serious and even alarming indications. Without Antwerp, the logistical situation was imminently risky. Even though MARKET-GARDEN might eventually lighten the task of opening Antwerp, the airborne operation would delay the

start of that task. The third question-why MARKET? why not some other airborne attack?-may be introduced by a prior question: What were the alternatives to Operation MARKET? Eighteen suggested airborne plans preceded MARKET but in most cases were canceled because of the rapid ground advance. One plan, Operation COMET, was virtually identical with MARKET, except that the latter employed more troops.

There were in addition eight other proposed operations that could have been considered current or worthwhile at the time of the MARKET decision. One plan to seize airfields at Berlin and the German naval base at Kiel was suitable only if the Germans were at the point of surrender or collapse. Another, to secure Walcheren Island at the mouth of the Schelde estuary for the purpose of assisting the opening of the port of Antwerp, was canceled because the island could easily be flooded by the Germans. The remaining six, planned variously to get the First or Third Army through the West Wall or across the Rhine, were all to take place in General Bradley's sector and thus required his approval. Whether Bradley's reluctance to have troop carrier planes diverted from ground supply missions had anything to do with the fact that none of these plans was chosen over MARKET is a matter for conjecture.

One other alternative was suggested. General Sir Miles C. Dempsey, the commander of the British Second Army, advocated, on the day of the MARKET decision, 10 September, an airborne attack to get the British across the Rhine, not, as in MARKET, at Arnhem but upstream at Wesel. [31] In many respects, this made sense. In earlier directives, Montgomery had oriented the 21 Army Group toward Wesel, close to the left flank of the First U.S. Army. [32] An airborne drop at Wesel would have conformed with announced direction and also would have prevented a gap from opening between the British and Americans. The gap, which caused serious concern, developed later as the British turned northward to Arnhem and the First Army moved eastward toward Aachen. A drop at Wesel also would have avoided what had begun to look like increasing German strength along the Dutch-Belgian border. But despite the advantages offered by a drop at Wesel, Field Marshal Montgomery overruled Dempsey's suggestion on the recommendation of air force commanders. Wesel was on the fringe of the Ruhr in one of the most concentrated flak belts in Europe. [33]

Alternatives aside, Operation MARKET had certain advantages of its own. In the official history of General Eisenhower's headquarters, Forrest C. Pogue has listed these in a manner that bears repeating. Operation MARKET, he has written.

... seemed to fit the pattern of current Allied strategy. It conformed to General Arnold's recommendation for an operation some distance east of the enemy's forward positions and beyond the area where enemy reserves were normally located; it afforded an opportunity for using the long-idle airborne resources; it was in accord with Field Marshal Montgomery's desire for a thrust north of the Rhine while the enemy was disorganized; it would help reorient the Allied drive in the direction 21 Army Group thought it should go; and it appeared to General Eisenhower to be the boldest and best move the Allies could make at the moment. The Supreme Commander realized that the momentum of the drive into Germany was being lost and thought that by this action it might be possible to get a bridgehead across the Rhine before the Allies were stopped. The airborne divisions, he knew, were in good condition and could be supported without throwing a crushing burden on the already overstrained supply lines. At worst, General Eisenhower thought the operation would strengthen the 21 Army Group in its later fight to clear the Schelde estuary. Field Marshal Montgomery examined the objections that the proposed route of advance "involved the additional obstacle of the Lower Rhine ... as compared with more easterly approaches, and would carry us to an area relatively remote from the Ruhr." He considered that these were overridden by certain major advantages: (1) the operation would outflank the Siegfried Line defenses; (2) it would be on the line which the enemy would consider the least likely for the Allies to use; and (3) the area was the one with the easiest range for the Allied airborne forces. [34]

Contrary to appearances, the military climate at the time of the MARKET decision was unsettled. Erratic winds were blowing in several directions. There was also the likelihood of a calm, a period of recuperation after the whirlwind of the pursuit. In this turbulent period emerged the decision to launch Operation MARKET-GARDEN.

The operation was a daring strategic maneuver that failed. That the decision to launch it has not prompted the kind of controversy surrounding other command decisions is somewhat singular. Here was no southern France, where one ally wanted it, the other opposed. Here was no Argentan-Falaise, where either ally could accuse the other of fault in failing to close the pocket. Even General Bradley, surely one of Field Marshal Montgomery's severest critics, has reserved his more pungent criticisms for other decisions.

Perhaps the reason for the lack of acrimony can be found in the narrow margin by which MARKET-GARDEN failed. Or, perhaps more to the point, in the license afforded commanders under conditions of success such as existed in September 1944. As British Field Marshal Sir Douglas Haig put it on 22 August 1918, "Risks which a month ago would have been criminal to incur ought now to be incurred as a duty."

NOTES

- 1. This operation is covered in detail in Charles B. MacDonald, *The Siegfried Line Campaign*, a forthcoming volume in UNITED STATES ARMY IN WORLD WAR II. See also, Forrest C. Pogue, *The Supreme Command* (Washington, 1954), in the same series; Chester Wilmot, *The Struggle for Europe* (New York: Harper & Brothers, 1952); Dwight D. Eisenhower, *Crusade in Europe* (New York: Doubleday, 1948); and Field Marshal Viscount Montgomery, *Normandy to the Baltic* (New York and London: Hutchinson & Co., Ltd., 1947).
- These events are covered in Martin Blumenson, Breakout and Pursuit, a forthcoming volume in UNITED STATES ARMY IN WORLD WAR II. For the cross-Channel invasion, see Gordon A. Harrison, Cross-Channel Attack (Washington, 1951), in the same series
- 3. SHAEF Weekly Intelligence Summary 23, 26 Aug 44, in SHAEF G-2 files.
- 4. The logistical story is covered in Roland G. Ruppenthal, Logistical Support of the Armies, Volume I, UNITED STATES ARMY IN WORLD WAR II (Washington, 1953) and Volume II (Washington, 1959). See above, 18, "Logistics and the Broad-Front Strategy," by the same author.
- 5. George S. Patton, Jr., War as I Knew It (Boston: Houghton Mifflin, 1947) pp. 114, 117, 132; First Army After Action Report, Sep 44.
- 6. Montgomery, Normandy to the Baltic, p. 214.
- 7. Eisenhower to Montgomery, 13 Sep 44, in SHAEF Secretary of the General Staff (SGS) File 381, Vol. I.
- 8. 12th A Gp Administrative Instructions 13, 27 Aug; Ltr of Instr 8, 10 Sep. Memo. Future Operations, 25 Aug; Ltr of Instr 6, 25 Aug; see also Ltrs, Bradley to Eisenhower. 26 Aug, and Eisenhower to Bradley, 29 Aug, all in 12th A Gp Military Objectives File 271.3, Vol. I.
- 9. For a detailed discussion, see Pogue, Supreme Command, pp. 261ff.
- SHAEF Planning Drafts, 3 and 30 May 44, in SHAEF SGS File 381,I: Eisenhower to Marshall, 22 Aug 44, in SHAEF Cable Logs;
 Ltr, Eisenhower to Montgomery, 24 Aug 44, in SHAEF SGS File 381, I; Eisenhower to Marshall, 5 Sep 44, copy in OCMH files; see also Eisenhower, Crusade in Europe, p. 345.
- 11. Eisenhower correspondence cited n. 10.
- 12. For details of the formation of the First Allied Airborne Army, see James A. Huston, Airborne Operations, MS in OCMH files.
- 13. Pogue, Supreme Command, pp. 119, 269-71, 279ff.
- 14. The fledgling plans had embraced a variety of objectives, among them the city of Boulogne,; the city of Tournai, with the aim of blocking German retreat from the Channel coast; the vicinity of Liege, in order to get First Army across the Meuse River; the Aachen-Maastricht Gap, to facilitate Allied passage through the West Wall; and Operation COMET, to put British forces across the Lower Rhine. See Hq, First Allied Airborne Army (FAAA) History of Headquarters First Allied Airborne Army, 2 Aug 44-20 May 45; see also John C. Warren, Airborne Operations in World War II, European Theater, USAF Historical Studies: No. 97, USAF Historical Division, 1956, pp. 80, 88-100; see also, Houston MS.
- 15. Quoted in Pogue, Supreme Command, p. 279.
- 16. Omar N. Bradley, A Solder's Story (New York: Henry Holt and Company, 1951), pp. 401-03.
- 17. Ibid, p. 403.
- 18. FAAA, Operations in Holland; see also The Climate of the Rhine Valley, Germany, in XIX Corps After Action Report (AAR), Oct 44, and The Climate of Central and Western Germany, Annex I to First U.S. Army (FUSA) G-2 Periodic Report 92 10 Sep 44, in FUSA G-2 Files.
- 19. FUSA G-2 Estimate 24, 3 Sep 44, in FUSA Operations Reports.
- 20. See, for example, Third U.S. Army (TUSA) G-2 Estimate 9, 28 Aug 44, in TUSA AAR, Vol. II.
- 21. SHAEF Weekly Intelligence Summary 26, week ending 16 Sep 44, in SHAEF G-2 File

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- 22. *Ibid*.
- Hq Air Troops Operational Instruction 1, 13 Sep 44, in 1st Airborne Division AAR on Operation MARKET, Parts 1-3, SHAEF FAAA.
- 24. Intelligence Summary 26 cited n. 21.
- 25. Air Chief Marshal Sir Arthur W. Tedder's Notes on Eisenhower-Montgomery Meeting at Brussels, 10 Sep 44, copy in OCMH files; see Eisenhower, *Crusade in Europe*, pp. 306-07.
- 26. Ltr, Eisenhower to Montgomery, 20 Sep 44, copy in OCMH files; Montgomery, Normandy to the Baltic, pp. 196, 213.
- 27. See, for example, Eisenhower to Army Group Commanders, 15 Sep 44, in SHAEF SGS File 381, I; Eisenhower to Montgomery, 22 Sep 44, copy in OCMH files.
- 28. Report by the Supreme Commander to the Combined Chiefs of Staff on the Operations in Europe of the Allied Expeditionary Force, 6 June 1944 to 8 May 1945. p. 67.
- 29. SHAEF Planning Draft, 30 May 44, in SHAEF SGS File 381, I.
- 30. On the Canadian task, see Col. C. P. Stacey, *The Canadian Army*, 1939-1945: An Official Historical Summary, (Ottawa: King's Printer, 1948), pp. 210ff.
- 31. Wilmot, The Struggle for Europe, p. 488.
- 32. See, for example, Montgomery to army commanders, 26 Aug 44, in SHAEF SGS File 381, I; see also par. 6 of 21 A Gp Operational Situation and Directive, 3 Sep. and Ltr, Bradley to Eisenhower, 14 Sep 44, both in 12th A Gp Military Objectives File 371.3, I.
- 33. Wilmot, Struggle for Europe, p. 488.
- 34. Pogue, Supreme Command, pp. 281-82.

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Training Articles

Training: Preparation for Combat

WILLIAM R. RICHARDSON, GENERAL, US Army

IN 1973, GENERAL William E. DePuy, the first commander of the US Army Training and Doctrine Command, began a training revolution. His vision changed how the Army viewed training and how the Army trained soldiers, leaders and units. From top to bottom, the Army answered DePuy's call with an unprecedented dedication to training excellence to prepare the Army for war.

The training revolution continues. The Army's first priority in peacetime must be training. High-quality, well-trained soldiers demand that their leaders provide tough, well-planned unit training. That training must be realistic and challenging. Realism now means far more than live firing at Grafenwoehr or extended field problems at Fort Hood, Texas.

Excellent training means synchronizing maneuver, fire support and Air Force assets at the National Training Center (NTC). Excellent training means deploying to the maneuver rights area as combined arms teams with air defense sections, howitzer batteries and the tanks of the armored cavalry. Excellent training means exploiting the joint training opportunities of *TEAM SPIRIT* and *REFORGER* so that allied armies can fight side by side executing standardized procedures with skill and competence.

Our training must be backed up by expert leadership whose tactical and technical competence generates a great sense of confidence in those they lead. When this occurs, we will achieve high morale, tremendous pride in the unit, great satisfaction and increased combat effectiveness. The essence of leadership is to see that all of this happens. It can happen if our leaders and commanders have the purpose of mind to train their units as if they had to go to war tomorrow.

Those leaders and commanders must have a compelling desire to make their units the very best possible. They must have a love for the field and an intuitive sense of how to fight that unit or have it provide support to units that do fight. They recognize that excellent training is the foundation for a strong, positive rapport between the leader and his soldier. Those leaders must be dedicated to their soldiers and to providing the best possible training for them and their units. If their dedication is anything short of 100 percent, they ought to be doing something else because they are not trainers.

The Leader

Leaders and commanders cannot expect to undertake the training of their units and get the proper results if they do not know how to fight and support. Knowing and understanding the doctrine is imperative. That requires study and more study, followed by practice and more practice. I sincerely believe that good tacticians make good trainers, and good trainers make good tacticians. This is founded on the key leadership principle-be tactically and technically proficient.

We must afford our junior leaders the opportunity to practice in the science and art of war. We need to let them learn the hard way, out in the field. They must have the chance to make mistakes and then be coached by their superiors on how to avoid those mistakes the next time around. Junior leaders and commanders need the coaching and teaching of the senior commanders who have already acquired the experience of the field. They expect that, and they are due it. When we can provide our young leaders such a free opportunity to try something, and possibly make a mistake, we are teaching them how to take this initiative and how to take risks. They badly need this opportunity, and senior commanders must afford them that opportunity. Then, we will truly be growing superb practitioners in the science and art of war.

All training must relate to wartime missions. If an event does not, we should not train on it. We do not have time. Our troops do not want it. And we are depriving ourselves of the chance to improve our unit's performance and our own leadership skills.

Training requires the leader to work hard, to concentrate on long-term goals rather than short-term hurdles and to set objectives, plan, execute, evaluate and fix. If an operation is sloppily executed, then it must be done again. The principle is simple-do it until it is right. Time, fatigue and weather cannot weaken your resolve. Your unit must

return to the assembly area either well-trained or with a clear understanding of what training improvements are necessary and how to achieve training success. Anything short of that results in a unit that is not prepared for war.

To be prepared for war, the unit must be tactically competent. Executing maneuvers and formations according to doctrine determines tactical competence. Leaders must understand how to analyze mission, enemy, terrain, troops and time available (METT-T) to organize for offensive or defensive operations. Based on the commander's intent, for example, leaders must know when a movement to contact can become a hasty attack. Tactical training requires a unit to practice operations over and over again until the unit executes orders as a combat team. From flank guard to battalion trains, leaders discipline their staff and subordinate commanders by insisting on high standards of tactical performance.

Leaders must master the fundamental skills they are developing in soldiers-from simple map reading to the proper use of terrain for cover and concealment to calls for fire and the employment of combined arms teams. Technical and tactical proficiency remains the mainstay of the leader's competence.

Training exercises at the NTC consistently show that bold and decisive leadership is essential to tactical success. Leaders who lack confidence based on tactical competence are not willing to take the initiative and the risk that comes with it. Their lack of confidence undermines their unit's ability to accomplish its mission.

The NTC also affirms that soldiers want to succeed and, to do so, they look to us-their leaders. Clearly, we set the example. Our technical and tactical competence builds our confidence and inspires confidence in our soldiers. The execution of quality training is arduous, but we cannot recoil from that responsibility. In times of uncertainty, confusion and stress, soldiers seek leadership. Soldiers learn more from what we do than from what we say.

Training Realism

Fundamental to training realism is the unit's wartime mission. Every exercise and every training activity must prepare the unit for war. Mission analysis yields the key tasks that a unit must execute. Those key tasks and associated standards are contained in Army Training and Evaluation Programs (ARTEPs), Mission Training Plans and drills. When actual wartime tasks are known, realistic training begins.

Combined arms training must be automatic. Only with such training will our leaders and commanders understand how to synchronize maneuver with firepower plus all of the other functions of combat that go into a successful battle. We simply must find the time to put units in the field to practice that combined arms experience. Failing that, our units will be inadequate to fight against the enemy.

While the Army may fight as a single service on limited occasions, joint and combined operations will be the rule rather than the exception. Deployment and operational training exercises with allies provide the realistic, mission-oriented training necessary for success in war. Joint training offers an unparalleled peacetime opportunity to exercise and refine warfighting capabilities. Training requires units to apply joint doctrine and tactics, rehearse the techniques and procedures of integrated command and control, and attack the full range of problems associated with operational and logistical interoperability. Without integrated, synchronized training of both combat and support elements from our allied forces, our capability to fight and support will be dangerously weakened.

Unit training must realistically reflect the confusion and frequency of change in combat. Our scenarios must challenge commanders and staffs to task-organize and deploy to accomplish on-order missions quickly, at night and in mission-oriented protection posture (MOPP) IV. Field training must be planned for extended periods of time. A three-day trip to the field, for example, will not impose the hardships of fatigue, stress and physical discomfort that a soldier must be prepared to face. Adverse weather should not shorten a field exercise. Safety must always be a primary concern, but the dangers and risks of bad weather can simply not be avoided. If a unit is not trained in a tough environment, then it is not prepared for war.

Disciplined Training

Training must reflect the fundamentals of the AirLand Battle. ARTEPs and drills provide the disciplined structure for training collective tasks at crew, team, squad, platoon and company levels. Combined arms training demands standardization of fundamental tactics, techniques and procedures. Bradley fighting vehicles fight alongside Abrams tanks. Aviators must understand restrictive and permissive fire control measures. Engineer minefields must be

depicted in the squadron tactical operations center exactly as depicted on the combat engineer platoon leader's Scatterable Minefield Report. The armor, infantry, field artillery, aviation, air defense artillery and engineers will not fight effectively as a combined arms team without standardization of tactics, techniques and procedures. The execution of stand-ardized doctrine requires disciplined training.

Improved intelligence-gathering and communications technology provide a proliferation of information to commanders and staffs. Through training, our commanders-from brigade through corps-must discipline their staffs to prioritize information, to adhere closely to METT-T, to develop a lucid understanding of the commander's intent, to concentrate combat power in time and space and to integrate communications, logistics and sister service support. Staff training must be steeped in AirLand Battle doctrine-not with casual familiarity but with an in-depth understanding of how to execute the tenets of AirLand Battle. Clearly, disciplined, precise training of the battle staff is essential for combat success.

Training Quality

Training excellence inevitably returns to the leader-the warfighter. The warfighter is a special breed of soldier. From squad leader to corps commander, the warfighter knows how to fight on the battlefield. With remarkable clarity, the warfighter's purpose is fixed in his mind, and he sifts through all of the annoying distractions to focus tenaciously on what is right and how to achieve it.

The warfighter knows he is right. To prove it, he stands daily with his fellow soldiers as their example of professional competence, knowing he is good. His confidence is contagious. This is not because he is arrogant and others want to hide behind his cockiness. It is because his unblinking dedication to do what is right demands that he train until it is right. Others then learn from his audacity to be disciplined and tough on themselves.

The warfighter's toughness pays off. He knows that Erwin Rommel was right when he said, "The best form of welfare for the troops is first-class training." Training excellence improves equipment maintenance, personal and billets appearance, re-enlistment and cohesion. Morale soars as his unit excels. The warfighter who trains his unit and soldiers also trains himself because the best way to learn is to train.

Leaders must build on excellence in training. Doctrine is in place. Training guidance is abundant. Resource constraints demand tough decisions but, above all, training must predominate. Leaders must move to the field and train their commands and sections with the intensity and fervor of combat. Only then will our forces be prepared for war. MR

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Profession of Arms

A Concept of Service JOHN W. VESSEY, GENERAL, US Army

From Our November-December 1984 Issue . . .

FOR THOSE OF YOU IN THE ARMED FORCES of the United States, you leave here at an exciting time from the perspective of your profession. There is more going on in the development of tactical concepts, in equipment modernization, in innovative training, and in genuine cooperation among our armed forces than I have seen in the 45 years I have been in uniform. You have read of the recent Army-Air Force announcements about battlefield collaboration, and the work between the Navy and the Air Force on collateral maritime missions. For you, what makes it even more exciting is the fact that we, as a nation and as armed forces, are absolutely uninhibited by lack of room in dealing with improvement.

Now, I realize that I am talking to officers from other nations, and I think you will see that what I have to say perhaps fits the concepts of your nations. I realize I am talking to some civilian graduates of the college, and I think that you will see that perhaps these same general concepts apply to you--if not exactly, then at least generally. You military people have chosen to serve the nation through service in the armed forces. The key word is "service." You serve in the Army, Navy, Air Force, Marine Corps, or Coast Guard. You do not work for them.

The reason for your service is because "We the People" agreed to provide for our common defense. You serve the people, and you do it best by helping preserve the peace by preparing for war. The people of this nation need to have confidence that you do not promote war. You do not advocate war, but war is in fact your *business* and you are *ready* for it.

In April I was in Greece. When in Athens I went to the Acropolis, and while there I could not help but think of that marvelous dialogue that Plato relates in the second book of the *Republic*. He has Glaucon and Socrates talking about the attributes of the armed forces of the day, which Plato called the "Guardians"--the Guardians of the city. At one point in the dialogue Plato has Socrates say, "Nothing can be more important than that the work of the Guardians should be well done." He said, "If shoemakers become inferior and claim to be what they are not, the state is not in peril; but if the Guardians of our city only appear to be Guardians and are *not* Guardians, you surely see that they utterly destroy the city."

Socrates and Glaucon go on to describe desirable attributes for the Guardians. They said they should be "quick to see, swift to overtake the enemy, and strong." Socrates adds that they should be brave and that their strength is spiritual as well as physical. Then they went on to decide that "... one man cannot practice many arts," and that war is an art and must be studied and practiced. Socrates adds that "the higher the duties of the Guardian, the more time and skill and art and application will be needed by him."

Socrates and Glaucon conclude their description of the Guardians by recognizing, "They ought to be dangerous to their enemies but gentle to their friends"--and by "their friends" they mean the citizens of the Republic. Then they wonder if it is possible to find these conflicting natures in a single person.

Through the years, most civilized countries have wrestled with the same questions about their armed forces: how to have warriors with the necessary skill and ferocity in times of war and not have them be a menace to the society in times of peace. Our forefathers were very concerned about those issues. The product of their concern is the relationship that exists today between our society and its warriors. That relationship was founded in the Declaration of Independence and in the Constitution.

The nation has always been skeptical of military power--witness Ben Franklin's brilliant but unsuccessful pamphlet *Plain Talk*, asking his fellow colonists in 1747 to do more in their own self-defense, and Thomas Jefferson's initial opposition to a navy. And, in 1784, the Continental Congress declared that standing armies in peace were inconsistent with the principles of the Republic. The Congress reduced the Continental Army to about a hundred officers and men and then stationed them as far away from civilization as they possibly could. As some of you know, we still do that today.

Later, at the Constitutional Convention, one delegate proposed that the Constitution prohibit the army from ever being larger than five thousand men. Now, George Washington was also a delegate to the Convention and it is

reported that he said, "That's fine--as long as we have another provision in the Constitution that no enemy will be permitted to attack the nation with more than three thousand men."

That skepticism was later developed in the Federalist Papers, and it all relates to why our military, springing from the society it serves and is sworn to defend, embodies the principles that govern the society. We, the military, are a part of "We the *people*." That is why our military forces have never produced a man on horseback; why the military forces have not been involved in the political affairs of the nation; and why they have not strayed from the narrow path of defending the Constitution as it was originally intended—that is, protecting the society and not policing the society.

You, the officers, the men and women of the armed forces of today, are the nation's Guardians, Guardians of today. You are the warrior class of the United States in the 1980s and 1990s. You have chosen to give up some of the benefits of your own personal liberty so that the citizens of the nation may enjoy those benefits in full. You have chosen to serve the nation, but it is also important that you recognize that the nation has chosen you to serve. That is a unique relationship. As with Socrates' Guardians, your higher duties will require more of your time, skill, art, and application. That is the reason for your attendance here at the Naval War College. As with the Guardians of Plato's *Republic, nothing* is more important than that your work be well done.

As you go on to your assignments, your skill, your concept of service, your values, and your loyalties to the nation and to your service will carry you through the years ahead. The skills you learned here, the issues that were exposed, are all important; you need to develop them and hone them through the years ahead. But you also need to continue to hone the concept of service. The concept of selfless service is essential for the armed forces as an institution; it is essential for you as members of the Guardian class; and it is essential for the security of the nation.

You do not choose the wars you fight or the places you serve, whether it is fighting a war or preserving the peace. You do not go home until the job is done. In doing the job you may well have to put life and limb at risk. Sir John Hackett called it the military's "unlimited liability contract." That is a good name for it. Many years ago a great sailor, Lord Nelson, said, "Duty is the great business of a sea-officer; all private considerations must give way to it, however painful it may be." Petty considerations just do not apply.

The ultimate test for the armed forces is the survival of the nation, but the service of every sailor, soldier, airman, Marine, or Coast Guardsman is tested in less awesome ways every day. It is the sum of the performance of all their members that defines the success of the armed forces. Each member of our military forces is accountable for his or her compliance with orders under law; but for the Guardian, compliance with orders alone is not enough. The security of the nation requires that you comply with orders and laws and regulations but it also requires that you comply with the unique sense of service to your fellow Guardians, the fellow members of your class. [As Marshall] Matt Dillon used to say on *Gunsmoke*, "It's a chancy job and a little lonely."

There are no degrees of importance in the service you perform. Some of you will go from here to command ships and squadrons; others will be working in logistics outfits supplying weapons and equipment or doing research and development. Some of you will be buried in the anonymity of staff work. Some of you will go to faraway places that your mother-in-law will not be able to find on the map. One thing that I want to emphasize to you is that whatever the duty, it is important. Under the code of the Guardians, there is no unimportant duty. Under that code, the sailor who died in insignificant sorties against pirates in some remote place was as important as the crewmen who saved the remnants of the ill-fated Greeley expedition on the Arctic ice a hundred years ago, or as important as those Rangers who scaled Pointe du Hoc at Normandy 40 years ago, or as important as the naval officers who directed the gunfire to support that operation.

There is no service that is more important than the other in our scheme of armed services and there is no duty that is more important than the other under the code of the Guardian. Once in a while we aviators like to think that when we are up in the air--free--that we have mastery over all. How many times have you sat on the ramp, waiting for a maintenance man to show up when the airplane was broken? You were not going anywhere until that maintenance man showed up. We, the fighters, sometimes think it all belongs to us. But, when we are wounded and picked up by some obscure medic to ease our pain, then we realize that we are no more important than he is.

The fighter pilots often think that reconnaissance guys do not do anything important. Yet, when you read the history of the battle of the Coral Sea, you will see that the Japanese lost the battle because a recce pilot did not do his duty correctly. The fighter pilot who was picked up out of the jungle or out of the water by a helicopter pilot knows that his duty is not more important than the other fellow's duty.

Recently, I was in Italy for the 40th anniversary of the liberation of Rome--visiting some of the battlefields of my youth. At the ceremonies, I think I was the last of the World War II veterans on active duty; but I want to tell you I was only a drummer boy. A young television reporter cornered me and asked me if I was not disappointed about what had happened 40 years ago when Rome was liberated and was then overshadowed by the D-day events in Normandy a couple of days later. He asked me if I was not disappointed to have participated in great battles which some historians later had characterized as unimportant. I told him that if he was not a member of the warrior class, if he was not a Guardian, he would not understand the answer, so there was no point in my telling him.

On Memorial Day, my present squad, the Joint Chiefs of Staff, fell in and marched in step the six miles from the Capitol to the Tomb of the Unknown Soldier for the burial of the Vietnam Unknown. We did that as a sign to all present and future members of the Guardians, a confirmation of our belief in the code--that is, that there are no unimportant duties, that whoever has fallen serving his country, wherever he is, even if he is unknown, has died performing important duty.

I want to emphasize to you that whatever the tasks assigned, they are all important. None can be left undone without peril to the nation. Twenty years or so from now, one of you, by the grace of God and through the confidence of your fellow members of the Guardian class, may be serving as Chief of Naval Operations or as Chairman of the Joint Chiefs of Staff. For whomever that is, I want to tell you today it is important for you to recognize that your service is no more important than that of your classmates here who will not have risen to such rank.

Inseparable from the concept of service is the concept of integrity. The citizens of this great nation place great trust in their military services. They will continue to judge us by stricter rules than they apply to themselves. And they *should* do that, because ultimately their security rests with us and the way we perform our duties. The people of this nation have entrusted their armed forces with the most awesome weapons the world has ever seen, but they have also placed the lives of their sons and daughters who serve, and the safety of their own families for now and in the future, in the hands of the armed forces.

Do not confuse integrity with infallibility. There is a great tendency to do that. As Gary Cooper said in *High Noon*, you should "aim to be high-regarded"; but you should remember that you are human and fallible. Those who serve with you and under you are also human and fallible. Those who will lead you are also human and fallible. The code of the Guardian has room for fallibility. Certainly, the higher up the flagpole you go, the more of your fallible backside will show. There is room for that; but there is *no room* for a lack of integrity or for those who place self before duty, or self before comrades, or self before country. Careerism is the *one great sin*, and it has no place among you.

Now, you may sit there and say, "Well, that's pretty well for you to say, when you are high on your lofty perch as Chairman of the Joint Chiefs of Staff, but we all want to get ahead." I know you want to get ahead. I understand that. I applaud it. But if you get there over the bodies of careers and your comrades, you have served your nation poorly, and you will have violated the code of the Guardians.

There will not be any tribunal to judge your actions at the height of battle; there are only the hopes of the citizenry who are relying upon your integrity and skill. They may well criticize you later amid the relative calm of victory or defeat. But there is a crucial moment in crisis or battle when those you lead and the citizens of the nation can only trust that you are doing what is right. And you develop that concept through integrity.

There is a marvelous passage in the last pages of Field Marshal Montgomery's book. He said, "But there are times in war when men must do hazardous jobs, and when success and the Nation's fate depend upon the courage, determination and tenacity of officers and men. When those who set duty before self give of themselves to see the task committed to them through to its completion, they win the day and the highest honor that mortal man can give."

To the international students here today, let me say, thank you for attending. I hope that your attendance here was as valuable for you as it was for us. I am sure that the United States students and the staff and faculty have enjoyed your company and profited from your presence. It is my firm belief that nurturing contacts among the military forces of the nations of the world will help reduce the risk of war.

I would like to say just a word to the families here. Your husbands or wives, as the case may be, have reached a point in their careers that is very important to them, and it is important to you, obviously. It is also important to the institutions they serve and important to the nation. They needed your support as they went through this school, and they need your support now as they go on to new duties. I realize that lecture is not necessary for you families, because if you had not supported them, they probably would not be here in the first place.

But I just want to tell you that I acknowledge that the family serves as surely as does the member of the family who wears the uniform, and I acknowledge your great importance to the military community. So as you leave here tomorrow, know that you have my thanks and the thanks of the Joint Chiefs of Staff and best wishes for the exciting days ahead.

In the liturgy for morning prayer in the *Lutheran Book of Worship*, there is a prayer which is a good prayer for the Guardians and their families. It goes like this:

Lord God, You have called Your servants to ventures of which we cannot see the ending, by paths as yet untrodden, through perils unknown. Give us faith to go out with good courage, not knowing where we go, but only that Your hand is leading us and Your love is supporting us.

I want you to know that that is my prayer for you, and I give you my congratulations. Best wishes to all of you. It has been a pleasure to be here.

General Vessey, born in 1922, earned his bachelor's degree at the University of Maryland and a master's at George Washington University; he holds LL.D. degrees from Concordia College and the University of Maryland, Joining the Minnesota National Guard in 1939 and called to active service in February 1941, First Sergeant Vessey was awarded a battlefield commission as a second lieutenant (field artillery) on the beachhead at Anzio, 6 May 1944. He was chief of Military Assistance Advisory Group Laos (1972-1973), commanded the 4th Infantry Division, and was commander in chief of the UN Command/U.S. Forces in Korea and then of the Republic of Korea/U.S. Combined Forces Command. He was Vice Chief of Staff of the U.S. Army, 1979-1982, and Chairman of the Joint Chiefs of Staff from 1982 to 1985. After his retirement he was the presidential emissary to Hanoi for POW/MIA matters, 1987-1993. This article reproduced the commencement address to the 1984 Naval War college graduating class.

Whispers of Warriors The Importance of History to the Military Professional

Congressman Ike Skelton

When I was a boy, every now and then my father would let me wear his sailor's hat. It was a very special keepsake, navy blue, embroidered in gold thread, with the name of the ship he so proudly served, USS *Missouri*, boldly emblazoned on the front. It was always a special occasion for me to wear that hat. When I wore it, I felt an unusual connection to my father and the men with whom he served during World War I. It was as if whispers of warriors floated inside that hat—whispers of important lessons learned through experience in battles past.

Perhaps spurred by stories from my father and keepsakes such as his hat, I have maintained an abiding interest in the military and military history. In my capacity as the ranking Democrat on the House Armed Services Committee in Congress, I work very closely with the military. Congress has a constitutional duty to raise and support armies and to provide and maintain a navy. It is a grave responsibility. While authorizing and appropriating funds for the engines of war are important military roles of Congress, ensuring our airmen, Marines, sailors, and soldiers are mentally prepared for the exigencies of war is a greater one. Congress must work with the armed forces to ensure the strategic flame burns bright, that the next generation of military leaders is capable and ready to assume the mantle of generalship in the traditions of General George C. Marshall and Admiral Chester W. Nimitz.

When diplomacy fails, the fates of nations rest in the minds and hands of their militaries. Paradoxically, the most grave course of action a nation can undertake must be accomplished by a group unable to practice regularly its profession. Sir William Francis Butler, the noted British soldier and author of the nineteenth century, said that "the nation that will insist on drawing a broad demarcation between the fighting man and the thinking man is liable to find its fighting done by fools and its thinking done by cowards." While armies, navies, and air forces can train, conduct exercises and war games, and shoot ordnance on instrumented ranges, for obvious reasons they cannot fight in the name of preparedness.

Why Study History? All the great commanders have benefited from a strong foundation in military history. Consider the words of a few of the masters of war:

Military history, accompanied by sound criticism, is indeed the true school of war.

—Jomini

The study of military history lies at the foundation of all sound military conclusions and practice.

—Alfred Thayer Mahan

[History is] the most effective means of teaching war during peace.

—Helmuth von Moltke ("the Elder")

[T]he science of strategy is only to be acquired by experience and by studying the campaigns of the great captains. Gustavus Adolphus, Turenne, and Frederick, as well as Alexander, Hannibal, and Caesar, have all acted upon the same principles.

-Napoleon

Only the study of history is capable of giving those who have no experience of their own a clear picture of what I have just called the friction of the whole machine.

—Clausewitz

When giants of warfare—the likes of Jomini, Mahan, the elder von Moltke, Napoleon, and Clausewitz—agree so universally on the importance of history to the military officer, one must take notice.

Their message is clear. Through the study of history, military officers can gain a semblance of experience in the art of war, even in the absence of fighting. Within the written histories of battles and wars spanning three millennia

reside the experiences of the best and worst to practice the military arts in combat. Through history, the whispers of our forefathers are brought to life. They tell the tales of great nations, how they rose and why they fell. They share secrets of war, from the painful, gut-wrenching decisions of commanders ordering men into harm's way, to the less frenetic and more rarefied analysis of grand strategy. They provide guidance in the fighting arts, teaching tactics and strategy. They tell about leadership, the value of inspiration and courage, and warn of the follies of recklessness or excessive caution. A student of military history can accumulate over three thousand years of fighting experience at the price of time spent reading and analyzing the whispers of warriors past.

There are four practical reasons for the military professional to master military history—to learn 1) lessons in fighting, 2) lessons in generalship, 3) lessons in innovation, and 4) the lessons of lessons learned. Beginning with lessons in fighting, each of these topics will be addressed in turn.

Lessons in Fighting. From the whispers of warriors, students of military history can gain an experiential foundation at all three levels of war—tactical, operational, and strategic. Junior officers should focus on tactics. After tactics have been mastered and as officers rise in seniority, they should also study the operational and strategic levels of war.

Tactical. FM 7-8, the Army's field manual for *Infantry Rifle Platoons and Squads*, states: "Mission tactics require that leaders learn how to think rather than what to think. It recognizes that the subordinate is often the only person at the point of decision who can make an informed decision."

Tactics are based on doctrine; reinforced through repetition during training, staff rides, and exercises; and are ultimately proven in combat. Knowledge of doctrine and rehearsal of tactics are essential elements in learning tactics. However, they still fall short in teaching a leader how to think in the face of the friction and fog of war, against an enemy intent on killing him, who comes to the battlefield with an entirely different set of weaponry, tactics, techniques and procedures, cultural motivation, and objectives. While still only a substitute for combat experience, through history a leader can learn the intricacies of how successful officers prevailed tactically against an adversary or, conversely, why they failed. More importantly, a reader of history can learn the background behind tactics and understand their development, allowing him to execute them in the proper context or innovate in the face of dynamic change. In short, a reader of military history learns how to think about tactics rather than what to think.

General George S. Patton, one of America's great tacticians, was an avid reader of history. He studied tactics intensely, in concert with learning everything he could of potential adversaries. As early as 1909, while still a cadet at the Military Academy, Patton wrote in his personal notebook:

In order for a man to become a great soldier . . . it is necessary for him to be so thoroughly conversant with all sorts of military possibilities that when ever an occasion arises he has at hand without effort on his part a parallel. To attain this end . . . it is necessary . . . to read military history in its earliest and hence crudest form and to follow it down in natural sequence permitting his mind to grow with his subject until he can grasp without effort the most abstruse question of the science of war because he is already permeated with all its elements.²

By the time World War II erupted, Patton was tactically primed and ready. As Sun Tzu instructed—"Know the enemy and know yourself; in a hundred battles you will never be in peril"—Patton studied his adversaries and their tactics as a matter of course. He maintained his study of the enemy during the conduct of campaigns.

The 1944 breakout from Normandy illustrates this point. Bad weather threatened to postpone an armywide general offensive against the Saar-Moselle triangle. When the time for the "go, no-go" decision came, Patton stuck to his order to attack. However, he fretted over his decision. In his diary he wrote: "Woke up at 0300 and it was raining like hell. I actually got nervous and got up and read Rommel's book, *Infantry Attacks*. It was most helpful, as he described all the rains he had in September, 1914, and also the fact that, in spite of the heavy rains, the Germans got along." After learning that the Germans had managed in equally dreadful weather during World War I, Patton was revitalized.

Tactical lessons abound in military history. A study of William Fetterman's massacre in 1866 near Lodge Trail Ridge in Wyoming yields the fundamentals of the ambush from its greatest practitioners, the American Indians. The 1763 battle of Bushy Run, pitting American rangers and British troops against the Indians, provides not only a daring example of how to neutralize an ambush but also of how a complete envelopment and certain rout can be

turned into a victory via a bold counterattack. The Revolutionary War battle at Cowpens in 1781 teaches a tactical application of the layered defense, coupled with the importance of matching the tactic to the terrain and capabilities of the troops. The VII Corps's textbook flanking of the Iraqi defense in DESERT STORM, reminiscent of Stonewall Jackson's smashing success against Joseph Hooker's right flank at Chancellorsville in 1863, provides students of military tactics with proven examples of the flanking maneuver. Those who study and analyze such historical examples gain vicarious battlefield experience and also learn how to think about tactics.⁴

Operational. In addition to learning how to think about operations, the student of military history can learn warfare principles and enduring warfare themes through study at the operational and strategic levels of war. As Sir A. P. Wavell, British field marshal and viceroy of India, said in his lectures to officers, "The real way to get value out of the study of military history is to take particular situations, and as far as possible, to get inside the skin of a man who made a decision, realize the conditions in which the decision was made, and then see in what way you could have improved on it."

General Douglas MacArthur understood operational art and also the principle of maneuver. His September 15, 1950, landing at Inchon—deep behind North Korean lines, culminating in a hammer- and-anvil decimation of communist forces between Seoul and Pusan—stands as one of the most brilliant and daring operations in the annals of warfare.⁵

MacArthur had firsthand combat experience to draw from in crafting the Inchon-Seoul campaign. He had orchestrated eighty-seven amphibious assaults in the Pacific campaign against the Japanese during World War II. MacArthur, however, also drew from history. As Army Chief of Staff in 1935, he advised that the military student "extends his analytic interest to the dust-buried accounts of wars long past as well as those still reeking with the scent of battle" to "bring to light those fundamental principles, and their combinations and applications which, in the past, have been productive of success."

MacArthur operationalized the words of Karl von Clausewitz, written 118 years earlier: "A swift and vigorous transition to attack—the flashing sword of vengeance—is the most brilliant point of the defensive."

Strategic. Strategy is the domain of top-level decision makers, where military operations join with policy, politics, and national objectives. It requires a comprehensive understanding of national objectives and all means of national power—military, diplomatic, and economic—as the precursor to linking ends with means. Military history provides lessons in applied strategy. Strategies employed in the conduct of war can be evaluated in terms of actual outcomes.

America's most renowned naval thinker, Alfred Thayer Mahan, said about strategy: "As in a building, which, however fair and beautiful the superstructure, is radically marred and imperfect if the foundation be insecure—so, if the strategy be wrong, the skill of the general on the battlefield, the valor of the soldier, the brilliancy of victory, however otherwise decisive, fail of their effect."

Mahan's words prophetically describe Germany's failure in World War II against Russia. Germany's generals performed brilliantly. Her soldiers fought bravely and with great skill. Through blitzkrieg tactics, the Germans won many decisive victories in battle. Yet, all came to naught for an ill-conceived strategy.

The roots of Germany's strategic problems can be traced back to the interwar years, when, paradoxically, they began a great military renaissance. After World War I, General von Seeckt, chief of the German army command from 1920 to 1926, began a reformation of the German army, intent on correcting many of its World War I deficiencies. He began with training. He pushed the Army to adopt maneuver tactics, setting the stage for blitzkrieg. He built an effective, independent-thinking noncommissioned officer corps. Most importantly, he transformed officer training into officer education. Officers learned the specifics of their branch, including tactics and weaponry. They also studied subjects common to all branches, as well as military history. Many scholars, however, have criticized the otherwise stellar German officer training and education program for its lack of attention to grand strategy, politics, and economics. The Wehrmacht felt that strategy was beyond its purview—instead, it focused on operational art.

The decades of dedication to the study of tactics, operations, and military history nonetheless paid off when World War II erupted. Germany fielded an army with officers who were masters of tactics and operations. Not surprisingly, they prevailed at the tactical and operational levels of war. However, their strategic prowess was not equal to their expertise in operational art. They left strategic decisions up to their commander in chief, Adolf Hitler.

By the time the Germans invaded Russia in June of 1941, Hitler was totally enamored with the blitzkrieg. After decisive blitzkrieg victories over Poland and France, he was convinced that the Red Army would quickly fold its tent once Operation BARBAROSSA began. But Hitler failed to grasp the strategic differences between a war in Europe and a war in Russia. Russia was different—bitter cold in the winter, opening to the east in a widening expanse that had swallowed the likes of Napoleon. Russia would once again trade space for time, which, coupled with her numerical superiority and fierce fighting spirit in defense of her homeland, would ground the lightning attack. Even with blitzkrieg tactics and great valor from its soldiers, the Wehrmacht failed to win Russia. Hitler would have done better to listen to the warning whispers of Napoleon.

A student of strategic history learns why Pericles' defensive strategy failed against the Spartans. He better understands the failure of the Confederate strategy to demoralize the North and entice European intervention against General Winfield Scott's Anaconda strategy. The military scholar learns the conditions that necessitated a "Germany First" strategy during World War II and to appreciate the economic and diplomatic sides of war, as evidenced by the success of the containment strategy used against the Soviet Union during the Cold War.

Lessons in Generalship. Generalship refers to the military skill of a high commander. In addition to knowledge of strategy, operations, and tactics, great generalship requires personal courage in the face of danger, the ability to inspire and move armies and fleets, and the ability to weigh risks and remain clearheaded in the face of chaos. Military history provides a wealth of case studies in generalship.

Leadership. While the study of the campaigns of the great captains will yield lessons in fighting, the study of the great captains themselves can augment a military officer's knowledge of leadership. Their courage in the face of fire, their inspirational exhortations, their bold and audacious actions, forever stand as leadership examples, no matter the era or service affiliation.

The leadership styles of the great generals and admirals have been as different as their names and personalities. From soft-spoken to loud and booming, from conceptual thinkers to detailed planners, leaders have varied greatly in character and leadership styles. Although their styles have defied condensation into a universal set of personality traits, students of military history can hone their own styles from study of great captains with styles similar to their own. From experience forged in battle, their counsel on leadership is as important a part of their legacy as their results in battle.

Superior leadership and martial wisdom alone do not complete the skill required for generalship. In combination with leadership, pervasive knowledge of strategy and tactics, and the trust and confidence of subordinates, the great captains also knew how to take appropriate risks. The study of military history provides case studies in risk calculation in which the gravest of stakes were on the line. As the great humanist Erasmus said, "Fortune favors the audacious." This statement applies to all of the great captains. Contrarily, hardship curses the reckless and overly cautious.

The Audacious. Napoleon described Hannibal as "the most audacious of all, probably the most stunning, so hardy, so sure, so great in all things." Hannibal's crossing of the Alps to attack the Romans in Italy, for which he is principally known, stands as perhaps the most audacious act in all of military history. The trek was not without its costs. Hannibal lost almost half his original force of forty-six thousand men and all but a few of the thirty-eight elephants he started with. Nonetheless, Hannibal's crossing of the Alps also had its payoffs. Hannibal achieved a string of military successes against superior odds, culminating in one of the most storied battles of all time—the battle of Cannae.

Two Roman double-consular armies met Hannibal on open ground near Cannae. The Romans outnumbered Hannibal's forces and looked to outflank Hannibal on both sides. Hannibal aligned his troops in a crescent formation, with the wings curved away from the Roman lines. The Romans attacked the Carthaginian infantry center, which gave way before them, allowing the Roman infantry to encircle them. The Roman infantry, sensing victory, closed in for the kill. On the wings, however, the Carthaginian cavalry had defeated the Roman cavalry and maneuvered to turn the crescent formation inside out to envelop the Roman infantry. Hannibal's army slaughtered the Roman armies. Hannibal had audaciously taken on a superior force and defeated it with a double-envelopment maneuver that is still studied today.

The Cautious. General "Fighting Joe" Hooker at Chancellorsville serves as an example of how excessive caution can turn an otherwise brilliant commander into a beaten man. In the spring of 1863, the Confederates held twenty-five miles of unbroken, fortified lines in Virginia, from Port Royal to Banks Ford. Robert E. Lee still held Marye's Heights in Fredericksburg, scene of Ambrose Burnside's earlier thrashing. Hooker realized that in spite of his two-to-one superiority over the Army of Northern Virginia, another attack on Fredericksburg would end with the same devastating results. Instead, Hooker planned to flank Lee's army by an upstream crossing of the Rappahannock and Rapidan Rivers with three corps, while holding Lee in place with forty thousand men at Fredericksburg. The plan proceeded smoothly until Union forces began to encounter resistance leaving the Wilderness toward Fredericksburg. Thanks to J. E. B. Stuart's cavalry probes, Lee had caught wind of Hooker's plan and sent fifty thousand men to take on Hooker. Lee, an audacious general in his own right, dangerously split his force again, sending Stonewall Jackson's corps to flank Hooker's right side. With Lee's forces split, Hooker had an opportunity to counterattack and crush the Confederate forces. Instead, Hooker lost his nerve and cautiously ordered a withdrawal to Chancellorsville. With that order, Hooker handed over the reins of initiative to Lee, snatching defeat from the jaws of victory.

The Reckless. Everyone knows the story of Custer's last stand and his headlong reckless rush after the Indians. Another, lesser-known Indian battle, the battle of Blue Licks, also serves to highlight the difference between reckless and audacious action. In August 1782, a group of 182 Kentucky militiamen, led by Colonel John Todd and including members of the Boone family, was in hot pursuit of Indians who had attacked an American fort. One officer, Major Hugh McGary, advised Colonel Todd to wait for reinforcements. Todd rebuked McGary for his timidity, a scorn that did not sit well with the hotheaded company commander.

During the pursuit, Daniel Boone noticed the Indians were concealing their numbers by sharing tracks, yet making the trail very easy to follow. Boone smelled an ambush by a force he estimated at five hundred Indians. The rangers caught up to the Indians at the Blue Licks. Several Indian warriors showed themselves at the top of the rocky hilltop. Boone knew the terrain. At the top of the hilltop were wooded ravines that could shield an Indian force from view. He advised breaking off the pursuit. McGary, still stinging from Todd's previous insult, called Boone a coward. He leapt onto his horse, yelling "Them that ain't cowards follow me," and recklessly charged into the river toward the Indians. Colonel Todd and the rest of the rangers followed. The Indians were indeed waiting in ambush, just as Boone feared. The rangers suffered a devastating defeat, in which Daniel Boone lost his son, Israel. Rather than provide inspiration at the decisive moment, McGary had recklessly incited a charge outside of the proper context.

Inspiration. Military history smiles most brightly on its most brilliant generals who were also monuments to inspiration. American military history has many proud examples of inspirational leadership. John Paul Jones revitalized his badly beaten crew in the battle between the HMS *Serapis* and the *Bon Homme Richard* with his "I have not yet begun to fight" reply to the British call for surrender. Major General Anthony C. McAuliffe's simple yet defiant reply of "Nuts!" to the German demand for surrender at Bastogne steeled not only the hearts of the defending 101st Airborne and 10th Armored Divisions but also the rest of the American army in northwest Europe. ¹¹ Inspirational words coupled with courage, and the strong will of a great captain, can turn the tide of battle. They can move men to victory against superior odds, just as Lord Horatio Nelson's signal that "England expects that every man will do his duty" did for his fleet on October 21, 1805, at the battle of Trafalgar.

Study of the great captains yields the context and timing of tide-turning remarks and shows the power of inspiration through the force of their results. While few officers will ever find themselves in situations like those of Jones off Flamborough Head, McAuliffe in Bastogne, or Nelson at Trafalgar—with fewer still the headiness to articulate such elegant, fiery prose in the midst of carnage—strong-willed officers must still be able to buttress the fighting spirit of their troops and move them to action. Inspiration can mean the difference between victory and defeat.

Inspiration can also result from deed and attitude rather than words. In Lord Moran's *The Anatomy of Courage*, Surgeon Commander McDowell provides a compelling account of inspirational leadership, while also noting its personal toll on the leader:

I saw the Captain of a ship drinking a cup of tea on the bridge in the course of dive-bombing attacks that had gone on all day. While he was drinking the lookout reported "Aircraft on the starboard bow, sir." He did not even look up. At "Aircraft diving, sir," the Captain glanced up only. "Bomb released, sir," and the Captain gave the order "Hard astarboard," and went on drinking his tea until the bomb hit the water nearby. The reaction to this episode was a kind

of hero-worship on the part of everyone who saw it. When the bombing had ceased the Captain went down to his cabin and when he was alone he wept.

Courage. Generalship requires courage—the strength to persevere in the face of fear. Of all the military virtues, it is the most prized and highly rewarded. No man knows how he will react to the stresses of combat until actually tested in battle. More likely than not, he will grapple with his own fear of death, while trying his best to present a mask of courage. History whispers the accounts of the great captains, who sometimes shared the fact that they too had to overcome personal fear in the face of combat. In a March 25, 1943, letter to his wife, Beatrice, Patton admitted, "I still get scared under fire. I guess I will never get used to it, but I still poke along." Untested warriors can take solace in the fact that fear is normal, a precondition to courageous action.

Commanders must also have the moral courage to do what is right in spite of popular sentiment or even orders. The whispers of the 109 civilians massacred at the Vietnamese village of My Lai at the orders of Lieutenant William Calley on March 16, 1968, still remind us of a higher duty always to do what is right.

Lessons in Innovation. We must stay tuned to the whispers of history—that they not be drowned out by the crescendo of the present. As Sir Julian Corbett noted, "The value of history in the art of war is not only to elucidate the resemblance of past and present, but also their essential differences." The development of the German blitzkrieg between World War I and World War II illustrates Corbett's insight.

World War I defensive victories in battles such as Verdun, as opposed to the slaughter of French soldiers in offensive operations, led the French to believe that an impenetrable Maginot Line would protect the French from future aggression. The "lesson learned" by the French was right, that in World War I the defense dominated. The Germans learned the same lesson. But, whereas the French adopted the lesson, the Germans adapted to it.

At the close of World War I, the Germans had some success with their elite "stormtroop" units in overcoming the stalemate of static trench warfare. They studied stormtroop tactics, looking for ways to improve them. While the stormtroop units were able to take advantage of surprise and speed to overcome enemy defensive positions, they still were short of the mobility required to take advantage of their gains. During the interwar years following World War I, the Germans developed the blitzkrieg concept, a mobile form of warfare that combined close air support with tanks and mechanized infantry, to shift the advantage back to the offensive.

Lessons in Lessons Learned. History teaches that every war is unique. "Lessons learned" typically focus on what worked—and what did not—in the last conflict. History is replete with examples of militaries staying with successful technology and doctrine from previous conflicts only to suffer disastrous results in the next.

History also teaches that there are no silver bullets in warfare. Multiple means are necessary to address a spectrum of conflict that continues to expand with each evolution and revolution in warfare. The debate over the utility of the atomic bomb after the bombings at Hiroshima and Nagasaki is a case in point. After the surrender of the Japanese in World War II, air extremists proclaimed that the atomic bomb rendered all other weapons and forces obsolete. They argued that the dropping of the bomb at Hiroshima and Nagasaki heralded the nuclear age, in which traditional forms of power projection—to include the Army, Navy, and Marines—were relics of the past. The atomic bomb could do it all—the nation merely needed to invest in bombers and A-bombs. An acrimonious debate culminated in 1949 with a special House Armed Services Committee investigation. 13

The committee report debunked the myth of the "one-weapon, easy-war concept"; it was further underscored when the North Koreans attacked across the thirty-eighth parallel on June 25, 1950. Strategic bombing with atomic weapons was simply not an option. The Korean War was a bloody conflict in which ground forces, supported by air and sea power, were the final arbiters.

Conclusion. Serious study of history is essential to the development of exceptional military professionals. Napoleon, on his way to exile at Saint Helena, probably summed it up best in referring to his own son's education: "My son should read and meditate often about history; the only true philosophy. And he should read and think about the great captains. This is the only way to learn about war."

On a personal note, I still have my father's hat. I no longer wear it; even so, I know the whispers of the past still reside within it. I remember their lessons. My father's hat reminds me. . . .

Notes

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- 3. Martin Blumenson, The Patton Papers, 1940–1945 (New York: Da Capo, 1996).
- 4. To find out more about these battles, the following readings are recommended: Roy E. Appleman, "The Fetterman Fight," in *Great Western Indian Fights*, ed. Potomac Corral of the Westerners (Lincoln: Univ. of Nebraska Press, 1960, repr. 1966), chap. 10; Mark M. Boatner, *Encyclopedia of the American Revolution* (New York: David McKay, 1966); Thomas Fleming, "The Cowpens," *Military History Quarterly*, Summer 1989, pp. 56–67; Victor Davis Hanson, "Cannae," *Military History Quarterly*, Summer 1990, pp. 60–5; Alberto Bin, Richard Hill, and Archer Jones, *Desert Storm: A Forgotten War* (Westport, Conn.: Praeger, 1998); and Stephen W. Sears, *Chancellorsville* (Boston: Houghton Mifflin, 1996).
- 5. For more on the Korean War, see T. R. Fehrenbach, *This Kind of War: A Study in Unpreparedness* (Washington, D.C.: Brassey's, 1998).
- 6. James S. Corum, *The Roots of Blitzkrieg: Hans von Seeckt and German Military Reform* (Lawrence: Univ. Press of Kansas, 1992), pp. 75–96.
- 7. Allan R. Millett and Peter Maslowski, For the Common Defense: A Military History of the United States of America (New York: Free Press, 1984), p. 161.
- 8. Napoleon advised that "the first quality for a commander in chief is a cool head, which receives a correct impression of things. He should not allow himself to be confused by either good or bad news. The impressions which he receives successively or simultaneously in the course of a day should classify themselves in his mind in such a way as to occupy the place which they merit, for reason and judgment are the result of the comparison of various impressions taken into consideration. There are men who, by their physical and moral make-up, create for themselves a complete picture built upon a single detail. Whatever knowledge, intelligence, courage and other good qualities such men may have, nature has not marked them for command of armies or for direction of great operations of war."
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- 10. The author's great-great grandfather, Squire Boone, was wounded in the thigh during the battle.
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- 12. Bertram Vogal, "A Reply to the Extremists," U.S. Naval Institute *Proceedings*, May 1947, pp. 545–7.
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Principles of War

Applying the Principles of War NOLA M. SLEEVI

Although centuries and continents separated their lives, Sun Tzu, Napoleon Bonaparte and Thomas Jonathan "Stonewall" Jackson employed, to varying degrees, the same basic principles of war. All were ingenious military commanders. Histories of their lives detail the characteristics that enabled them to become successful leaders. This article will discuss their similarities and the tactics they employed: deception, celerity (speed/swiftness), shaping the enemy and exploiting victory.

Sun Tzu

Sun Tzu's Chen clan ancestors were extremely active and influential in Chinese politics. Tales of the wiles with which the clan overthrew the reigning Qing family no doubt inspired Sun Tzu as he developed his principles of war. Sun Tzu's father, Chen Shu, received the title "Sun" in recognition of his notable military attainments. Sun Tzu assimilated and developed many of his military theories as a result of his father's and paternal family's influence. Sun Tzu placed great value on studying the art of war. The constant political unrest in China compelled Chen clan members to always be on guard and to seek opportunities for military advancement. Resolutely facing a life without tranquillity, Sun Tzu honed his warrior skills.

Helu, King of Wu, an experienced military commander and expansionist, positively impacted Sun Tzu's career. Helu recognized and capitalized on Sun Tzu's military knowledge, appointing him troop disciplinarian and assistant to General Wu Zixu, commander of Wu forces. In his position as collaborator with Wu, Sun Tzu gained opportunity to fully employ his principles of war. His successes ultimately won him the rank of general.

Napoleon

Napoleon exhibited signs of genius at an early age. Despite being young and deficient in most studies except mathematics, in 1783, Napoleon was selected for transfer from the Brienne School to the Paris Royal Military Academy. Chevalier de Keralio, inspector and military tactics author, overruled suggestions that Napoleon should wait another year: "I perceive in him a spark of genius which cannot be too early fostered." 1 As further evidence of his mental superiority, in September 1785, at the age of 16, Napoleon was commissioned second lieutenant, royal corps of artillery. The average length of time required to "pass out" of the Royal Academy was from two to three years, but Napoleon "applied himself so assiduously" he received his commission after only one year.2

At 19, on his own initiative, Napoleon launched an intensive self-education period in which he consumed many books on military and political history. While attending the Paris Royal Military Academy, he had gained no formal knowledge of military history or tactics. His self-appointed course of study included 83 campaigns, foremost of which were the campaigns of Alexander the Great, Hannibal, Julius Caesar, Gustavus Adolphus, Henri de Turenne, Eugene of Savoy and Frederick the Great.3 Napoleon thoroughly read about these campaigns, convinced that only in this way could he master the secrets of the art of war.

Napoleon also consciously trained his memory and analytical powers by writing a concise summary of each book he read. When he received command of the Army of Italy in March 1796, his mind was trained and ready for his future as military commander and, eventually, emperor. "If I seem always ready to meet any difficulty, to face any emergency, it is because before undertaking any enterprise I have spent a long time thinking it out and seeing what might happen. It is not a guardian spirit that reveals to me suddenly and in secret what to say or to do in circumstances unexpected by others, it is my meditations, my thinking things out. . . . "4

As a youth, Napoleon lived in poverty. He was a *bousier*, or free pupil, at the schools he attended, and the "children of many noble and wealthy families" surrounding him were a constant reminder of his poverty.5 As the Army of Italy commander, Napoleon knew he could gain his soldiers' respect by procuring much-needed supplies for them. This motive does not appear his only one. His heart, not just his military mind, was touched by the appalling conditions under which they lived.6

"Stonewall" Jackson

Thomas Jonathan Jackson became constable of Lewis County, Virginia (West Virginia), at 18. His job "required both courage and determination, qualities that he soon showed that he possessed." A major portion of his duties involved collecting debts, and Constable Jackson became expert at outmaneuvering reluctant debtors. Once, Jackson

grabbed the reins of the horse of a man who refused to pay up. Jackson led the horse to a low stable door, forcing the man off his horse, enabling the county to take possession of the animal in lieu of cash.

Jackson possessed a steadfastness and determination reflected in one of his maxims: "You may be whatever you resolve to be."8 When accepted to West Point in 1842, Jackson's education was found deficient. A family friend inquired whether he could succeed and Jackson replied, "I am very ignorant, but I can make it up in study. I know I have the energy and I think I have the intellect."9 True to his word, "he made up in industry what . . . he had lacked in opportunity."10 Resolve and hard work enabled Jackson to finish his first year ranked 17th out of 59. In General Robert E. Lee's letter of recommendation for Jackson's promotion to lieutenant general in October 1862, he commented that Jackson "spares no exertion to accomplish his object."11

Weak eyes forced Jackson to develop unique study and reading habits. While he was a professor of natural and experimental philosophy and artillery tactics at the Virginia Military Institute (VMI), he read the next day's lesson by daylight, then mentally rehashed it in the evening. This extreme mental discipline prepared Jackson for the American Civil War during which he methodically and meticulously plotted maneuvers to mislead and mystify his enemies.

Jackson was not easily excitable. A VMI cadet related the calmness of artillery tactics instructor Major Jackson under "fire." During drill, mischievous cadets sometimes threw bricks or other objects onto the arsenal's roof. The objects often rolled accurately toward the professor. Although Jackson was often nicked by the falling missiles, "never a notice, a sign or the slightest regard was visible in his face or his actions."12 Many instances are related about his self-control during battle. For example, he could frequently be spotted writing orders atop his mount, Little Sorrel, oblivious to flying bullets. One such time, a cannon ball splintered a tree directly above him. Jackson did not react to the disturbance, remaining engrossed in writing a dispatch.13

Deception

Sun Tzu believed "All warfare is based on deception."14 Through deception, the intended place of battle remains questionable, thereby weakening and confusing the enemy. Uncertainty forces the opponent into psychological disadvantage, causing him to exert wider effort in battle preparation. The attacker can engage fewer troops when the foe is extended. "If he does not know where I intend to give battle, he must prepare in a great many places. And when he prepares everywhere, he will be weak everywhere."15

Sun Tzu perceived deception as a powerful catalyst for creating change, reasoning that the most successful deceptive measures are usually simple and inconspicuous and that the commander with superior deceptive skills has a substantial advantage. "Subtle and insubstantial, the expert leaves no trace; divinely mysterious, he is inaudible. Thus he is master of his enemy's fate."16

During the Jena Campaign, Napoleon sent cavalry commander Armand de Caulaincourt on a mission to detect Prussian intentions to fight. Caulaincourt used the ruse of a hunting trip to Compiegne as his cover. In another deceptive move to gain information, Napoleon sent engineer Colonel Blein, in full uniform, across Prussian lines. Blein was mistaken for a Saxon officer and allowed unmolested passage to "purchase maps" at the Leipzig Fair. After locating the general headquarters of the King of Prussia and the Duke of Brunswick, Blein returned to Napoleon with dispositions of enemy forces.

A favorite Napoleonic deception tactic was to advance his army in divided columns. In the May 1800 Marengo Campaign, Napoleon's troops crossed the Alps in five columns, two of which contained the majority of soldiers. The total front was approximately 115 miles, reaching from the Var River to St. Gothard Pass. This divided approach into Italy successfully deceived General Baron Michael Friedrich von Melas concerning Napoleon's objective. Melas wrote reassuringly to a female friend in Pavia that she was safe from the French and need not evacuate her home. Within 12 hours, Napoleon and his main army were in town.

Deception was vital in Jackson's Shenandoah Valley Campaign during the Civil War. Union troops were numerically superior and were distributed such that Jackson's force was often between them. He found deception useful in economizing time to outmaneuver converging enemy armies. To Jackson, "mystery was the key to success." 17 Jackson frequently used circuitous marches to produce uncertainty in the enemy's mind. Confederate

General Richard Taylor remarked, "I began to think that Jackson was an unconscious poet, and, as an ardent lover of nature, desired to give strangers an opportunity to admire the beauties of his valley." 18

The meandering before the McDowell, West Virginia, engagement was typical. Jackson's destination was west. He marched east. Confusion regarding Jackson's position and destination is evident in official correspondence. On 9 May 1862, Secretary of War Edwin M. Stanton directed General Nathaniel P. Banks to determine enemy strength and positions, saying, "Opinions from Gen. [Irwin] McDowell and Gen. [John C.] Fremont are contrary with respect to Jackson."19 On the same day, Major General E.A. Hitchcock reported, "The movements of Jackson are uncertain."20 Union reconnaissance showed "the departure of Jackson, but not his destination."21

Maintaining extreme secrecy toward his own staff, generals and troops was characteristic of Jackson. Others were not convinced of the validity of Jackson's extreme reticence. For example, his staff concluded after the Romney, West Virginia, expedition that "If Gen. Jackson had been killed no one would have known what was to be done."22 When informed that this practice was unacceptable to his generals, Jackson replied, "If I can deceive my own friends I can make certain of deceiving the enemy."23 Jackson realized that the least tidbit of information might give the enemy an advantage in a war in which there was a high rate of desertion, where friend and foe shared a common language, thus making it harder for spies to be easily detected.

Celerity

Sun Tzu, Napoleon and Jackson each relied on celerity to compensate for numerical inferiority. They also found it instrumental in promoting surprise and giving morale advantage to the attacker. For instance, Sun Tzu believed, "Speed is the essence of war," recognizing speed as essential in achieving surprise. "Take advantage of the enemy's unpreparedness; travel by unexpected routes and strike him where he has taken no precautions."24 Likewise, Napoleon highly valued time and believed the loss of it "irreparable in war."25 He used celerity to gain the advantage of surprise. For example, a rapid flanking march toppled much of the allied forces' command structure at Ulm [Germany], in October 1805. Austrian commander General Karl Mack, completely surprised by Napoleon's arrival, "had never imagined that the French could envelop his right flank so swiftly."26 Napoleon's sudden appearance threw General Karl von Schwarzenberg and others off balance to such an extent they deserted Austrian forces. Mack was one of the few to regain composure and "try to buy time for other allied armies."27

To Jackson, celerity was an indispensable element in many marches in order to soundly defeat enemy detachments and escape before reinforcements could arrive. Jackson's Shenandoah Valley Campaign has "rarely been equaled for boldness of initiative and celerity of movement." 28

Jackson's swift movement at Kernstown, Virginia, created a misapprehension of his strength that struck fear into Union troops. Although the advantage gained was initially psychological, celerity secured a Southern strategic victory and produced fear for the safety of Washington in President Abraham Lincoln's and Stanton's minds. They greatly overestimated Jackson's strength and were certain of imminent attack. Jackson fostered this illusion by "the swift and deceptive dashes of his foot cavalry."29

Jackson's use of celerity in the May 1863 flank march at Chancellorsville, Virginia, produced complete surprise resulting in Confederate victory. Jackson selected the route, ordering the cavalry to screen the march. Stragglers could expect to feel the bayonet of provost marshals. There would be no allowance for delay, although Jackson did enforce his usual order that the troops rest 10 minutes each hour. Jackson's exhortation to "Press on, press on" was issued repeatedly throughout the 8-hour march.30 The element of surprise, bought by the exertion of celerity and deception, was intact when Jackson's corps attacked Brigadier General Joseph Hooker's rear forces.

Shaping the Enemy

Sun Tzu, Napoleon and Jackson each shaped the enemy to conform to their timing and conditions of battle. Each commander was careful not to allow the enemy to shape him. Shaping has both offensive and defensive characteristics. The offensive aspect of shaping centers on "attacking the enemy's strategy."31 Defensively, the object is, through troop disposition, to appear to be "without ascertainable shape."32

Sun Tzu believed a wise commander refrained from solidifying plans until he has satisfactorily shaped his enemy. His tactics should be directed toward conforming the opposition's shape to his own plans. He believed the most effective methods of shaping the foe in each campaign are determined only through meticulous probing and

observation, using close enemy contact, spies and agents and reconnaissance as essential shaping elements.33 Sun Tzu perceived morale as another important factor in shaping the enemy, understanding that a commander who can capitalize on or create discouragement can make the enemy more pliable.

Napoleon also excelled at shaping the enemy. One of the best examples is seen at the December 1805 battle of Austerlitz. Before the campaign, Napoleon had carefully studied the terrain. His reconnaissance was thorough and incessant. Several days before the battle, when enemy troops changed positions, dangerously intermixing their lines, Napoleon watched, adjusting his strategy as needed.

Napoleon also used psychological shaping tactics to weaken his enemy and prepare him for the decisive thrust. During the 1796 battle of Arcole, Austria, especially during the second and third days of battle, Napoleon consciously and systematically wore down his enemy, while waiting for the battle to become "ripe."34 He knew "success in war depends on . . . sensing the psychological moment in battle."35 Some fighting occurred on dikes 11 yards wide and 3 feet above the marshes of the Adige and Alpone rivers. On the second day, Napoleon "detected a slowness and hesitancy in [Austrian General Josef] Alvintzy's maneuvers."36 He later discerned the Austrian army's low morale and its many raw recruits' exhaustion. He then detached a small flanking force of 25 guides and four trumpeters, and, with "great reinforcement of shouts and trumpet calls," they routed the opposition.37

Jackson believed a commander's ability to shape his enemy depended largely on a thorough knowledge of his surroundings. Jackson valued knowledge of the theater's terrain as well as that in the areas where he expected to fight. Geographical familiarity enabled him to foresee and influence enemy maneuvers and strategies. Major Jedediah Hotchkiss wrote, "[I]n the preparations [Jackson] made for securing success . . . he was very particular in securing maps, and in acquiring topographical information. . . . I do not think he had an accurate knowledge of the Valley before the war."38 Yet, his men said of Jackson, "He knew every hole and corner of the Valley as if he made it himself."39

Hotchkiss, who after Jackson's death, served under generals A.P. Hill, R.S. Ewell and J.A. Early, recognized Jackson's outstanding ability to shape his enemy, saying that Jackson possessed "an unrivaled eye for terrain" and was "an expert at reconnaissance. . . . I was in no great battle subsequent to Jackson's death in which I did not see the opportunity which, in my opinion, he would have seized and have routed our opponents."40

Jackson also had the ability to discern the enemy's morale, keenly using it to shape his enemy even when circumstances refracted other officers' judgment. The 1862 Battle of Malvern Hill, Virginia, one of the Seven Day's Battles fought to repulse Northern troops from the Richmond vicinity, was hard-fought with many losses on both sides. Reports to Jackson after the battle were filled with discouragement. Ewell, the last to report, stated he expected an attack by Major General George B. McClellan in the morning, adding bluntly that the demoralized Confederate troops could not face him successfully. Jackson, recognizing that by refusing to withdraw would effectively intimidate the Federals, shaped their already wounded morale into fear and hopelessness. Jackson assured his officers, "McClellan will clear out in the morning."41 Daybreak affirmed his assessment. McClellan had withdrawn to the banks of the James River. Major R. Dabney credited Jackson's "quick eye" with an ability to estimate "aright the discouragement of the enemy and strike the hesitating foe at the decisive moment."42

Exploiting Victory

Exploiting victory was an integral principle of the art of war to Sun Tzu, Napoleon and Jackson. None was content to merely gain victories. They capitalized on resultant enemy demoralization and chaos. In fact, Sun Tzu stressed further action than just winning the battle. After winning battles and taking objectives, he said, failing "to exploit these achievements is ominous and may be described as `wasteful delay.'"43 The low morale and broken ranks of a defeated foe may be easily used to the victor's advantage, as momentum is already on his side. "Thus a victorious army is as a hundredweight balanced against a grain, a defeated army as a grain balanced against a hundredweight."44

Napoleon would "pursue the beaten foe without mercy after securing victory." 45 General Francois Joseph Lefebvre referred to this trait as the "most original of Napoleonic warfare." 46 The first Italian Campaign exemplified Napoleon's views on exploiting victory. He relentlessly pursued the enemy, wringing everything possible from his victories. For example, initial success against the Austrians was followed by aggressive pursuit, leading to victory at Lodi, Italy, in May 1796. After the battle at Castiglione, Italy, Napoleon's "ruthless pursuit of a beaten enemy" led to

a victory at Bassano.47 Subsequent battles proved Napoleon's tactics and exploitation of victory were sound as he continued to achieve spectacular successes.

Likewise, Jackson believed that "To move swiftly, strike vigorously and secure all the fruits of victory is the secret of successful war." 48 He exploited victory to reap both intangible and concrete benefits. As a result of Jackson's relentless exploitation and pursuit, the opposition greatly overestimated Southern strength. This misconception caused Northern troops to stay in the Valley after they had been ordered to reinforce McClellan at Richmond. As Jackson capitalized upon the momentum of victory, confidence and fearlessness permeated Southern morale.

One of Jackson's most famous exploits was the 38-mile overland engine relocation his forces conducted in exploitation of action that began at Martinsburg, West Virginia. Jackson formed a special unit to reinforce bridges, smooth roadbeds, assemble the strongest available horses and strip the 50-ton, coal-carrying locomotives of expendable weight. His force transported 14 engines from Martinsburg to Strasburg behind 40 horses and, at times, 200 soldiers.49 On average, three days were required for each relocation. Admiring Virginians lined the route daily.50 Jackson recognized that pursuit and securing the spoils of war required effort, skill and persistence.

Jackson had occasion to both laud and lament his cavalry in efforts "to carry out the pursuit" and exploit victories.51 Jackson ordered Colonel Flournoy of Ashby's cavalry to sweep forward after the victory at Front Royal, Virginia, to continue the Confederate momentum. The result was that 250 Virginian cavalrymen captured 600 Federal horsemen.52 Jackson declared "he had never, in all his experience of warfare, seen so gallant and effective a charge of cavalry.53 However, later the same day, the same cavalrymen virtually stopped the Confederate momentum when they interrupted their pursuit to stop to plunder. Jackson then lamented, "Never have I seen an opportunity when it was in the power of cavalry to reap a richer harvest of the fruits of victory. Had the cavalry played its part in the pursuit, but a small portion of Bank's army would have made its escape to the Potomac.54

Sun Tzu, Napoleon and Jackson each possessed unique characteristics that prepared them for leadership roles and battlefield command. Their relentless pursuit of excellence through rigorous intellectual study of past military campaigns, terrain, tactics and the art of war prepared them to fully exploit the principles of deception, celerity, shaping the enemy and exploitation of victory. Although each general had his own individual leadership style and stressed slightly different aspects of the principles of war, each agreed that warfare must be thoroughly studied and that prudent application of its basic principles to the fluid conditions of war ensures victory. *MR*

Notes

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- 35. Fuller, 46.
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On Bringing Back the Principles of War RICHARD M. SWAIN, LIEUTENANT COLONEL, US Army

Today, there is increased realization that the study of principles of war should be an integral part of an officer's education and training. While this is not a new subject, the interest in it in recent years has been less than overwhelming. It is time to re-examine the principles in light of today's environment. The author asks several questions that are appropriate for consideration.

PRINCIPLES are "the fundamental ideas or rules in accordance with which practical activity takes place in a specific field." What military theorists have long referred to as the principles of war are, in fact, misnamed. Rather than dealing with war as a whole, these "fundamental ideas" are operational in nature. They are more applicable to operational strategy, operations and tactics than to the technical, logistic and social aspects of war. These principles are the underpinnings of operational theory. In any particular situation, they have existed in a dynamic balance, or imbalance, very much dependent upon the objective conditions which defined that situation.

For the student of war, the principles provide a frame of reference within which to examine past events. By gaining an appreciation of the relationship of one principle to another, and of the effect of conditions upon their application, an officer can train his mind and judgment so that he will be able to deal with the problems he may find in the future ⁴ To the officer who has been so educated, the principles also provide a set of proven guides, descriptive rather than prescriptive, which he can use to evaluate a plan or operation when the assumptions of more rigidly prescriptive doctrine may prove to have been false.

If one intends to reincorporate the principles of war into the system of officer education and training, four questions immediately commend themselves for consideration. What principles should be adopted? How should they be taught? Where should they be recorded? How should they be used in practice?

O What principles should be adopted? The idea of principles of war is not new. Both Jomini and Clausewitz wrote about principles of war, as did Marshal Foch and any number of 19th-century military theorists. However, it was J. F. C. Fuller who first listed, or gave names to, eight of the nine principles now incorporated into Field Manual (FM) 100-1, *The Staff Officers Field* Manual. If Fuller named them, the US Army adopted them in the 1920s and later defined them.

Until a few years ago, with the publication of the current FM 100-5, *Operations*, the US Army's principles of war existed generally in the form seen in Figure 1. These nine principles are not immutable, and all authorities are not in agreement about what the principles of war are. However, these provide a starting point, and, by now, they have the weight of custom behind them. Most US Army officers have come into contact with these nine at one time or another, though perhaps few were properly instructed in their significance or correct application.

It would be appropriate to examine these principles to determine their adequacy, both in *toto* and individually. Some questions arise immediately. Are nine principles too many or too few? Surely, if one is looking for conceptual guideposts, there is a limit to the number of principles one can adopt without being dogmatic or redundant. Are these nine principles the correct ones? Should some be added, dropped or modified?

Ought not the principle of mass demand concentration of *superior* combat power at the decisive place and time? What of economy of force? Should a commander not allocate minimum essential combat power to all efforts, recognizing that profligacy in any action may result in a Pyrrhic victory? Then, there is unity of command. Fuller wrote of cooperation. It would seem that unity of effort would make a better principle as that is the end sought by both unity of command and cooperation.

One might also wish to re-examine surprise and security. Sometimes they produce confusion because they are apparently, but not truly, opposites. Surprise has to do with the ability of one's opponent to react to one's moves. Security demands that you not be taken unawares. Both principles seem to be necessary, but might require re-titling or re-definition. Of course, careful instruction can usually prevent any misunderstanding.

PRINCIPLES OF WAR

Objective: Direct all efforts toward a clearly defined, decisive and attainable goal. The ultimate goal of war is the fulfillment of the policy for which the war is being fought. The accomplishment of this goal often requires the defeat of the enemy's armed forces or the destruction of his means or will to resist. At lower echelons of command, the goal may be the seizing of terrain or possibly the retention of terrain. Goals of smaller units are frequently altered in campaigns and wars, but seldom in the midst of battle. The principle of the objective is applicable at all echelons

Offensive: Seize, retain and exploit the initiative. By maintaining the initiative, the commander preserves his freedom of action and enhances the morale of his troops. The principle of the offensive applies not only to offensive operations but also to the defensive. An offensive spirit must be inherent in the conduct of defensive operations, for a prolonged and passive defense breeds unrest, lowers morale and surrenders the advantage of intangibles to the enemy. An active defense, conducted with the spirit of the offensive, keeps the enemy off balance, restricts his ability to attack and enhances security. In adhering to the principle of the offensive, the commander sets the pace and determines the course of battle, exploits enemy weaknesses and is better prepared to capitalize on unexpected developments.

Mass: Concentrate combat power at the decisive place and time. The commander must choose the time and place, and he must also determine what combat power is available to him and how much is needed. Since combat power is the total of physical means and moral means available to a commander, his available combat power is a function of numbers, quality and state of morale. The principle of mass leads to success when a commander achieves superiority in combat power over his rival. Through proper application of the principle of mass, numerically superior forces can be defeated.

Economy of Force: Allocate minimum essential combat power to secondary efforts. This principle is a corollary to the principle of mass, for it is a method of achieving mass. And like the principle of mass, the principle of economy of force requires the commander to choose the time and place for secondary efforts and to determine the amount of physical resources that comprise minimum essential combat power at that time and place. Inherent in both the principle of mass and the principle of economy of force is the idea that all available resources must be employed in the most efficient and effective manner.

Maneuver. Move and position military forces in a way that furthers the accomplishment of the *mission*. Maneuver is also a corollary of the principle of mass, for it-is another means of achieving a decisive superiority of combat power. Movement and positioning must always be undertaken with the intent to place the enemy at a relative disadvantage. Proper movement and positioning frequently achieves results that other-wise could be achieved only at heavy cost in men and materiel. In many situations, the principle of maneuver can be applied only in conjunction with the effective employment of firepower.

Unity of Command: For every objective, there should be unity of effort under one re*sponsible commander*. Unity of effort requires that all elements of a force work harmoniously toward a common goal, and it implies the development and coordination of the full combat power of the available forces. Cooperation further contributes to unity of effort, but only when a single individual is responsible for the activities of a group can the group operate at its peak efficiency in its quest to achieve an assigned goal. Coalition warfare creates a challenge for the principle of unity of command because of the unwillingness of groups to place their resources under the control of a commander from one of the other groups in the coalition.

Surprise: Accomplish your purpose before your enemy can react effectively. Surprise is a most effective and powerful weapon in war, and it can decisively shift the balance of combat power. With surprise, success out of proportion to the energy exerted can be achieved. Surprise results from striking the enemy at a time and place for which he is not fully prepared. Speed, cover, deception, effective intelligence, effective counterintelligence, variations in tactics and variations in methods of operation are some of the factors that contribute to the gaining of surprise.

Security: Never permit the enemy to acquire an unexpected advantage. Proper security infers that a commander prevents surprise of his own forces, maintains his freedom of action, avoids annoyance by the enemy and denies

information to the enemy. Since risk is inherent in war, application of the principle of security does not imply undue caution and the avoidance of calculated risk. Security can often be enhanced by the seizure and retention of the initiative.

Simplicity: Prepare clear, uncomplicated plans and clear, concise orders to ensure *thorough understanding*. In all communications, the commander should make every reasonable effort to eliminate the slightest chance of misunderstanding; simplicity contributes to this end. Simplicity does not infer that precise, detailed and necessary information should be withheld from those who need such information to operate effectively.

Source: Lieutenant Colonel John W. Campbell, "Evolution of a Doctrine: The Principles of War," Marine Corps Gazette, December 1970,pp39-42.

In re-adopting the principles of war, it would be useful to restore the one-sentence definitions which are not present in FM 100-1. The most obvious reason for this is the need for clarity. For example, discrimination between the principles of security and surprise is essential if one is to understand fully the object of both. This discrimination is possible with the precise nature of the definition. Precision of definition promotes a common vocabulary of military theory, and such definition greatly facilitates the instruction of students new to the study of the military art. Whether the traditional list of nine principles is retained or modified, it is a good starting point for the process of redefinition. Properly constructed and precisely defined, the principles of war will become a useful tool for the military officer.

How should the principles be taught? The principles of war and the study of the history of the military arts⁵ are synergistic. The principles provide a framework within which to examine operational history. This study, in turn, gives the student a feel for the interrelationship between the principles and the influence of objective conditions on their application. The vehicle for this study is the battle/campaign analysis.

Before undertaking the analysis of battles and campaigns, it is wise to memorize the precise, one-sentence definitions shown in Figure 1. While some would object to this sort of memorization as scholasticism, it is an essential first step to understanding.

In any intellectual discipline, one must first understand the conceptual tools before they can be used as intended. Each of these definitions has certain key words which contain the essence of the idea of that principle. It is of the utmost importance, however, to remember that learning the definitions of the principles of war is not an end in itself. It is only means to an end. That end is the enhancement of one's powers of discrimination on the battlefield. Once the principles are committed memory, one can learn the techniques of battle/campaign analysis. Figure 2 provides an easily mastered format for battle/campaign analysis. The point of the battle/campaign analysis is to examine real events, determine as accurately as possible what happened,

BATTLE/CAMPAIGN ANALYSIS

Clausewitz distinguished between the simple historical narrative and "the *critical approach*" by listing three different intellectual activities which together constitute the latter. These were:

- First, the discovery and interpretation of equivocal facts.
- Second, the tracing of effects back to their causes.
- Third, the investigation and evaluation of means employed,

This Clausewitzian model provides the intellectual framework within which to develop the techniques of battle and campaign analysis.

Two things must be clearly understood. First, when we speak of battle and campaign analysis, we do so in the broadest sense. That is, we treat it as an exercise that looks beyond the discrete events that constituted a particular battle or campaign and evaluate those events in terms of the background against which they were played out. We also consider such precepts of military theory as the principles of war. Second, while knowledge of specific facts is necessary, it is a means to an end rather than the end itself. Acquisition of this knowledge completes only the first of Clausewitz' three activities. The vital part of the process rests in the second and third, tracing effect to cause and evaluating the means employed.

A battle or campaign analysis should consist of two major elements: a historical summary and a critique. Because battles and campaigns are dialectic to the extent that their outcome is the sum of the efforts of two opposing forces, the historical summary should contain three elements. These are a statement of the opposing commander's intentions, an explanation of why they sought to do whatever it was they intended and an explanation of how they went about accomplishing their aims.

These are the elements of the first three paragraphs of the five-paragraph operation order in a somewhat different sequence. A commander's intention is normally his *mission*. *-The situation* normally defines the broader setting in which the commander finds himself, and the *execution* tells how he will accomplish his mission. The historical summary should be just that, a summary. It must, however, provide sufficient detail to support the analysis. Obviously, if the facts are incorrect, the analysis must fail as well.

The second and more useful element should consist of the analysis, or critique, of the commander's actions, again supported by facts or examples. It is necessary to take a position as to why each commander succeeded or failed, whether the actions they took were appropriate given their intentions and whether their immediate intentions were valid given the situation and their long-range goals.

If their actions were inappropriate, then look for possible alternatives. Evaluate how well the commanders applied the principles of war. State which principles they seemed to emphasize and which they neglected, and to what end. Show an appreciation for the effects of doctrinal organizational, strategic, tactical, technological, logistical or personal limitations within which each commander had to function. Finally, state the significance of the outcome of the battle or campaign.

Carl von Clausewitz. *On War edited* by Michael Howard and Peter Paret, Princeton University Press. Princeton, N.J., 1976, pp 141 and 578.

Ultimately, the battle/campaign analysis requires the student of war to sit in judgment of former military leaders. It is through this disciplined value judgment (judgment based upon facts) that the historian is set apart from the chronicler.

OUTLINE

Battle/Campaign Analysis

- 1. Historical Summary
 - a. What were the commanders trying to do?
 - b. Why was that necessary?
 - c. How did each intend to accomplish his aim?
- 2. Analysis.
 - a. Was each commander's aim consistent with his greater goals (national policy in the case of strategy; strategy in the case of the engagement)? Did he have any alternatives which were better?
 - b. Were the commander's actions consistent with their intentions?
 - c. Why did each succeed or fail?
 - (1) Effect of conditions (space, time, technology employed, composition of forces, geography, and so forth) on the outcome.
 - (2) Application of principles of war.
 - d. What was the significance of the battle or campaign?

Identify the effects of objective conditions and subjective decisions, draw some conclusions as to why things turned out the way they did and speculate as to whether other outcomes were possible. Like the principles of war, battle/campaign analysis is only a means to the end of greater understanding, not just of any single battle or campaign, but of those things both abstract and concrete that affect military operations.

Because conditions vary, a student of war is safe in drawing general conclusions only after analyzing a great number of battles or campaigns which occurred under a wide variety of historic, geographic, sociopolitical and technological conditions. Only then can the general be separated from the particular with some degree of assurance.

It is fair to say that the technique of battle/campaign analysis is the most which can be taught. Practice and experience in using it will come only with time. The wisdom to draw correct conclusions must originate within each officer. Because the technique is both basic and intellectual, it belongs in the field of education rather than training. Further, it would seem to be accomplished best in undergraduate institutions, at West Point or in Reserve Officers' Training Corps.

It is essential that its intellectual nature be preserved, or it will rapidly degenerate into rote memorization and produce few benefits. At the same time, should the Army ever develop a coordinated system of military education, it is a process which could be reintroduced at the staff and war colleges at progressively higher standards of sophistication. At those levels, it could, and perhaps should, be combined with a survey of military theory to broaden the officer's intellectual grasp of war along with his technical abilities.

Where should the principles be recorded? This question really addresses the issue of whether principles of war have a place in US Army doctrine. Here, there is a dilemma. It has already been stated that principles of war are an intellectual and theoretical tool. Though doctrine is no more than received, or approved, theory, for the past two decades at least, the US Army has approached tactics and operations as technical rather than intellectual processes.

At the lowest level of the spectrum, this is, no doubt, appropriate. Minor tactics are almost entirely technique. However, the result has been that all our doctrinal manuals tend to be detailed and directive rather than general and conceptual. We publish cookbooks rather than works of military theory, and principles have little use therein.

The only possible exception of any consequence is FM 100-5, intended by its author as a sort of conceptual manual, though to a certain extent its fascination with technical detail conceals its intellectual merit. It is in such a "battle book" that the principles might find a home.

How should the principles be used in practice? The easy answer is that they should not. The real purpose of these guides is that "by total assimilation with his mind and life, the commander's knowledge must be transformed into a genuine capability". But a properly educated commander may find that in addition to helping him to develop his judgment and powers of discrimination (coup d' oeil) through the proper study of history, the principles provide him with a dynamic model against which to test his plans and concepts.

The commander must avoid, at all costs, using the principles as a checklist. He must remember that it is the balance of the various principles, among themselves and in the context of the situation in which he finds himself, that is important. Then, as Fuller wrote:

It is, however, an undoubted fact that the general who places his trust in the principles of war, and who trusts in them the more strongly the fog of war thickens, almost inevitably beats the general who does not.⁸

NOTES

- Colonel V. Ye. Savkin, 7he Basic Principles of Operational Art and Tactics (A Soviet View), Superintendent of Documents. US Government Printing Office, Washington, D.C.. 1972, p 119.
- 2. Michael Howard, The Forgotten Dimensions of Strategy," *Foreign Affairs*. Volume 57, Number5. Summer 1979. pp 975-86. Baron de jomini, *The Art of War*, translated by Captain G. H. Mendell and Lieutenant W. P. Craighil, J. B. Lippencott Co., Philadelphia, Pa., 1862. p 15.
- 3. Colonel J. F. C. *Fuller*, "The Principles of War, With Reference to the Campaigns of 1914-1915," *The Journal of* the Royal United Service Institution, February 1916, pp 1-40. Colonel J. F. C. Fuller. *The Reformation of War*, Hutchinson and Co., London, Eng. 1923, pp 24-56.
- 4. Carl von Clausewitz, *On* War, edited by Michael Howard and Peter Paret, Princeton University Press, Princeton, NJ. 1976, pp 141 and 578.
- 5. The study of the application of man's creative intelligence to the ordered use of force.
- 6. Clausewitz, op. citt., p 141.
- 7. *Ibid.*, p 147.
- 8. Fuller, The Reformation of War, op. cit., p 28.

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Newspaper and Magazine Articles

West Point Recognition

BENJAMIN J. STEIN

Tuesday

We've not much longer here to stay, / For in a month or two, / We'll bid farewell to cay-det grey, / And don the Army Blue.

I know that song well. My father-in-law was in the West Point Class of 1944. When my wife and I got married, he gave me, among many other things, a record of Army songs like "Army Blue" and "Benny Havens, Oh!" and I listened to them. It's all on my mind because my wife, Tommy, and I are on our way in a huge GMC Yukon to Mahwah, New Jersey, to join the class of 1944 for their 55th reunion.

We're staying at the Mahwah Crossroads Sheraton, which is a far cry from the world's classiest hotel, New York's Essex House, which put us up during the Emmies. But we're here not for the hotel, but to see the class of 1944, their wives and children and grandchildren, and to add our homage to that of a grateful nation.

The first event was a barbecue. The food was nondescript, but the grads of 1944 looked great. Trim, fit, enthusiastic, alert, well-dressed. They looked, in fact, like an ad for a military academy. I sat with my father-in-law, who is, as usual, the handsomest fellow in the room, and his former roommate, and a man named Colonel Farris. He seemed to be there alone, and indeed he was, since he was a widower.

To make a long story short, Colonel Farris went into the Army Air Corps when he left West Point in the summer of 1944. He was sent to a small island called, if I have the spelling right, Ieshima, right next to Okinawa, where there was a fine airfield for use in attacking the Empire of Japan.

"One day we had quite an adventure," he told me. "We got word that the Japanese had built some airfields near Seoul, Korea, or Kanjung, as the Japanese called it." (I hope I'm spelling this right.)

"Isn't that a long way from Okinawa?" I asked.

"They gave us extra fuel tanks," he said, "and we flew seven hours to Seoul. We caught a whole squadron of Japanese planes in mid-air. We shot down thirty-seven of them in about fifteen minutes."

"Wow," I said.

"Well, they were on a training mission," said Colonel Farris. "Most of them or at least some of them didn't even have ammunition for their guns. But some did and we got them, too. It was such a big haul that we got a Presidential Unit Citation."

"Amazing. And then you flew back?"

"Seven hours back, and we had to do it fast because we didn't have enough fuel to hang around the target for long. That was the problem. When I was on my way back, something went wrong with a gasket, and oil started spewing out all over the cockpit and all over my face. I couldn't see through the windscreen, and I had to slide back the canopy and waggle the plane from side to side so I could see out to land."

"Why didn't you parachute out?"

"Because I was so covered with oil that I figured that my chute would be soaked with oil, too, and I would just sink. So I got talked in by radio and then landed and got out and kissed the ground."

"Amazing. Just incredible," I said. "Weren't you terrified?"

Colonel Farris shrugged and smiled. "We were well trained," he said, "and I was very busy trying to see, so I didn't really feel any way but that I wanted to get that thing on the ground."

"I cannot even imagine such bravery," I said.

"It was standard," he said, and then he started to talk about his daughter in New England, who was obviously very important to him. I wandered from table to table looking at the men and their families. No one was bragging. No one was wearing huge jewelry. People were demure and well behaved. Good Lord, I thought to myself. This is America the way it was when it all worked right. This is the America of Gary Cooper, of The Best Years of Our Lives.

I think even Tommy senses the gravitas of the room. He's listening, respectful, actually taking it all in with wonder.

Wednesday

What a day. We drove from Mahwah to West Point along windy, confusing roads, got lost once, and then came to West Point. I had on a large pin that said BEN STEIN--USMA CLASS OF 1944. My wife had on a similar pin. When we got out of our car and started to walk towards the parade grounds, cadet after cadet snapped off a crisp salute and many said, "Wow, I had no idea you were a grad."

"I'm not," I kept saying to them. "My father-in-law is and we're here visiting him."

Frankly, I was a little upset that they thought I was twenty-two years older than I am. But I was so proud and happy in my subterfuge that I, terrified even of loud noises, might be thought of as a USMA grad, that I secretly gloated.

Anyway, we rushed over to the parade ground just as Colonel Denman, my father-in-law, and his class were marching in wearing blazers and slacks and black cotton hats, and looking extremely distinguished. There were also men there from the class of 1939, the class of 1949, the class of 1954, and maybe a few fellows from the class of 1929.

They turned out smartly and then stood casually on the edge of the parade grounds while we family members sat in some very Spartan bleachers. It was amazingly cold considering it was late May. A chill breeze kept whipping off the river over all of us.

From out of the portals of the main building at West Point came the corps of cadets, dressed very smartly in gray jackets and hats, some plumed more than others. They wore neat white trousers and carried M-14's, standards, and flags. They marched magnificently to their positions. Then they awaited orders to march according to various speeds and drills, and then to music from famous marches.

Tommy grew restless and started to fidget. A woman in late middle age sat near us looking sad and lonely. I motioned for her to come sit with us and she did. "My husband was in the class of 1944," she said. "He died in October."

"You must be very lonely," I said.

"You can't imagine how lonely," she said. "But the day after he died I got a call from Colonel Morrison, who's the head of the class association and he told me he had heard 'Nick' died. I knew he had to be from my husband's class at West Point because that's the only place they ever called him 'Nick.' He said I was a member of the class, too, and he wanted me to come to every occasion."

As you can imagine, my eyes were overflowing with tears at this kind of story, but I managed to say, "That's incredibly moving. That's so kind."

"No," she said. "That's standard for this class."

There was a great deal more drilling, all of it done extremely well. An announcer gave the names of each of the companies as it marched by, and the name of the captain of each company. Some of the captains and flag bearers were women cadets, who also marched smartly. It was getting even more ridiculously cold. In the distance, I could see an old stone fort high on a hill. I think Benedict Arnold had some connection with it, but I might be mistaken.

The finale came when the oldest graduate present, a Colonel Royal, class of 1930, emerged from his walker to review the corps. He was about 90, I would guess, or maybe a bit older. Still, he stood straight and tall and did a fine review as the corps came by, eyes right, standards lowered in respect.

Then the corps returned splendidly to their barracks--made of a solid, imposing stone. And then, with great relief, families and grads went into the immense mess hall for a lavish lunch. We were escorted to our table by an extremely beautiful woman cadet who was about to get married to another cadet who had graduated a year earlier. She was a marathon runner and as sweet as could be.

There were speeches of welcome, and then a few off-key notes. Representatives of the various classes presented USMA with giant blow-ups of alumni donation checks. There was also a certain amount of bragging by the donors about the size of their gifts.

My father-in-law's class and 1939 were far more diffident, which I appreciated. The boasting about money was so wildly wrong for a military academy I could hardly believe my eyes and ears. USMA, if it's about anything different from other fine colleges, is not about bragging about money. It's about Duty, Honor, Country. It's about fighting and suffering for your country and for your pride. But I guess alumni gifts are always welcome.

Then, off for a heart-rending moment: the reading of the roll of absent friends from the class of 1944 in the Old Chapel. My wife, son, and I got very lost trying to find it, but a tour bus of 1944 grads saw us and stopped and took us to the site. They all greeted us as if they had known us for fifty years and made sure we got off the bus at the right spot so as not to get hit by traffic.

The Old Chapel was marked on the ancient plaster walls with plaques and inscriptions of grads who had fought and died in various battles, including one who died in an Indian skirmish in the Dakotas as recently as 1890. The sermon was by a chaplain who was not from the class, but who spoke well because briefly. Then, in a deeply affecting montage, about twelve of the class stood up and read the list of those from their companies who had entered immortality. Colonel Denman, my brave father-in-law, was choking up as he walked to the lectern, but in a clear, distinguished voice with the good kind of Arkansas accent (you know the bad kind already) he read the list of his friends who had died.

By then I was deep in tears. There were no homilies about any of the men, no distinctions mentioned other than an occasional "he was my roommate." The men who had passed in their final review were members of the Corps. That was enough to know. I stood there humming, "Army Blue, Army Blue, hurrah for the Army Blue," and then the service ended with the playing of taps from the rear of the chapel. I think I was the only one in the room weeping, except possibly for a few widows. The men of the Corps are made of sterner stuff.

Then a tour of the West Point cemetery, with Col. Denman pointing out the headstones of friends and classmates. "He was a great guy," he said when he came to one young man's grave with a death date from World War II. "Everybody liked him," he said when he came to another stone. "He had a lot of friends." I saw that he had died only days before the end of the war in Europe.

"Bad luck," Colonel Denman said, and never has the phrase been said more truly.

Then a long hike back to our car, past faculty houses all decorated with "Beat Navy." We walked past a magnificent overlook on the Hudson, and past many cadets who saw my Class of 1944 button and saluted. I soon took it off. I really have absolutely no claim to that kind of distinction or honor.

Then, back home to our hotel, with yours truly deep in thought. How could I have been so lucky as to not have ever been in combat? How could I have been so lucky as to never have to face anyone trying to kill me? How could we as Americans have been so lucky as to have such magnificent men as the Class of 1944 fighting for us? What could we ever do to repay our debt to them?

Well, back to my room for a nap, and then down to the big dinner dance of the Class of 1944. John Eisenhower, Ike's son, was there and I tried to tell him I was a friend and admirer of Julie and David Eisenhower, but he was deep in conversation with someone else.

I sat at the table with my father-in-law, his wonderful wife, Sue, and my wifie and son. Seated next to me was a handsome fellow named "Mike" Malloy. He lived with his amazingly young-looking wife in Scottsdale, near a son who was a motivational speaker. I asked him about his career.

"I was in Europe during the Battle of the Bulge, or as some called it, the Battle of the Ardennes. I wasn't at Bastogne. I got there after the Germans had been stopped and turned back. I was in a town called St. Vith at the northern end of the pocket the Germans had made.

"Strategically, the Germans were beaten. But tactically, it was hell. The Germans were trying to break out of the pocket and spread out to make life hard for us. We were trying to keep them in the pocket and force them back to Germany. But it was a fighting retreat by the Germans, and they fought very well. They had a lot of artillery, and they made it all count. And we never were safe. I lost two men who had just joined my unit from a German shell that landed about a quarter mile behind the lines. The Germans were always doing that, shelling behind our lines just to keep us off balance. When the men got killed, I didn't even know their names. It wasn't like in a movie where all the men know each other. Some of the new men got killed before we knew their names at all."

"It must have been impossible fighting in that cold. How do you sleep when you're so cold and the Germans are trying to kill you?"

"It's very trying," he said. "We help each other walk. We help each other stay warm. We help each other stay alive. We made it."

There was a fine small band playing Tommy Dorsey and Glenn Miller tunes. I danced many dances with my beautiful wifie. I was impressed at how well the men and women of the Class of 1944 danced. "We had dance classes at USMA," Colonel Denman said. "We would alternate being the girl."

As I have said before, my father-in-law saw violent sustained combat in Europe and in Vietnam. He won his first Silver Star for running through German machine-gun and sniper fire to radio in artillery strikes on dug-in German infantry shooting up his company when he was 22 years old. He went on to liberate Gunstkirchenlager concentration camp, and he gleams with greatness in my eyes.

What I kept thinking that night was that the reunion of these superb heroes was being held out of sight of TV cameras, in a large but obscure hotel in Mahwah, New Jersey, with no one paying much attention. The Emmies had been on national TV and we stayed in the palatial Essex House, and were driven everywhere in limousines--and all for doing safe, warm, well-paid work.

But if I were in trouble, who at the Emmies ceremony would risk his life for me? When I am old and alone or my wife is old and alone, who would call from the Emmies and keep us company? And if the nation were in trouble, who would save it, men like me or men like the men of the Class of 1944? That Emmy is a grand statue and I love her, but the really noble trophy is even a small swatch of Army Blue. How I loved those stolen few moments with my Class of 1944 pin, getting fraudulent salutes as if I had been a part of that gilded band of brothers.

Father's Day

Dear Fathers: Thank you for keeping Mom company while she changed our diapers. Thank you for telling me to turn off the lights and reminding me that we don't own PEPCO. Thank you for driving me to my first date in eighth grade and reminding me to walk my date to the door and tell her I had a nice time.

Thank you for holding back the Japanese at Corregidor, for spotting the Japanese carriers off Midway and sinking them and turning the tide in the war, for slugging it out toe-to-toe with the Japanese at Okinawa, for fighting and dying when Kamikazes attacked, for fighting with the SS hand-to-hand at St. Lo and Bastogne, and freezing, starving, and still fighting at St. Vith to push the Germans back to Germany.

Thank you for inventing penicillin and the Salk vaccine and the Sabin vaccine and heart transplants and angioplasty and air-conditioning and color TV.

Thank you for showing me how a power drill works, and how to open a combination lock, and how to tie a Windsor knot, and where Brooks Brothers is.

Thank you for sending me to summer camp in the cool Poconos.

Thank you for standing up to the Communists in Korea, freezing and getting cut to pieces at Chosin and still holding on in the first battle of the Cold War.

Thank you for building the interstate highways and the Washington Beltway and the suburbs and Sligo Creek Park and the Kennedy Center.

Thank you for marching against segregation and getting spit on and hosed down and put in jail so that all of your children of all colors could live with dignity if they chose to.

Thank you for bravely going to Vietnam and living with daily terror in jungles and in hilltops like Khe Sanh and seeing your friends blown up in the Iadrang Valley while your children at home called you Fascists. Thank you for coming home and not hating us.

Thank you for living in miserable solitude without your families in arctic bases and in equatorial heat for no money, guarding us while we played at swimming pools and pretended we were tough because we smoked weeds that were not good for us.

Thank you for not cursing aloud at us when we wore our hair down to our shoulders and sneered at you for being bourgeois while we took your money to go to graduate school. Thank you for helping us get our summer jobs and helping us with the down payment on our first house.

Thank you for explaining to us how to do our taxes and warning us not to get in over our heads with credit cards. Thank you for telling us that recessions do not go on forever and neither does inflation, and we won't always live from paycheck to paycheck.

Thank you for digging up letters from our third grade teachers telling us how cute we were when we were eight.

Thank you for letting your grandchildren turn your homes upside down and biting your lip and telling us how cute they are when they are eight.

Thank you, fathers. We have not forgotten and we see you in ourselves when we tell our sons to turn off the lights because they burn non-renewable resources and tell our daughters that the boy who sits next to them in school doesn't really mean it when he calls her stupid--and that we'll smack him if he does it again. Thank you fathers, it's your day today and every day.

Vietnam Warriors: Do we really know them? MONA CHAREN

THE ANNIVERSARY of the fall of Saigon occasions memories of one of the most cringe-inducing photographs in American history -- that of an American helicopter abandoning our embassy in South Vietnam. The anniversary of that terrible betrayal seems an opportune time to set the record straight on a few things.

Attempting to correct the myths in general circulation about the Vietnam War is like trying to correct the lies told by Bill Clinton in just the past six months -- a Herculean task. A small sample of the myths associated with that war would include the notions that: 1) the Vietcong were an indigenous movement without connections to the North Vietnamese; 2) most young Americans opposed the war; 3) the Tet offensive was a military victory for the communists; and 4) America sent a draftee Army, consisting disproportionately of poor and black men, to fight this unpopular war.

In point of fact, after the war's end the Vietcong were folded into the North Vietnamese Army, to whom they had been linked from the beginning. Most young Americans supported the war, never attended a demonstration or shut down a university, and voted for Nixon (but not the ones who grew up to run television networks, edit newspapers or make "historical" movies). The Tet offensive was a military setback for the communists, but a propaganda victory.

As for the American soldiers who fought that no-win war (no-win because the policy-makers in Washington were not fighting to win), we have information from the Vietnam Veterans Memorial Fund as well as the book "Stolen Valor" by B.G. Burkett that puts the lie to a great many myths concerning them.

In the first place, if you want to find a mostly draftee army, look at World War II. Sixty-six percent of armed forces members were drafted in the Second World War, compared with 25 percent in Vietnam.

As for ethnic background, 88.4 percent of those who served in Vietnam were Caucasian. A little more than 10 percent were black About 1 percent belonged to other races. Of those who gave their lives, 86.3 percent were Caucasians (including Hispanics), 12.5 percent were blacks and 1.2 percent were other races. Seventy percent of the enlisted men killed were of northwest European descent. Of those killed as a result of hostile action, 86.8 percent were Caucasian; 12.1 percent were black; and 1.1 percent were of other races.

Of those who died in Vietnam, 64.4 percent were Protestants, 28.9 percent were Catholics and 6.7 percent were other religions (or no religion).

Were Vietnam vets drawn disproportionately from the ne'er do well set? Not at all. Seventy-six percent were from lower-middle and working-class backgrounds. Three-quarters had family incomes above the poverty level, and 50 percent were from middle-class families. Nearly a quarter of those who served had fathers in professional, managerial or technical occupations.

Ninety-seven percent of Vietnam-era vets were honorably discharged.

Ninety-one percent of Vietnam War veterans (including those who saw heavy combat) are proud to have served their country, and 66 percent say they would serve again if called upon.

We have created a notion that American soldiers committed greater numbers of atrocities in Vietnam than in other wars. But My Lai appears to have been an aberration, not a commonplace occurrence. On the other hand, the wounds suffered in combat by Americans were worse than those experienced in earlier conflicts. Amputation or crippling wounds to the lower extremities were 300 percent higher in Vietnam than in World War II and 70 percent higher than in Korea.

As Burkett notes in his book, about 10,000 Americans fled to Canada to avoid service in Vietnam. What is less well known is that 30,000 Canadians joined U.S. forces to serve in Vietnam.

Burkett further found that bogus Vietnam veterans appear to be everywhere.

The typical Vietnam vet is not the dysfunctional, bitter, psychological mess immortalized in a dozen movies and television shows. Instead, Burkett estimates that there are thousands of petty thieves and mentally deranged people claiming falsely to have served in Vietnam.

Those who help to mold our national self-image have often used Vietnam to undermine our sense of righteousness. But to do so, they have had to distort the truth.

Text of Rep. Hyde's Closing Remarks

By The Associated Press Text of closing remarks by Rep. Henry Hyde, R-Ill., on Monday in the impeachment trial of President Clinton, as transcribed by Federal Document Clearing House:

Mr. Chief Justice, learned counsel, and the Senate, we are blessedly coming to the end of this melancholy procedure, but before we gather up our papers and return to the obscurity from whence we came, permit please a few final remarks.

First of all, I want to thank the chief justice not only for his patience and his perseverance, but for the aura of dignity that he has lent to these proceedings, and it has been a great thrill really to be here in his company as well as in the company of you distinguished senators. Secondly, I want to compliment the president's counsel. They have conducted themselves in the most professional way. They have made the most of a poor case, in my opinion.

Excuse me. There's an old Italian saying, and it has nothing to do with the lawyers, but to your case. Says: You may dress the shepherd in silk; he will still smell of the goat. But all of you are great lawyers and it's been an adventure being with you. You know, the legal profession, like politics, is ridiculed pretty much, and every lawyer feels that and understands the importance of the rule of law—to establish justice, to maintain the rights of mankind, to defend the helpless and the oppressed, to protect innocents, to punish guilt. These are duties which challenge the best powers of man's intellect and the noblest qualities of the human heart. We are here to defend that bulwark of our liberty, the rule of law.

As for the House managers, I want to tell you and our extraordinary staff how proud I am of your service. For myself, I cannot find the words to adequately express how I feel. I must use the inaudible language of the heart. I've gone through it all by your side, the media condemnations, the patronizing editorials, the hate mail, the insults hurled in public, the attempts at intimidation, the death threats, and even the disapproval of our colleagues, which cuts the worst.

You know, all a congressman ever gets to take with him when he leaves this building is the esteem of his colleagues and his constituents. We've risked that for a principle and for our duty as we've seen it. In speaking to my managers of whom I am terminally proud, I can borrow the words of Shakespeare's Henry V, as he addressed his little army of longbowmen at the Battle of Agincourt, and he said: "We few—we happy few; we band of brothers. For he who sheds his blood with me shall be my brother. And gentlemen in England abed will curse the fact that they are not here, and hold their manhood cheap when any speaks who fought with us on St. Crispin's Day."

As for the juror judges, you distinguished senators, it's always a victory for democracy when its elected representatives do their duty no matter how difficult and unpleasant, and we thank you for it. Please don't misconstrue our fervor for our cause to any lack of respect or appreciation for your high office. But our most formidable opponent has not been opposing counsel nor any political party. It's been the cynicism—the widespread conviction that all politics and all politicians are by definition corrupt and venal. That cynicism is an acid eating away at the vital organs of American public life. It is a clear and present danger because it blinds us to the nobility and the fragility of being a self-governing people.

One of the several questions that needs an answer is whether your vote on conviction lessens or enlarges that cynicism. Nothing begets cynicism like the double standard—one rule for the popular and the powerful and another for the rest of us. One of the most interesting things in this trial was the testimony of the president's good friend, the former Senator from Arkansas. He did his persuasive best to maintain the confusion that this is all about sex. Of course it's useful for the defense to misdirect our focus toward everyone concedes our private acts and it's none of our business, but if you care to read the articles of impeachment, you won't find any complaints about private, sexual misconduct.

You will find charges of perjury and obstruction of justice which are public acts and federal crimes, especially when committed by the one person duty bound to faithfully execute the laws. Infidelity is private and non-criminal. Perjury and obstruction are public and criminal. The deliberate focus on what is not an issue here is the defense lawyer's tactic and nothing more. This entire saga has been a theater of distraction and misdirection. Time on the defense tactics when the law and facts get in the way. One phrase you have not heard the defense pronounce is the

"sanctity of the oath," but this case deeply involves the efficacy, the meaning and the enforceability of the oath. The president's defenders stay away from the word "lie" preferring "mislead" or "deceived," but they shrink from the phrase "sanctity of the oath," fearing it as one might a rattlesnake.

There is a visibility factor in the president's public acts, and those which betray a trust or reveal contempt for the law are hard to sweep under the rug, or under the bed for that matter. They reverberate—they ricochet all over the land and provide the worst possible example for our young people. As that third grader from Chicago wrote to me: "If you can't believe the president, who can you believe?"

Speaking of young people, in 1946 a British playwright, Terence Rattigan wrote a play based on a true experience that happened in England in 1910. The play was called "The Winslow Boy." And the story, as I say a true story, involved a young 13-year-old lad who was kicked out of the royal naval college for having forged somebody else's signature on a postal money order. Of course, he claimed he was innocent, but he was summarily dismissed and his family of very modest means couldn't afford legal counsel, and it was a very desperate situation. Sir Edward Carson (phonetic), the best lawyer of his time—barrister I suppose—got interested in the case and took it on pro bono, and lost all the way through the courts. Finally, he had no other place to go, but he dug up an ancient remedy in England called "petition of right." You ask the king for relief. And so Carson wrote out five pages of reasons why a petition of right should be granted. And lo and behold, it got past the attorney general and got to the king. The king read it, agreed with it, and wrote across the front of the petition: "Let right be done—Edward VII." And I have always been moved by that phrase. I saw the movie, I saw the play, and I have the book, and I am still moved by that phase "let right be done." I hope when you finally vote that will move you, too.

There are some interesting parallels to our cause here today. This Senate chamber is our version of the House of Lords, and while we managers cannot claim to represent that 13-year-old Winslow boy, we speak for a lot of young people who look to us to set an example.

Ms. Seligman last Saturday said we want to win too badly. This surprised me, because none of the managers has committed perjury, nor obstructed justice, nor claimed false privileges. None has hidden evidence under anyone's bed, nor encouraged false testimony before the grand jury. That's what you do if you want to win too badly. I believe it was Saul Bellow who once said, "A great deal of intelligence can be invested in ignorance when the need for illusion is great." And those words characterize the defense in this case—the need for illusion is great.

I doubt there are many people on the planet who doubt the president has repeatedly lied under oath and has obstructed justice. The defense spent a lot of time picking lint. There is a saying in Equity, I believe, that equity will not stoop to pick up pins. But that was their case. So the real issue doesn't concern the facts, the stubborn facts, as the defense is fond of saying, but what to do about them.

I am still dumbfounded about the drafts of the censures that are circulating. We aren't half as tough on the president in our impeachment articles as this draft is that was printed in the New York Times. And inappropriate relationship with a subordinate employee in the White House which was shameless, reckless and indefensible. I have a problem with that. It seems they're talking about private acts of consensual sexual misconduct, which are really none of our business.

But that's the lead-off. Then they say the president deliberately misled and deceived the American people and officials in all branches of the United States government. This is not a Republican document. This is coming from here. The president gave false or misleading testimony and impeded discovery of evidence in judicial proceedings. Isn't that another way of saying obstruction of justice and perjury? The president's conduct demeans the office of the president as well as the president himself, and creates disrespect for the laws of the land. Future generations of Americans must know that such behavior is not only unacceptable, but bears grave consequences, including loss of integrity, trust, and respect—but not loss of job. Whereas William Jefferson Clinton's conduct has brought shame and dishonor to himself and to the office of the president; whereas he has violated the trust of the American people, see Hamilton Federalist Number 65, and he should be condemned in the strongest terms. Well, the next-to-the-strongest terms—the strongest terms would remove him from office. Well, do you really cleanse the office as provided in the Constitution? Or do you use the air-wick of a censure resolution? Because any censure resolution, to be meaningful, has to punish the president—if only his reputation. And how do you deal with the laws of bill of attainder? How do you deal with the separation of powers? What kind of a precedent are you setting? We all claim

to revere the Constitution, but a censure is something that is a device, a way of avoiding the harsh constitutional option, and it's the only one you have, either up or down on impeachment.

That of course is your judgment and I am offering my views for what they're worth. Once in a while I do worry about the future. I wonder if after this culture war is over that we're engaged in, if an America will survive that's worth fighting to defend. People won't risk their lives for the UN or over the Dow Jones averages, but I wonder in future generations whether there'll be enough vitality left in duty honoring country to excite our children and grandchildren to defend America.

There's no denying the fact what you decide, it will have a profound effect on our culture as well as on our politics. A failure to convict will make a statement that lying under oath, while unpleasant and to be avoided, is not all that serious. Perhaps we can explain this to those currently in prison for perjury. We have reduced lying under oath to a breach of etiquette, but only if you are the president. Wherever and whenever you avert your eyes from a wrong, from an injustice, you become a part of the problem. On the subject of civil rights, it's my belief this issue doesn't belong to anyone. It belongs to everyone. It certainly belongs to those who have suffered invidious discrimination and one would have to be catatonic not to know that the struggle to keep alive equal protection of the law never ends.

The mortal enemy of equal justice is the double standard and if we permit a double standard, even for the president, we do no favor to the cause of human rights. It's been said that America has nothing to fear from this president on the subject of civil rights. I doubt Paula Jones would subscribe to that endorsement. If you agree that perjury and obstruction of justice have been committed, and yet you vote down the conviction, you're expending and expanding the boundaries of permissible presidential conduct.

You're saying a perjurer and an obstructer of justice can be president in the face of no less than three precedents for conviction of federal judges for perjury. You shred those precedents and you raise the most serious questions of whether the president is in fact subject to the law, or whether we are beginning a restoration of the divine rights of kings. The issues we're concerned with have consequences far into the future, because the real damage is not to the individuals involved, but to the American system of justice and especially the principle that no one is above the law.

Edward Gibbon wrote his magisterial "Decline and Fall of the Roman Empire" in the late 18th century. In fact, the first volume was issued in 1776. In his work, he discusses an emperor named Septimus Severus who died in 211 A.D. after ruling 18 years. And here's what Gibbon wrote about the emperor: "Severus promised only to betray; he flattered only to ruin; and however he might occasionally bind himself by oaths and treaties, his conscience, obsequious to his interest, always released him from the inconvenient obligation." I guess those who believe history repeats itself are really onto something. Horace Mann said: "You should be ashamed to die unless you have achieved some victory for humanity." To the House managers, I say your devotion to duty and the Constitution has set an example that is a victory for humanity.

Charles de Gaulle once said France would not be true to herself if she wasn't engaged in some great enterprise. That's true of us all. We spend ourshort lives as consumers, space occupiers, clock watchers, spectators—or in the service of some great enterprise. I believe being a senator, being a congressman, and struggling with all our might for equal justice for all is a great enterprise. It's our great enterprise. And to my House managers, your great enterprise was not to speak truth to power, but to shout it. And now let us all take our place in history on the side of honor, and oh yes, let right be done. I yield back my time.

Seniors Must Learn to Sacrifice ROBERT J. GRADY, Lt. Col., USAF (Ret)

All citizens of the USA should remember this!!!!!

I was embarrassed to read that President Clinton and his advisors have said, "The older generation must learn to sacrifice as other generations have done."

That's my generation. I knew eventually someone would ferret out the dirty secret: we've lived the "lifestyle of the rich and famous" all our lives. Now, I know I must bare the truth about my generation and let the country condemn us for our selfishness.

During the Depression we had a hilarious time dancing to the tune of "Brother Can You Spare A Dime?" We could choose to dine at any of the country's fabulous soup kitchens, often joined by our parents and siblings...those were the heady days of carefree self-indulgence.

Then, with World War II, the cup filled to overflowing. We had the chance to bask on the exotic beaches of Guadalcanal, Iwo Jima and Okinawa; to see the capitols of Europe and travel to such scenic spots as Bastogne, Malmedy and Monte Cassino. Of course, one of the most exhilarating adventures was the stroll from Bataan to the local Japanese hotels, laughingly known as death camps.

But the good times really rolled for those lucky enough to be on the beaches of Normandy for the swimming and boating that pleasant June day in '44.

Unforgettable.

Even luckier were those that drew the prized holiday tickets for cruises on sleek, gray ships to fun filled spots like Midway, The Solomons and Murmansk.

Instead of asking, "What can we do for our country, "an indulgent government let us fritter away our youth wandering idly through the lush and lovely jungles of Burma and New Guinea.

Yes, it's all true: we were pampered, we were spoiled rotten, we never did realize what sacrifice meant. We envy you, Mr. Clinton, the harsh lessons you learned in London, Moscow and Little Rock.

My generation is old, Mr. President...and guilty; but we are repentant. Punish us for our failings, sir, that we may learn the true meaning of Duty, Honor, and Country.

Warrior Ethic's Weakened Legs

DAVID HACKWORTH

An American Army sergeant was shot earlier this month in Kosovo. He's not the first casualty from that ill-conceived misadventure, and he won't be the last.

But another Army sergeant - Brian Heitman - also made the news when he stood tall and wrote in the Army Times, "The warrior ethos is sadly dead in today's Army. There are, to be sure, warriors left . . . but we are a minority."

There is a connection between the two sergeants. One was wounded on the field of strife, where combat skills and the warrior ethic keep men alive, and the other told his superiors that realistic combat training has been reduced to the point where men in the famed 82nd Airborne Division are at risk if deployed to a killing zone like Kosovo.

"Now the fear of making the wrong decision has led many to become indecisive," he wrote.

"This has led to weakened training events of low intensity in which our real enemies are boredom. . . . Live-fire ranges are so watered down that there is little or no realism involved. Whenever there is risk involved, soldiers take the training more seriously."

Sgt. Heitman is right on target. I hear from about 3,000 soldiers, sailors, Marines and airmen weekly, and many have the same complaint: The warrior ethic is being bled out of our armed forces.

Sgt. Jeffrey Barnello, another straight-shooting 82nd Airborne leader, explains why our warriors must be hardened to perfection and steeled with iron discipline to make it through the terror of ground combat: "We don't want to be filling our own body bags to send home to Mom. We know that quality training will make our enemy the recipient of such a fate."

During the past 10 years, the two-century tradition of the American warrior has been weakened by technocrats, social engineers, do-gooders and incompetent or uncaring senior leaders.

The technocrats say that silver bullet gadgets are the end-all and take the nastiness out of war.

These airheads are backed up by the likes of the William Perrys and William Cohens who end up running the Pentagon despite knowing as much about what makes a fighting man as I know about how to formulate perfume.

Mr. Cohen likes gold-plated gadgets because they're made by his pals, the defense contractors. He's also the guy who gave us the "Victory Over Serbia" - where megabuck silver bullets from three miles up had about as much impact as April showers on the fourth-rate Serbian army busy down in the mud ethnic-cleansing the Albanians.

The other guilty parties responsible for attempting to destroy the vital kill-or-be-killed Spartan ethos are the social engineers, do-gooders and PC politicians whose agenda is to use the services to promote equality, provide opportunity and make the armed forces warmer and fuzzier than the Brownies.

Sgt. Heitman had the guts to stand up and tell the truth while a lot of uniformed folks in much higher pay grades shirk their duties. He knows the values necessary to defend a society might well be in conflict with the society itself and that our military must concentrate not on liberal agendas but rather on the life-or-death skills needed to fight and win on the battlefield.

And bear in mind that if things are bad in the elite 82nd Airborne Division, which is a first-to-go Army outfit, imagine what the average unit must be like.

No surprise that Sgt. Heitman has had private sessions with his entire chain of command right up to Gen. Dan McNeill. His bosses must've been almost as shocked by his article as they would've been if the division had turned out for parade in pink tutus. But the big surprise is that - without reprisal - they carefully listened to his message: Because of excessive safety restrictions and training distractions, his unit is not able to train as it will have to fight - down in the mud - when the magic silver bullets again fail to do the job.

His bosses actually got the word. They actually listened to a caring leader down at the bottom who will be one of the first troopers on the objective on D-Day.

And that's a good sign. When the brass fail to listen to the troops, it's all over.

David Hackworth, a retired colonel in the U.S. Army, is a columnist and author

Does Honor Have a Future?

WILLIAM J. BENNETT

The modern age brings to mind Christian apologist C.S. Lewis's chilling words in the Abolition of Man: "We make men without chests and expect of them virtue and enterprise. We laugh at honour and are shocked to find traitors in our midst."

America is the greatest nation in the history of the world-the richest, most powerful, most envied, most consequential. And yet America is the same nation that leads the industrialized world in rates of murder, violent crime, imprisonment, divorce, abortion, sexually transmitted diseases, single-parent households, teen suicide, cocaine consumption, and pornography production and consumption.

America is a place of heroes, honor achievement, and respect. But is it also a place where heroism is often confused with celebrity, honor with fame, true achievement with popularity, individual respect with political correctness. Our culture celebrates self-gratification, the crossing of all moral boundaries, and now even the breaking of all social taboos. And on top of it all, too often the sound heard is whining-the whining of America-which can be heard only as the enormous ingratitude of we modern men toward our unprecedented good fortune.

Despite our wonders and greatness, we are a nation that has experienced so much social regression, so much decadence, in so short a period of time, that we have become the kind of place to which civilized countries used to send missionaries.

Casting Stones

Social regression and decadence are glaringly obvious in the current presidential administration. Now, whenever I make a comment these days criticizing Bill Clinton, someone inevitably asks, "Aren't you casting stones .?" It shows how far we have fallen that calling upon the President of the United States to account for charges of adultery, lying to the public, perjury, and obstruction of justice is regarded as akin to stoning.

It is also an example of what sociologist Alan Wolfe refers to as America's new 11th Commandment: "Thou shalt not judge." In One Nation After all, Wolfe writes, "Middle -class Americans are reluctant to pass judgment on how other people act and think." Of course, all of us are in favor of tolerance and forgiveness. But the moral pendulum has swung too far in the direction of relativism. If a nation of free people can no longer make pronouncement on fundamental matters of right and wrong—for example, that a married 50 year old commander-in-chief ought not to have sexual relations with a young intern in his office and then lie about it—it has lost its way.

The problem is not with those who are withholding judgment until all the facts are in, but with the increasing number of people who want to avoid judgment altogether. Firm moral convictions have been eroded by tentativeness, uncertainty, diffidence. The new relativist consensus Wolfe describes is not surprising. During the last 30 years we have witnessed a relentless assault on traditional norms and a profound shift in public attitudes. The tectonic plates have moved. Why have we been drawn toward such permissiveness? My former philosophy professor John Silber was correct when he spoke of an "invitation to mutual corruption." We are hesitant to impose upon ourselves a common moral code because we want our own exemptions. This modern allergy to judgments and standards, of which attitudes toward the Clinton scandals are but a manifestation, is deeply problematic, for a defining mark of a good republic is precisely the willingness to make judgments about things that matter.

In America, we do not defer to kings, cardinals, or aristocrats; we rely instead on the people's capacity to make reasonable judgments based on moral principles. Our form of government requires of us not moral perfection but modest virtues and adherence to some standards. Those who constantly invoke the sentiment of "Who are we to judge?" should consider the anarchy that would ensue if we adhered to this sentiment in say our courtrooms. What would happen if those sitting on a jury decided to be "nonjudgmental" about rapists and sexual harassers, embezzlers and tax cheats? Without being "judgmental" Americans would never have put an end to slavery, outlawed child labor, emancipated women, or ushered in the civil rights movement. Nor would we have prevailed against Nazism and communism, or known how to explain our opposition.

Mr. Clinton himself admitted in a judgment laden 1996 proclamation he signed during National Character Week: "Individual character involves honoring and embracing certain core ethical values; honesty, respect,

responsibility...Parents must teach their children from the earliest age the difference between right and wrong. But we must all do our part." How do we judge a wrong—any wrong whatsoever—when we have gutted the principle of judgment itself? What arguments can be made after we have strip-mined all the arguments of their force, their power, and their ability to inspire public outrage. We all know that there are times when we will have to judge others, when it is both right and necessary to judge others. If we do not confront the soft relativism that is currently disguised as virtue, we will find ourselves morally and intellectually disarmed.

Corruption

In living memory, the chief threats to American democracy have come from without: first Nazism and Japanese imperialism, and later Soviet communism. But these wars, hot and cold, ended in spectacular American victories. The threats we now face are from within. They are far different, more difficult to detect, more insidious: decadence, cynicism, and boredom. Writing about corruption in democratic government, Alexis de Tocqueville warned about "not so much the immorality of the great as the fact that immorality may lead to greatness." When private citizens impute a ruler's success "mainly to some of his vices... an odious connect is thus formed between the ideas of turpitude and power, unworthiness and success, utility and dishonor. "The rulers of democratic nation, Tocqueville said, "lend the authority of the government to the base practices of which they are accused. They afford a dangerous examples, which discourage the struggles of virtuous independence."

Tocqueville recognized, too, that democratic citizens would not be conscious of this tendency, and in fact would probably disagree that it even existed. This is what makes it all the more dangerous; the corrupt actions of democratic leaders influence the public in subtle ways that often go unnoticed among citizens. This sort of decay is gradual and hard to perceive over a short period of time.

Which brings us back to Bill Clinton. If there is no consequence to the president's repeated betrayal of public trust and his abuses of power, it will have a profound impact on our political and civic life. Bill Clinton and his defenders are defining personal morality down, radically lowering the standards of what we expect from our president, and changing for the worse the way politics is and will be practiced. Recall the words of John Dean: "If Watergate had succeeded, what would have been put into the system for years to come? People thinking the way Richard Nixon thought and thinking that is the way it should be. It would have been a travesty; it would have been frightening."

We find ourselves at this familiar juncture today. It would be a travesty, and frightening, to legitimize Mr. Clinton's ethics and arguments made on their behalf. But we are getting close, disconcertingly close, to doing just that. "He's strictly one of a kind," Washington Post columnist Mary McGrory wrote, "our first president to be strengthened by charges of immorality."

You will often hear Clinton apologists argue that to take a stand against the president's misconduct will send the signal that anyone who is not a saint need not apply for the job. Nonsense. We do not expect our presidents to be men of extraordinary virtue, who have lived lives of near perfection. We should not even expect all our presidents to have the sterling character of say, a Washington or a Lincoln, although we should hope for it, and certainly honor it on those rare occasions when we find it.

We have every right, however, to expect individuals who, taken in the totality of their acts, are decent and trustworthy. This is not an impossible standard; there are many examples we can look to—Truman, Eisenhower, Carter, and Reagan, to name just four men who served six terms since World War II. These are men, like all of us, who had an assortment of flaws and failings. They made mistakes. But at the end of the day, they were men whose character, at least, we could count on.

Bill Clinton is not. The difference between these men and Mr. Clinton is the difference between common human fragility and corruption. That we accept the latter as common is a measure of how low our standards have dropped. We have to aim higher and expect more-from our presidents and ourselves.

The Value- Free Culture

Our most exalted leader, a man who once proudly boasted that he would head the most ethical administration in history, is now saying to the American people, in effect, "My political enemies are to blame for all the scandals that

surround me. I have nothing more to say. The rules don't apply to me. There are no consequences to my action. It is irrelevant. My private life has nothing to do with my public life. My only responsibility is to do the people's business."

This is moral bankruptcy, and it is damaging our county, our standards, and our self -respect. It is also jeopardizing the future of the next generation of American leaders. A year ago, I delivered an address at the U.S. Naval Academy in which I told the Annapolis cadets that I was well aware of the fact that even among their ranks—among the military's brightest and best young men and women---there is widespread confusion of purpose and attenuation of belief. After all, if the character and personal conduct of the acknowledged leader of the free world is "irrelevant" then what is relevant? Why should anyone feel compelled to make sacrifices for the sake of an abstract principle like honor?

Young people just don't seem to be finding the answers to these troubling questions in the value-free culture of the 1990's. Please allow me to use two major historical events as reference points to describe this culture. In 1999, the famous New York rock festival, Woodstock will celebrate its 30th anniversary. In its first 24 hour, Woodstock attracted 300,000 young people. It was characterized by rowdiness, drinking, drug use, promiscuity, and even death.

But back in the summer of "69, Woodstock was hailed uncritically as the "defining event of a generation." It was undoubtedly the high point of the counterculture movement in America. "If it feels good, do it" was the unofficial banner under with the participants paraded. It is worth noting, however, that most of those who attend Woodstock reunions today were not even at the original festival. Evidently the memories are just not worth rekindling. The boys and girls have grown up-and grown beyond what Woodstock stood for. As adults, they consider it to have been childish, utopian, irrelevant, irresponsible or worse.

But their children and grandchildren are receiving a very different impression from countless magazine articles, books, television specials, music videos, and movies that claim Woodstock was the greatest-the hippest-event ever and that the psychedelic pioneers should be envied for their brave and mocking defiance of everyone and everything that went before.

The year 1999 will also mark the 54th anniversary of Operation Overlord. This secret Normandy invasion under the command of Dwight D. Eisenhower was the largest amphibious landing in history. In its first 24 hours, it involved about 170,000 young people. What D-Day veterans, as well as their families and friends, continue to celebrate in huge numbers at their reunions is something far different than is celebrated at Woodstock.

Poignancy and dignity surround their gatherings, if only because the stakes during the dark days of World War II were so high, the heroism so manifest, the examples so inspiring. The participants can well recall President Roosevelt's moving radio broadcast on June 6, 1944, which called the nation to pray:

Almighty God: Our sons, Pride of our nation, this day have set on a mighty endeavor...They will need thy blessings. Their road will be long and hard. For the enemy is strong. He may hurl back our forces...They will be sorely tried, by night and day. The darkness will be rent by noise and flame. Men's souls will be shaken with the violence of war. As at Woodstock, there were deaths But they were different, in numbers and in cause. In one 10-minute period on Omaha Beach, a single rifle company of 205 men lost 197, including every officer and sergeant. These were not pointless or avoidable deaths. The price was very high—but that for which the soldiers died was sacred. We remember. Their comrades -in-arms remember. And so those who can, come back again and again to the battlefields to commemorate what has come to be called the "longest day".

What do today's youth learn about Operation Overlord from the present culture? With a few notable exceptions, like the recent film Saving Private Ryan, they learn that it was just an unfortunate episode in our history that happened a long time ago and that only interest "old-timers" like their grandparents and great-grandparents. Young people don't feel they need to know much about D-Day unless it is going to be covered on a test in school, and they certainly don't regard it as relevant to their own lives.

What Endures

In both cases, we can easily change young people's minds, but first we need to take on the much more difficult task of changing the present culture. Properly speaking, a value-laden culture should take heed of the fact that ephemeral things are those flies of summer. They drift away with the breeze of time. They are as wind and ashes. An event like

Woodstock cannot hold the affection of the heart, or command respect, or win allegiance, or make men and women proud. It may be remembered by the media, but it leaves no lasting impression on the soul. It is forgotten. It is meant to be forgotten. Few people make pilgrimages to Woodstock, for it can give them nothing of worth.

Plato reminds us that what is real is what endures. That is why events like Operation Overlord will, in a value-laden culture, remain vivid and meaningful. War has always been the crucible-that is, the vessel as well as the severest test for our core beliefs. The battles of Trenton, Midway and Tarawa; those who served with John Paul Jones on the Bonhomme Richard and the crews of Taffey Three in Leyte Gulf; The Marines and brave Navy officers at "Frozen Chosin"-these things endure.

But it is not only these things that provide us with the opportunity to remember and revere or past. In the peaceful pursuits of business, politics, religion, culture, and education, we can strive to understand and to pass on to our children the common principles and common virtues that make us essentially American. We can also introduce the next generation to ancient concepts of honor, which have been cheapened for far too long.

In the Funeral Oration, the great Athenian statesman Pericles said two thousand years ago, "For it is only love of honor, it is not gain as some would have it, that rejoice the heart of age and helplessness."

Honor never grows old, and honor gives the greatest joy, because honor is finally, about defending noble and worthy things that deserve to be defended, even at a high cost. In our time, the cost may be social disapproval, public scorn, hardship, persecution, or even death.

Does honor have a future? Like all things human, it is always open to question. As free citizens, we can always fail to live up to the "better angels of our nature". After the conclusion of the Constitutional Convention in 1787, a lady reportedly asked Benjamin Franklin, "Well, Doctor, what have we got-a republic or a monarchy?" Franklin replied, "A republic, if you can keep it."

And so honor has a future, if we can keep it. And we keep it only if we continue to esteem it, value those who display it and refuse to laugh at it.

Challenges of Military Readiness

Senator James M. Inhofe

Upholding military readiness in a time of relative peace and prosperity presents enormous challenges to politicians and policy makers. Despite public apathy and occasional resistance, they must make tough decisions that will affect our national security for years to come. It is a difficult task that many of us in Congress and the executive branch are grappling with at the current time.

Popular conventional wisdom holds that we are now reaping the fruits of a remarkable postwar era—in the aftermath of both the Gulf War and Cold War. America now stands as the world's lone superpower. We are told it is a time when the threats we have lived with for a generation have receded to the ash heap of history. As such, there are strong tendencies to relax, draw down our forces, let down our guard and put off the costly expenses of military upkeep, refurbishment and modernization.

Yet a more realistic view of the world would suggest that we are just as likely to be in the calm prewar era, a time before the next serious challenge to America's vital interests requiring a major military response. History teaches that we are often surprised by hostile international developments, such as Pearl Harbor, the invasion of South Korea, the Cuban Missile Crisis, the Iran hostage crisis or the invasion of Kuwait. These remind us of the need to stay prepared. It is a lesson we may think we have learned until we are surprised once again and caught with our military ill prepared to meet the unforeseen crisis of the moment.

Many fear this is where we are today. While the public is complacent, the US military is suffering readiness, modernization and budget shortfalls which are seriously degrading its ability to meet the national military strategy—to be prepared to fight and win two major theater wars nearly simultaneously. At the same time, our smaller forces are being stretched thin by an unprecedented proliferation of noncombat contingency operations and missions. The administration boasts how the US military is "doing more with less." But if a real war should break out unexpectedly, or if current trends are not reversed soon, we may be unpleasantly surprised to find out that our military can only "do less with less."

As the Senate Armed Services Subcommittee on Readiness & Management Support chairman, I am determined to provide our military with more of what it needs to meet any challenge to the nation's security and well being. In approaching this responsibility, I am also mindful of the reality that it will take years to restore and modernize the US Armed Forces in the ways necessary to be fully prepared for the challenges that lie ahead. It took years to build the military that was ready and able to win the Gulf War. Similarly, the decisions we make today about investing in our defense needs will directly affect what future commanders will have at their disposal when facing some unforeseen future crisis.

For the past six years, we have been leaving the wrong kind of legacy. We have cut budgetary spending power, depleted our supplies of ammunition and spare parts and allowed training, equipment and property to degrade and personnel to leave the services in droves. We have put off tough decisions about replacing key weapon systems, equipment and infrastructure. We have dangerously presumed we have the luxury of adequate time to reverse course if we would ever see real storm clouds on the horizon.

I am convinced we do not have such a luxury. The storm clouds are already there, if we will only see them. New and dangerous threats are emerging throughout the world. At the same time, our ability to meet them has been diminished by complacency, shortsightedness and neglect. The time to begin to reverse course is now.

Overseas contingency operations, such as our unlimited peacekeeping mission in Bosnia and our unending build-up/build-down containment of Iraq, are having a much more significant impact on military readiness than is generally realized.

In 1995, the chairman of the Joint Chiefs of Staff testified before a skeptical Congress that he supported the commitment of US troops to Bosnia only on the condition that it be a limited one-year operation costing less than \$1.2 billion. He indicated anything beyond that would cause an unacceptable drain on US military readiness due to the tight budgets facing the Pentagon for the foreseeable future. On that basis—with that time and cost limit—Congress went along by a margin of only a few votes. But now, more than three years later, as some of us predicted,

the Bosnia mission has become unlimited, direct costs have already surpassed \$12 billion and the drain on readiness is a reality that only grows as we contemplate a similar ill-conceived peacekeeping mission in Kosovo.

During my initial visits to US forces in Bosnia, I got a taste of what was happening behind the scenes. Many US ground troops being deployed to Bosnia came from the 21st Theater Army Area Command based in Germany. This command alone had been reduced in size from 28,000 in 1991 to about 7,000 in 1996. The supporting, logistic and resupply functions for this deployment were huge and are representative of what is happening throughout our "overstretched" military. The troops were working longer hours with increased demands, resulting in less time with their families. Ten- and 20-year-old trucks were being used to capacity, many with odometers reading over a million miles. Personnel with specialized skills, such as mechanics, petroleum handlers and electrical technicians, were in especially high demand and often had to be drawn away from US-based units to fill essential billets. The effect on readiness, not just for the troops in Bosnia and those in the Germany-based resupply operation, but for those throughout the ranks in the United States as well, was and is enormous.

Troops in Bosnia are not keeping up with vital battalion-level combat training. Any order to redeploy to a major crisis in Iraq or Korea would require substantial retraining, costing significant time and resources. Equipment cannibalization rates are up because spare parts have been in short supply. Clearly the Bosnia mission has exacerbated serious concerns throughout the military—divorce rates are up, retention rates and morale are down and readiness is suffering.

A large part of the problem is lack of adequate resources. Overall defense spending has declined in real terms for 14 straight years. Vital increases in procurement and modernization spending have been promised and postponed so many times already that any new promises seem empty. Strict budgetary spending caps constrain defense spending much more severely than domestic spending, which continues to increase.

To turn things around, our military requires more funds, improved equipment and training, better housing and a myriad of other tangible items. This year the Senate Readiness Subcommittee plans to examine aspects of some of these issues and more. We will be looking for ways to improve readiness and leverage efficiencies to make scarce dollars go farther.

With an ambitious planned schedule of nearly 20 hearings, we will examine such issues as: Year 2000 computer compliance; Army, Air Force, Navy and Marine Corps readiness; military construction; real property maintenance; business management reform; acquisition procedures; the impact of contingency operations; ammunition requirements; military family housing; military training; logistics; and maintenance.

It is gratifying that more and more people are beginning to realize the full extent of the military readiness crisis and what needs to be done about it. In recent weeks, the president, secretary of defense, the joint chiefs of staff and many others have acknowledged that restoring our military must be a high national priority in the immediate years ahead. We in Congress hope to provide constructive oversight and guidance, working with the military to make the improvements all of us know are necessary. This should not be a partisan issue—the stakes are too high.

This year, there is good reason to believe that Congress will pass a long-overdue measure to increase basic military pay and reform military retirement benefits. These were among the priority items mentioned by top US military leaders as necessary to improve morale, recruitment and retention.

There is also strong sentiment in Congress to adequately address one of the most significant threats facing our forces today—their vulnerability to attacks by ballistic missiles. We know that sophisticated technology for both short- and long-range missiles and weapons of mass destruction is proliferating around the world. The existing missile threats to our forces now stationed in the Middle East, Korea and elsewhere are real and growing, not to mention the national missile threat to our homeland.

Robust theater missile defenses, such as the Army's Theater High-Altitude Area Defense (THAAD) and the Navy's Aegis Theater Wide (NTW) system, must be given especially high priority for development, testing and deployment. As we proceed, we must understand that there will be both successes and setbacks as the technology matures. We must not be overly discouraged by testing failures. We must learn from them and move forward. This

is surely among the lessons we have gleaned from the remarkable development of rocket and computer technology in our lifetimes.

National missile defense is also an urgent priority. I am an advocate of upgrading the NTW system—building upon our almost \$50 billion investment in Aegis ships, radars, launching platforms and air defense systems—to make it capable of playing a vitally needed and affordable national missile defense role.

At the same time, I believe it is imperative that we not constrain or "dumb down" our defensive technology for the vague promises of "paper" arms control agreements. American ingenuity and missile defense technology should not be looked upon as diplomatic bargaining chips. Once again, the stakes are too high.

Similarly, space control is important to all of our services in meeting their mission. We must recognize that space is the ultimate "high ground" of any future conflict. Our forces are increasingly dependent on it for reconnaissance, communications, targeting, information and data of all kinds. I believe that protecting future readiness requires us to be constantly vigilant of our need to dominate the space environment.

But with all of this, there is something else, something more. As I travel to US military bases around our country and overseas, I recognize that our most vital military asset is our people—the troops, the enlisted men and women and the noncommissioned officers and officers who are devoting their lives to serving their country.

When I talk to them about their jobs and their concerns, I am often struck by their remarkable capacity to adapt to any material hardship presented by the current readiness crisis as it relates to deficiencies in equipment, weapon systems and spare parts, not to mention long hours, difficult deployments and inadequate pay. They are trained and willing to do their best to overcome such obstacles.

What I find they miss, more than anything else in today's environment, is that confident sense of mission that comes from knowing what America's role in the world is and knowing the public understands and supports that role. They want and expect to have intuitive confidence that the military they serve in is always being used prudently and wisely to advance vital national interests.

This, more than anything else, is what is truly lacking today and it is hurting military morale, retention and readiness. For our civilian leaders of the US Armed Forces, from the president to Congress to the American people, this is the biggest challenge we face—and the one we must not fail to address and rectify as quickly as possible. *MR*

Senator James M. Inhofe was elected in 1994 to represent the state of Oklahoma in the US Senate following four terms in the US House of Representatives. As chairman of the Armed Services Subcommittee on Readiness and Management Support, he assists in overseeing aspects of defense operations including military construction, depot maintenance, training, logistics and ammunition procurement. He also serves on the Strategic Forces and AirLand subcommittees and the Intelligence Committee. He received a bachelor's degree in economics from the University of Tulsa. He served in the US Army from 1954 to 1956

Defense Of The Realm MARK HELPRIN

Wall Street Journal, August 1, 2000

Yet again in a presidential election, home, hearth, pocketbook, and style have pushed from the main stage the less material questions of principle and survival. After eight years of beating the hell out of the American military, the Democrats will tell an absurd lie about their stewardship and then move on to the terra firma of class war, race, and abortion. To preserve their national-security lead, Republicans will speak some patriotic cliches, harvest a few points, and quickly scuttle away, for there are themes they do not want to touch and facts they do not wish to mention.

No one will state that the lion has not lain down with the lamb and that eventually we will fight again. No one will state that, if we do not take care, Americans, perhaps those now playing in our schoolyards or resting in their mothers' laps, will die in enormous numbers in a war that will seem to have no end. No one will state that the president of the United States, while receiving large illegal campaign contributions from China, transferred to China technology that it is using now in a vast military buildup that someday we will face. And no one will dare America to put aside for a moment the domestic questions that, had it been as careless of vigilance in the past as it is now, it would not now be free to dispute.

Lifeboats on the Titanic

To do so in the richest, most powerful country on earth would be as unnecessary as counting the lifeboats upon boarding the Titanic. The next war will be a cyber war. There will be no corpses. The Internet will win it for us as our "gender"-normed troops tap at their laptops. We think this way because we have forgotten that soon after the builders of the Titanic were in their dinner jackets, preparing to eat lobsters, they were in their life jackets and the lobsters were preparing to eat them.

Under President Bush, Dick Cheney cut back the military, which was the right course in view of what was happening in the Soviet Union, and there it stood, at levels provocative to none and sufficient unto the day. Would that it had remained so, but President Clinton then characteristically seized upon a thing that didn't need to be fixed, and set about breaking it. The detailed litany is sad and long, but, roughly speaking, he has reduced America's military power by one-half while expanding the scope of its involvement. This has been not in response to fact but to do well by his reflexively antimilitary political base on the left and in the feminized middle, and to create a reserve from which to extract shots of honey targeted to pay off allies and buy new support.

Reconciling such destructive politicization with the assumption that the president cares about national security has required a bunch of bloody lies. For eight years, the public has been reassured that the U.S. can fight two wars simultaneously, as in Iraq and North Korea, a lie that would prove bloody indeed were we to struggle to prevail in one theater as we abandoned the other, as is almost certain. When, during the air campaign in Kosovo, North Korea provoked a small naval battle with the South, the U.S. had no carriers in the Western Pacific. Though Americans may not have noticed, it is a sure bet that China did. And just as North Korea was preparing to loft an ICBM over Japan, the Clinton administration stated that what it now calls "states of concern" (what next, Saddam's "male menopause," Kim Jong II's attention-deficit disorder?) would be of no concern in regard to ballistic missiles for at least 15 years.

In its insatiable mania to dissemble, a compulsion that starts at the top, this administration has turned to the so-called revolution in military affairs not to mine every last ounce of potential from it but because it "offers much greater military efficiency" at a time when even stripped forces "may not be affordable." That is, here is yet another way of spending less while pretending that all is well, for if this revolution is to be properly exploited it will in fact cost a great deal more than the conventional approach. The sorry state of the North Atlantic Treaty Organization makes exhortations to multilateralism ring hollow and false, or perhaps stupid. And the administration must pretend that China is not a vast storm in the gathering, or how else to excuse its ready provisioning to China of the most dangerous military technologies?

To discourage opportunists who will take advantage of American ill-preparedness and thereby create the wars that some, somehow, believe such ill-preparedness prevents; and to ensure that, if we are forced to fight, we will do so

with the fewest possible casualties and the best chance of victory, we must attend to matters of defense that have suffered from two presidential terms of neglect and incompetence.

National security rests first upon the strategic balance, which has been upset by the proliferation of nuclear weapons, the refinement of precision guidance, and the continuing reduction of nuclear arsenals toward the point where more manageable target sets may allow a first strike. In light of this the only recourse is to defend. The charge that defense is technically impossible is a tropism in service of a semireligious objection, the only argument of substance against a strategic defense being that it might shield a first strike. But never was such a defense intended to be, nor can it be, so impermeable as to allow that risk. Rather, it was planned to preserve retaliatory capacity, to protect as much of the population as possible in the event of the unthinkable, and to provide near-absolute coverage of accidental launches and deliberate nuclear attacks from "states of concern."

That China, Russia, the European left, and American academics are so set against it is probably proof positive that we should build it. Among other things, had we taken their advice to heart during the past 50 years we would all be wearing Mao buttons and carrying buckets of dirt. The revolution in military affairs is quite real, but like any revolution it is dangerous. It must be incorporated into military fundamentals rather than being the excuse for their abolition: i.e., pick up the gun, but do not drop the sword. It is necessary to create superlight army divisions and huge special operations echelons, but madness to assume that heavy formations are no longer of use, especially in light of the fact that just nine years ago we successfully fought the largest single armored battle in the history of the world.

The navy is a splendid advantage in regard to China, in that except for South Korea, America's major allies in the region are all on islands. And even if, in an era when foreign basing is difficult or impossible, Bill Clinton is willing to scrap one-half the fleet and forgo the priceless strategic advantage of mastery of two-thirds of the earth's surface, his successor should reverse course, bring back John Lehman, and go down to the sea in ships.

The American soldier must train exclusively for battle against a first-class adversary. He must not be used as a drug policeman, to save endangered crocodiles, or to referee groups of psychotic Balkan peasants. The United States Army is not and should not be a gendarmerie. That should be left to the French. Nor should the armed forces be a laboratory of feminism. Let America lead rather than follow the supposedly enlightened nations by excluding its mothers and daughters from combat rather than thrusting them into it. And whoever it is that does our fighting, we can take steps to keep them whole by abolishing single-supplier procurement and restoring the duplicative competition that results nonetheless in better and more reliable weapons and soldiers who survive. Lives are more important than money.

Munich and Pearl Harbor

For almost a decade now, the defense of the United States has been entrusted to a commander-in-chief who is proud not to have studied war. He and his subordinates have made many mistakes and done much damage. They bequeath to us a thoughtless legacy of imbalanced strengths and great weaknesses that give hope and impetus to military competitors, like China, that otherwise, in despair of challenging us, would direct their energies elsewhere. How can we have forgotten so many bitter lessons? Are Munich, Pearl Harbor, and the Kasserine Pass not enough to light the way to military restoration? Perhaps, recoiling from the wars of the 20th century, Americans simply do not want to face certain themes. But as their refusal to look at danger head on will only magnify it, the essence of statesmanship is to open the subject and to keep it open, even at risk of one's own chances, until all is secure.

Mr. Helprin, a novelist, is a contributing editor of the Journal and a senior fellow of the Claremont Institute.

The Man Who Dropped the Bomb Bob Greene

Fifty-five years later, Paul Tibbets remembers his mission over Hiroshima

July 29 - Fifty-five years ago on August 6, Paul Tibbets dropped the atomic bomb on Hiroshima, and then returned to a quiet life in Ohio. Two years ago, Chicago Tribune columnist Bob Greene also returned to his hometown of Columbus as his father was dying, and struck up a friendship with Tibbets. Greene's bestseller "Duty: A Father, His Son, and the Man Who Won the War" tells how that helped him understand the sacrifices of his father's generation. Earlier this summer Greene talked with Tibbets about that historic day.

He had said 6:15 p.m., so my mother and I had left her house in plenty of time. But there had been an accident on East Main Street, and we were stuck in traffic, and there was no way we were going to be at Fisherman's Wharf by 6:15.

"I guarantee you one thing," I said to my mother. "When the clock strikes 6:15, he'll be sitting at the table."

Paul Tibbets. He had asked my mom and me to join him for dinner- this was on a warm Wednesday night this summer, in Columbus, Ohio, where Tibbets lives, where I grew up, where my dad had lived and died-and if there is anything I have learned about Tibbets, it is that he is never late. Ever.

Certainly not on that 6th day of August 55 years ago, when at the request of his country he did what no person in the history of mankind had ever been asked to do-when he flew the world's first atomic bomb over an enemy nation. In a plane he named for his mother, Enola Gay, he and his crew dropped the bomb on Hiroshima, and at long last World War II was about to end.

On that summer day in 1945, Tibbets had had no satellite navigation to guide his B-29 from the American air base on Tinian Island in the Pacific to Hiroshima; no computers to keep the plane on course. Tibbets and his crew made the flight by checking their watches, and the stars above. It was a six-hour, nearly 2,000-mile trip. The plan had called for the atomic bomb to be released from the Enola Gay at 8:15 a.m. Japan time. Tibbets flew the plane over the T-shaped bridge in Hiroshima at 8:15 a.m. plus seventeen seconds. ("We were off," he would tell me. "We weren't

So now, in the summer of 2000, I knew he'd be waiting for us. Fisherman's Wharf is near no majestic body of water, unless you count Columbus' Alum Creek; it's just a nice, unpretentious place on Main Street, and my mom and I walked in, and Tibbets rose to greet us.

He's 85. Had any of the local television weathermen in Columbus been in the restaurant, or any of the Ohio State University football or basketball stars, they would have caused quite a stir. Not Tibbets. As always, even in his hometown, he went unrecognized.

Which seems just fine with him. Because "Duty" tells the story of how Tibbets helped me understand my father's life- how Tibbets was able to tell me things about why my dad's service with an infantry unit in World War II was so important to him, why it was the central event of my father's time on Earth. My mother, and her last months with my dad, are a constant and deeply emotional part of "Duty" as well. When Tibbets heard I would be back in Columbus to see my mom, he said he thought it would be nice if we all got together. So here we were, in a land at peace, with August 6 approaching once more.

I asked if he paused to commemorate the day each year.

"The answer is, I did at first," he said. "Just privately, to myself. And I would look at the newspapers each August 6, to see if there was any mention made. Some years, not a word was in there."

Tibbets looked off, as if trying to see some invisible calendar. "In a personal way, it's getting away from me, that day. It was a long time ago. It has lost no significance. I think I did it right- what I was asked to do that day, I did right. But when August 6 comes along every year, I don't do anything special on that day."

Many times he has told me that he has never lost a night's sleep over the dropping of the bomb. Even with the unfathomable death and carnage on the ground below, he believed then-and believes now- that so many more lives, American and Japanese, were saved because he flew the mission and the war ended and the killing stopped. Oftentimes, in Tibbets' presence, I would see men and women in their seventies and eighties come up to him (once they figured out who he was) with tears in their eyes, to thank him for letting them live full lives. The men had been young American soldiers on their way to a land invasion of Japan. Because of what Tibbets did, they came home instead, and raised their families. They cry now, when they meet him.

"As the years go by," I asked him, "do you still ask yourself, 'Why me?'"- why he, of all the men in the U.S, military in World War II, had been selected to put together this unit, and to fly the bomb to Japan?

"I don't ask questions like that," he said. "I know what I did- and I did it like I'd do it again under the same circumstances."

"What about your memories of the day?" I said. We had talked about the flight so many times in the most precise detail. "The seat slapped me on the ass," Tibbets had told me, when he had explained the effect inside the plane at the moment the five-ton bomb had been released. And when, after the bomb exploded, he had looked down at Hiroshima, "I looked at that city- and there was no city, there was nothing but the fringes of where the city used to be...."

Now I was asking him if the memories stayed the same over time- if, 55 years later, they were becoming hazy, or if they were still as vivid.

"I don't think it fades," he said. "It gets condensed. I don't think so much anymore about all the steps we took getting ready for the flight. But when we got to Hiroshima... when we began the final part of the mission, the part they had sent us there for...that is still as clear to me as the day we flew there. Every second of it."

And if he had failed? If the mission had not succeeded, and the bomb had not been dropped, and World War II had continued?

"The damn thing wasn't going to fail," he said to me. "I was taking the plane there- and I wasn't going to let it fail."

But what if the scientists had declared the bomb not ready- or if President Truman had decided not to give the order? What if the war had been allowed to go on, and the battlefield deaths had kept mounting? "If we hadn't flown our mission, I think mankind would have lost a lot," Tibbets said.

He knows that there are some who, all this time later, disagree with him. He knows that there are some who continue to be highly critical of what he was asked to do on that August day. His response to that is as direct as Tibbets himself: "Those people never had their balls on that cold, hard anvil. They can say anything they want."

Not that he used that language tonight; my mom was at the table. Fifty-five summers later, an 85-year-old man in an Ohio restaurant, Tibbets told my mother how pleased he was that she could join us for dinner. We talked about a lot of things, and at one point, speaking of that long-ago August, Tibbets said, "What they asked me to do was something that had not been done before. I think it was one of the most important days in the life of the world."

"Was it the most important day in your life?" I asked. "My life's not over yet," he said.

The Art of Mentoring Leaders

R.W. Zimmerman

I recently received many letters that point to the lack of mentoring our young officer leaders as a contributor to their high attrition after their initial commitment.

It seems that most mentoring today consists of ingraining the tricks of getting ahead and making the promotion gates.

During my career, I met very few officer leaders who took mentoring beyond career advancement counseling, doctrinal slide shows, or standard safety briefs. I learned most of the real skinny about leading and combat from combat veterans and books (most not on the official reading lists). Even the occasional military movie with John Wayne, depicting a personable, almost unmilitary leadership style, influenced me.

Why is our military failing at mentoring and what can we do to give our young leaders more than just career advancement tactics for their kit bags?

Our institutions must be reformed to bring professional experience back into our schools. Stop mindless peer mentoring. Cadets and officer candidates deserve to be trained by former combat platoon leaders and company commanders. Hazing, such as the common "get drunk and naked" games must be eliminated and replaced with tough combat skills training and unannounced alert drills.

Successful platoon leaders and former company commanders, with experienced noncom assistance, should coach future platoon leaders, while future company commanders need the guidance and experience of former battalion commanders.

Future battalion commanders need not be mentored by staff Majors and staff trained Lieutenant Colonels but by former Brigade Commanders.

Unfortunately, these experienced guys are not available for our schools because they are punching other essential career ticket. That leaves only semi-experienced peers to do the teaching. The result: We're stuck with plain doctrine because instructors can't refer to much real experience and we're turning into a "doctrinaire," initiative deprived, and paper oriented force.

When I asked my father how the German Army of WWII achieved the high kill ratios for tank crews and the extraordinary level of maneuver flexibility, he simply answered - Kampferfahrung (combat experience) passed on by experts.

He still refers to his instructors and immediate superiors as people who would enter hell before their men but rarely in foolish acts of heroism. During his combat gunnery and tactical maneuver training, it was not uncommon to see senior NCO and officer cadre with amputations and the occasional glass eye. Most sported Panzer assault and wounded badges in the highest categories and their accomplishments were legend. No wonder that the young Panzer soldiers respected them and listened to every word of advice, the glass eye or the missing arm a grim reminder of the slightest combat mistake or mishap. Paper grades on tests weren't as important as experience gained through constant drill.

Maybe we could learn from that example. Why can't we use the guy who gets injured during combat as an instructor versus trying to quickly separate him through medical disability boards?

Why don't we take the successful and experienced field commanders and NCOs and send them to the combat schools as trainers but reward them for it. I remember an Army pilot program called project warrior that pointed in that direction. It never came to fruition because it didn't allow for time to punch all career tickets.

Institutional coaching however, cannot exist without unit mentoring by competent leaders, able to level with subordinates. Instead of perpetuating careerism and overdoses of safety briefings, they should talk tactics and leadership in a close circle with junior officers, maybe even over a beer or two.

An open discussion of a tactical problem, using an example from recent history, lends itself to creating an environment of lively participation. Add a movie clip and finish with a tactical problem-solving task and you'll see the team gel. Once the officers know each other, include the senior noncoms to foster platoon sergeant-platoon commander teamwork.

When coaching, senior commanders need to get away from the "head table" and mix with small groups to learn about the guys who would do the fighting for them. That will enable them to gain comfort in personable motivating without using the efficiency report card as the main attention getter.

Trust and confidence in the leader's abilities come from personal contact. As my father pointed out - "if you stand with three Panther tanks and a total of 47 rounds against two or more enemy battalions, your men look to you as the guy with the wisdom and the guts to pull them through. It's best if they know you real well, for comrades won't ever let each other down."

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Heroes of the Vietnam Generation JAMES WEBB

The rapidly disappearing cohort of Americans that endured the Great Depression and then fought World War II is receiving quite a send-off from the leading lights of the so-called '60s generation. Tom Brokaw has published two oral histories of "The Greatest Generation" that feature ordinary people doing their duty and suggest that such conduct was historically unique.

Chris Matthews of "Hardball" is fond of writing columns praising the Navy service of his father while castigating his own baby boomer generation for its alleged softness and lack of struggle. William Bennett gave a startlingly condescending speech at the Naval Academy a few years ago comparing the heroism of the "D-Day Generation" to the drugs-and-sex nihilism of the "Woodstock Generation." And Steven Spielberg, in promoting his film Saving Private Ryan, was careful to justify his portrayals of soldiers in action based on the supposedly unique nature of World War II.

An irony is at work here. Lest we forget, the World War II generation now being lionized also brought us the Vietnam War, a conflict which today's most conspicuous voices by and large opposed, and in which few of them served. The "best and brightest" of the Vietnam age group once made headlines by castigating their parents for bringing about the war in which they would not fight, which has become the war they refuse to remember.

Pundits back then invented a term for this animus: the "generation gap." Long, plaintive articles and even books were written examining its manifestations. Campus leaders, who claimed precocious wisdom through the magical process of reading a few controversial books, urged fellow baby boomers not to trust anyone over 30. Their elders who had survived the Depression and fought the largest war in history were looked down upon as shallow, materialistic, and out of touch.

Those of us who grew up on the other side of the picket line from that era's counter-culture can't help but feel a little leery of this sudden gush of appreciation for our elders from the leading lights of the old counter-culture. Then and now, the national conversation has proceeded from the dubious assumption that those who came of age during Vietnam are a unified generation in the same sense as their parents were, and thus are capable of being spoken for through these fickle elites.

In truth, the "Vietnam generation" is a misnomer. Those who came of age during that war are permanently divided by different reactions to a whole range of counter-cultural agendas, and nothing divides them more deeply than the personal ramifications of the war itself. The sizable portion of the Vietnam age group who declined to support the counter-cultural agenda, and especially the men and women who opted to serve in the military during the Vietnam War, are quite different from their peers who for decades have claimed to speak for them. In fact, they are much like the World War II generation itself. For them, Woodstock was a side show, college protestors were spoiled brats who would have benefited from having to work a few jobs in order to pay their tuition, and Vietnam represented not an intellectual exercise in draft avoidance or protest marches but a battlefield that was just as brutal as those their fathers faced in World War II and Korea.

Few who served during Vietnam ever complained of a generation gap. The men who fought World War II were their heroes and role models. They honored their fathers' service by emulating it, and largely agreed with their fathers' wisdom in attempting to stop Communism's reach in Southeast Asia. The most accurate poll of their attitudes (Harris, 1980) showed that 91 percent were glad they'd served their country, 74 percent enjoyed their time in the service, and 89 percent agreed with the statement that "our troops were asked to fight in a war which our political leaders in Washington would not let them win." And most importantly, the castigation they received upon returning home was not from the World War II generation, but from the very elites in their age group who supposedly spoke for them.

Nine million men served in the military during the Vietnam war, three million of whom went to the Vietnam theater. Contrary to popular mythology, two-thirds of these were volunteers, and 73 percent of those who died were volunteers. While some attention has been paid recently to the plight of our prisoners of war, most of whom were pilots, there has been little recognition of how brutal the war was for those who fought it on the ground. Dropped onto the enemy's terrain 12,000 miles away from home, America's citizen-soldiers performed with a tenacity and quality that may never be truly understood. Those who believe the war was fought incompetently on a tactical level

should consider Hanoi's recent admission that 1.4 million of its soldiers died on the battlefield, compared to 58,000 total U.S. dead. Those who believe that it was a "dirty little war" where the bombs did all the work might contemplate that it was the most costly war the U.S. Marine Corps has ever fought—five times as many dead as World War I, three times as many dead as in Korea, and more total killed and wounded than in all of World War II.

Significantly, these sacrifices were being made at a time the United States was deeply divided over our effort in Vietnam. The baby-boom generation had cracked apart along class lines as America's young men were making difficult, life-or-death choices about serving. The better academic institutions became focal points for vitriolic protest against the war, with few of their graduates going into the military. Harvard College, which had lost 691 alumni in World War II, lost a total of 12 men in Vietnam from the classes of 1962 through 1972 combined. Those classes at Princeton lost six, at MIT two. The media turned ever-more hostile. And frequently the reward for a young man's having gone through the trauma of combat was to be greeted by his peers with studied indifference or outright hostility.

What is a hero? My heroes are the young men who faced the issues of war and possible death, and then weighed those concerns against obligations to their country. Citizen-soldiers who interrupted their personal and professional lives at their most formative stage, in the timeless phrase of the Confederate Memorial in Arlington National Cemetry, "not for fame or reward, not for place or for rank, but in simple obedience to duty, as they understood it." Who suffered loneliness, disease, and wounds with an often contagious élan. And who deserve a far better place in history than that now offered them by the so-called spokesmen of our so-called generation.

Mr. Brokaw, Mr. Matthews, Mr. Bennett, Mr. Spielberg, meet my Marines.

1969 was an odd year to be in Vietnam. Second only to 1968 in terms of American casualties, it was the year made famous by Hamburger Hill, as well as the gut-wrenching Life cover story showing the pictures of 242 Americans who had been killed in one average week of fighting. Back home, it was the year of Woodstock, and of numerous anti-war rallies that culminated in the Moratorium march on Washington. The My Lai massacre hit the papers and was seized upon by the anti-war movement as the emblematic moment of the war. Lyndon Johnson left Washington in utter humiliation. Richard Nixon entered the scene, destined for an even worse fate.

In the An Hoa Basin southwest of Danang, the Fifth Marine Regiment was in its third year of continuous combat operations. Combat is an unpredictable and inexact environment, but we were well-led. As a rifle platoon and company commander, I served under a succession of three regimental commanders who had cut their teeth in World War II, and four different battalion commanders, three of whom had seen combat in Korea. The company commanders were typically captains on their second combat tour in Vietnam, or young first lieutenants like myself who were given companies after many months of "bush time" as platoon commanders in the Basin's tough and unforgiving environs.

The Basin was one of the most heavily contested areas in Vietnam, its torn, cratered earth offering every sort of wartime possibility. In the mountains just to the west, not far from the Ho Chi Minh Trail, the North Vietnamese Army operated an infantry division from an area called Base Area 112. In the valleys of the Basin, main-force Viet Cong battalions whose ranks were 80 percent North Vietnamese Army regulars moved against the Americans every day. Local Viet Cong units sniped and harassed. Ridge lines and paddy dikes were laced with sophisticated booby traps of every size, from a hand grenade to a 250-pound bomb. The villages sat in the rice paddies and tree lines like individual fortresses, criss-crossed with trenches and spider holes, their homes sporting bunkers capable of surviving direct hits from large-caliber artillery shells. The Viet Cong infrastructure was intricate and permeating. Except for the old and the very young, villagers who did not side with the Communists had either been killed or driven out to the government-controlled enclaves near Danang.

In the rifle companies we spent the endless months patrolling ridge lines and villages and mountains, far away from any notion of tents, barbed wire, hot food, or electricity. Luxuries were limited to what would fit inside one's pack, which after a few "humps" usually boiled down to letter-writing material, towel, soap, toothbrush, poncho liner, and a small transistor radio.

We moved through the boiling heat with 60 pounds of weapons and gear, causing a typical Marine to drop 20 percent of his body weight while in the bush. When we stopped we dug chest-deep fighting holes and slit trenches for toilets. We slept on the ground under makeshift poncho hootches, and when it rained we usually took our

hootches down because wet ponchos shined under illumination flares, making great targets. Sleep itself was fitful, never more than an hour or two at a stretch for months at a time as we mixed daytime patrolling with night-time ambushes, listening posts, foxhole duty, and radio watches. Ringworm, hookworm, malaria, and dysentery were common, as was trench foot when the monsoons came. Respite was rotating back to the mud-filled regimental combat base at An Hoa for four or five days, where rocket and mortar attacks were frequent and our troops manned defensive bunkers at night.

Which makes it kind of hard to get excited about tales of Woodstock, or camping at the Vineyard during summer break.

We had been told while in training that Marine officers in the rifle companies had an 85 percent probability of being killed or wounded, and the experience of "Dying Delta," as our company was known, bore that out. Of the officers in the bush when I arrived, our company commander was wounded, the weapons platoon commander was wounded, the first platoon commander was killed, the second platoon commander was wounded twice, and I, commanding the third platoon, was wounded twice. The enlisted troops in the rifle platoons fared no better. Two of my original three squad leaders were killed, the third shot in the stomach. My platoon sergeant was severely wounded, as was my right guide. By the time I left my platoon I had gone through six radio operators, five of them casualties.

These figures were hardly unique; in fact, they were typical. Many other units—for instance, those who fought the hill battles around Khe Sanh, or were with the famed Walking Dead of the Ninth Marine Regiment, or were in the battle for Hue City or at Dai Do—had it far worse.

When I remember those days and the very young men who spent them with me, I am continually amazed, for these were mostly recent civilians barely out of high school, called up from the cities and the farms to do their year in Hell and then return. Visions haunt me every day, not of the nightmares of war but of the steady consistency with which my Marines faced their responsibilities, and of how uncomplaining most of them were in the face of constant danger. The salty, battle-hardened 20-year-olds teaching green 19-year-olds the intricate lessons of that hostile battlefield. The unerring skill of the young squad leaders as we moved through unfamiliar villages and weed-choked trails in the black of night. The quick certainty with which they moved when coming under enemy fire. Their sudden tenderness when a fellow Marine was wounded and needed help. Their willingness to risk their lives to save other Marines in peril. To this day it stuns me that their own countrymen have so completely missed the story of their service, lost in the bitter confusion of the war itself.

Like every military unit throughout history we had occasional laggards, cowards, and complainers. But in the aggregate these Marines were the finest people I have ever been around. It has been my privilege to keep up with many of them over the years since we all came home. One finds in them very little bitterness about the war in which they fought. The most common regret, almost to a man, is that they were not able to do more—for each other and for the people they came to help.

It would be redundant to say that I would trust my life to these men. Because I already have, in more ways than I can ever recount. I am alive today because of their quiet, unaffected heroism. Such valor epitomizes the conduct of Americans at war from the first days of our existence. That the boomer elites can canonize this sort of conduct in our fathers' generation while ignoring it in our own is more than simple oversight. It is a conscious, continuing travesty.

Former Secretary of the Navy James Webb was awarded the Navy Cross, Silver Star, and Bronze Star medals for heroism as a Marine in Vietnam. His novels include The Emperor's General and Fields of Fire.

Motivation

Where Have All the Mitchells Gone? TIMOTHY E. KLINE, LIEUTENANT COLONEL, USAF

*This article first appeared in Air University Review 33, no. 4 (May–June 1982): 28–32.

THE LONE PORTRAIT leans forward at the base of a raised platform where guests and staff take meals in elevated splendor within the US Air Force Academy's glass and aluminum centerpiece, Mitchell Hall. The entire wing appears three times daily before the stern glare of that leathery face, which, more than any other, is the face of airpower ascendant—American airpower. It is reassuring to a budding generation of military-aviation specialists that things of the spirit can transcend career considerations—that nation and honor supersede the narrower traits of group conformity and safety which mark the serviceman's routine.

William "Billy" Mitchell seems an ironic professional focal point for a military service characterized today by careful managers on the leading edge of American technology. Yet, each of the famous architects of the bright legend that spawned an independent US Air Force rode the shock wave of Mitchell's defiant vision. Henry "Hap" Arnold, Carl "Tooey" Spaatz, and Ira C. Eaker were famous disciples of a combat leader whose cashiered career set in motion a triumph he would not live to see. He received the Medal of Honor posthumously. In a lucid piece recounting the legacy in detail, Lt Col George M. Hall, US Army, wrote of Mitchell, "The individual who responds to the imperatives of honor under circumstances when honor encompasses duty may be tempted to act against the grain of duty when it does not coincide with the same imperatives."

Mitchell, in an Army uniform, cut across the grain of a tradition that considers "military individualism" a potential spoiler of democracy. Speaking independently, he precipitated an expected reaction by the institutional leadership of the older services.² Prof. Stanley Falk, in examining the "apparent incompatibility" of the national predilection for military leaders who are independent heroes while at the same time operatives in a "precise bureaucratic imperative," determined that "individualized values are a threat to the entire range of traditional military norms." Mitchell was the upshot, deliberately and quite legitimately dispatched by a military tribunal that recognized him as a threat to its order and stability. Yet, he looms large at the Academy, where a thousand and more formative minds can collectively consider his compelling gaze and reflect that rugged countenance. What must the enshrinement of such a noble man mean to young people still being nurtured on the rudiments of airpower? Should they incline themselves to emulate the principled performance of that exemplar? Could they succeed by doing so?

As it fell from Elijah to Elisha, so the mantle of Mitchell passed smoothly to the next generation of airmen. The people who witnessed his banishment to Fort Sam Houston, Texas, his reversion to the rank of colonel, the dramatic court-martial, and his resignation, were ardent personal boosters. They had stood by Billy Mitchell despite threatened careers. Arnold, Spaatz, Eaker, and even Mitchell's immediate boss, the sagacious Mason Patrick, backed him fully. Arnold won five stars. Spaatz and Eaker launched an air war in Europe that finally set the Air Force free. Their mentor's words became their own words. "Wars will be won or lost with the military capability possessed when war starts," echoed Eaker. The nation that hangs its destiny on a false preparation will find itself hopelessly outclassed from the beginning," Mitchell warned long before. The fruitfulness of that first wave of Mitchell adherents was impressive: the combined bomber offensive was their unique achievement. But how potent is that impulse in the Air Force today?

Models of success in the new Air Force tend to be managerial. Caution is in the wind. Everyone knows that courage can boost a career only so high. Robin Olds and Charles "Chuck" Yeager are handy examples of such eclipsed glory. They shone brightly, served rather long, and were quietly dismissed by fiat. They were good, solid heroes who each got a star, as Mitchell did, but they went home to intact legends, books, talk, conventions, and memory. Of course, they balked at times, but neither one was pressed by honor to lift the banner of national unpreparedness, as Billy Mitchell was. Theirs was another calling. They retain useful personal images of immense benefit to a service that must still justify its existence by wielding a glittering sword borne up on wings by men of bone and blood.

The apparent dichotomy of the Air Force leadership ideal is strange. The officer corps is bound by an effectiveness rating system that emphasizes careful husbanding of resources over boldness; it values caution over ardent spirit or daring innovation. Individuals occupying officer billets must wonder whether the familiar Mitchell image is a valid behavior model or whether it is a warning that outspokenness will bring swift and sure retribution.

Since Mitchell, no dissenting military leader has suffered or, for that matter, has been offered the forum of a public court-martial. Modern generals are kept in line by a tight infringement of First Amendment freedom-of-speech rights. Free expression of ideas among military men is understood to disturb civilian control. Maj Felix Moran, commenting on the case of Maj Gen John K. Singlaub, US Army, Retired, noted, "When civilian supremacy has actually been at stake, administrative actions, such as removal, reassignment, and forced retirement have been taken against the errant officer" in lieu of rigorous enforcement of Article 88, Uniform Code of Military Justice, concerning prohibitions of free speech.

The general-officer environment now seems so politically precarious that most senior officers must feel wholly submerged in a pervading atmosphere of intimidation. Maureen Mylander examined this situation with bemusement in *The Generals: Making It, Military Style*. Later she would write, "It took me some time to discover that beneath the facade of 'supreme power,' generals themselves act more like frightened little boys than the conspiratorial heavies of *Seven Days in May*." What is it that emasculates modern leadership? Blame an inordinate fear of outspokenness or controversy, other generals with more stars, and civilian bosses who, "even on a whim, can pack a hapless general off to Camp Swampy where, like General Halftrack, he will wait month after month for the message the Pentagon will never send."

Instead of simplifying military life and streamlining military mores, the impact of burgeoning aviation and electronic technologies has brought increasing complexity to the employment of airpower. Force application, like the enforcement of discipline, has suffered from "greater reliance on explanation, expertise, and group consensus" as the Air Force moves farther and farther from the dominance of authoritative leadership. Perhaps the trend to less personal, less vivid leadership was inevitable. Yet, the old order gives way grudgingly. We want to stick with comfortable images. Small things such as colorful nicknames brand the halcyon days of that past with a certain bright distinction. Why don't we label modern leaders with affectionate tabs like "Tooey," "Hap," or "Jimmie"? What about "Possum" Hansell and "Rosie" O'Donnell? Is it possible the present generation brooks no affection for authority until it proves worthy of admiration in combat? Was it only the infusion of civilian recruits on a massive scale in World War II that boosted informality in such a pronounced way? Nonetheless, they were good times for airmen.

Perhaps it is symptomatic that we seem to revere our leaders less and accuse them of far more distance from reality than they deserve. It may well be true, as Col Robert D. Heinl Jr. observed, that "the uniformed services today are places of agony for the loyal, silent professionals who doggedly hang on and try to keep the ship afloat." If so, the patient performance of duty that marks the modern hierarchy is most praiseworthy. Still, a Billy Mitchell every now and then would provide just the right flavor to make service life more savory. The large, relatively docile officer corps yearns for a cause célèbre to forge a renewed commitment to airpower, amid all the promise those colorful words portend.

The officer corps is bound by an effectiveness rating system that emphasizes careful husbanding of resources over boldness; it values caution over ardent spirit or daring innovation.

The Air Force desperately needs a new Mitchell—not to do battle with the establishment but to provide a vision for airpower's future. This need surpasses the requirement for another iteration of computer chips and reaches well beyond bean-counting exercises to determine new life expectancies for tired airframes. The sobering reality of kneejerk reactions to successive revelations of Soviet weaponry has benumbed us all. It is time for a visionary—maybe even a prophet. Someone must articulate a direction for the Air Force from within its most vital constituency—the officer corps. We have rested too long on the pen of Ira C. Eaker. He has been the most widely read airman. He spoke when no one else would speak. His scenario for the future was bleak, pending emergence of a will to contend:

One day, over the hot line from Moscow, may come this message to our commander in chief in the White House: "Mr. President, we order you not to interfere with our operations against Israel. Obviously, you will comply, for your own chiefs of staff will confirm that we have overwhelming military superiority!" If present conditions continue much longer, no president of the United States will have any option but to comply with that ultimatum, amounting to surrender.¹⁴

General Eaker and company won a costly combat victory that provided a place in the sun for airpower. Why has the burden of spokesman been thrust on such a valiant standard-bearer for so long? People who have followed his words in critical editorials over the years may realize now how bold each stroke has been. One should not discount his

warnings because he issued them from the safety of retirement; rather, one should remember Mylander's caution about generals:

Ultimately he will fade into retirement where—under Title 10, Section 888 of the U.S. Code, threat of court-martial and loss of retirement pay—he will be forbidden to use "contemptuous words" in speech or print against the President, Vice-President, Congress, Secretary of Defense, Secretary of a Military Department, Secretary of the Treasury, or the governor or legislature of any state.¹⁵

Admiring the sagacity and skill of American airpower's foremost spokesman comes easy.

Are all the doors of military opinion sealed by the caution of careerism? The few attempts by officers on active duty to counter corporate-style logic or challenge the incoherencies of civilian control have met dismal fates. One of the most poignant of these was an Air War College commandant's attempt to examine critically, in a forum that ostensibly protected his remarks with a nonattribution policy, the folly of high-level management of the air war in Vietnam. Sadly for Maj Gen Jerry D. Page, remarks to a closed professional audience proved just as damning as a letter to a left-wing daily. He nearly disappeared, except for the *Pueblo* incident. During that drama, he emerged briefly as a minor but positive actor. His memory sounds a warning Klaxon to incipient free speakers.

A number of surveys were proffered in the last decade to Air Force Academy graduates electing to depart active duty for the allures of the civilian marketplace. Not the least of their registered complaints involved the integrity of Air Force commanders.¹⁷ Some observers have suggested that these young officers were too easily dismayed by a rigid outlook on officership produced by four years of training under the Academy's Honor Code. Such intimations miss the mark widely. In a time of general adherence to situational ethics, it is not surprising that many commanding officers do succumb to disturbing societal norms that the young Academy graduates find abhorrent. Repugnance for unethical behavior is matched, however, by disgust with rampant toadyism.

Having sat through all those Walter Cronkite—narrated airpower films as "doolies," the cadets expected to find a sense of professional certainty in the real Air Force. Mitchellism had been a daily fare. To discover that those few in the officer corps who most nearly epitomized that ideal were often subjected to close scrutiny and low effectiveness ratings must have provoked a terrific reaction in many of the most idealistic neophytes. Their pressing question was not "Why are there so many toadies in the service?" They were far more likely to ask, "Where have all the Mitchells gone?"

Those who serve know how important a single, galvanizing officer of vision and integrity can be in motivating a person's career. Many even know a budding Mitchell, Spaatz, or Eaker. But how confident are we that such an officer will survive, when the slightest divergence can derail a career? The Air Force must preserve a way to the top that permits room for its prophetic nobility to take a stand, suffer a shootdown, and rise like a Phoenix toward a vision like Mitchell's. The alternative? No more Mitchells, no more Eakers, no more certain trumpet for airpower.

Notes

- 1. Lt Col George M. Hall, "When Honor Conflicts with Duty," Air University Review, September-October 1980, 46.
- 2. General Eaker wrote, "The fact is that General Mitchell welcomed the court-martial as it gave additional publicity to his cause, which was, of course, to obtain a separate Air Force." Correspondence with author, 11 March 1981.
- 3. Stanley L. Falk, "Individualism and Military Leadership," Air University Review, July-August 1980, 97.
- 4. Lt Gen Ira C. Eaker, USAF, "Introduction to Some Observations on Air Power," speech, US Air Force Academy, 19 October 1978.
- 5. Ibid
- 6. William Mitchell, Winged Defense (New York: G. P. Putnam's Sons, 1925), xv.
- 7. See Alfred F. Hurley, *Billy Mitchell: Crusader for Air Power* (Bloomington: Indiana University Press, 1975). Hurley quotes Mitchell, who viewed his unprecedented trial as a "necessary cog in the wheel of progress, a requisite step in the modernization and rehabilitation of the national defense of the country" (page 105).
- 8. Maj Felix F. Moran, "Free Speech, the Military, and the National Interest," Air University Review, May-June 1980, 109.
- 9. Maureen Mylander, "Fear of Generals," *The Nation*, 12 April 1975, 429.
- 10. Ibid.
- 11. Morris Janowitz, "Prologue to the Second Edition of *The Professional Soldier*," Working Paper no. 176 (Chicago: University of Chicago, n.d.), 12.
- 12. See Bruce Callander, "The 'Hap'less Nicknames Up in the Air," *Air Force Times*, 9 March 1981, 20, for a marvelous sketch of endearing wartime personalities.
- 13. Col Robert D. Heinl Jr., "The Collapse of Armed Forces," Armed Forces Journal, 7 June 1971, 30.
- 14. Eaker, speech.
- 15. Mylander, 429.
- 16. Maj Gen Jerry D. Page, correspondence with author, 20 April 1981. Hanson W. Baldwin drafted a full description of the impact of the dramatic incident for the *New York Times*, 27 January 1967, pages 1 and 3; 3 February 1967, page 34; 7 February 1967, page 25; and 17 February 1967, page 15. See also, *U.S. News and World Report*, 6 February 1967, 8l.

17. USAF Academy Alumni Association Graduate Survey, Check-Points, Fall and Winter 1980. Col Jock Schwank possesses a detailed compilation of the latest Alumni Association findings. In this regard, I suggest that interested parties contact the association.

I believe it is an established maxim in morals that he who makes an assertion without knowing whether it is true or false is guilty of falsehood, and the accidental truth of the assertion does not justify or excuse him.

—Abraham Lincoln

Contributor

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In Combat

BRIGADIER GENERAL MARK WALSH

This is a condensed version of a speech Brig. Gen. Mark Welsh gave to cadets at the U.S. Air Force Academy on Aug. 26: From the Wall Street Journal

Over the years I've been asked to talk about Desert Storm, and not long ago I was asked to give a presentation on lessons I learned in that conflict. I sat down to make a list of all those great lessons I wanted to pass on to future generations.

When I finished I only had about 15 items, and I realized that none of them were lessons learned. Every one was a person, or an event or just a feeling I had. But I have never forgotten them, and never will.

Every kind of combat is different. Aerial combat happens at about 1,000 miles an hour. It's hot fire, cold steel, instant death and big destruction. Ground combat is not that way. Those of you who have heard infantry soldiers talk know that ground combat is endless time, soaking fear, big noises and darkness. Either way, your first combat is an intensely personal experience. Today I'll tell you some of the things I remember.

One week before the Desert Storm air campaign actually started, we were flying missions to northern Saudi Arabia to practice dropping simulated bombs at night on targets in the desert, so those of us who didn't routinely fly night missions would be ready if the war started.

On this particular night, when we were done with our run, we hit a post-strike tanker to gas up and then headed back toward the base. I climbed up to about 42,000 feet, plugged in the afterburner, put on the autopilot and leaned back in that tilt-back seat to stare at nature. It was a gorgeous night. Then, out on the horizon, I saw something I had never seen before and haven't seen again. It was a beautiful, huge white halo that went all the way around the moon. I'll never forget that halo.

I also won't forget that when I landed that night, my assistant operations officer met me at the bottom of the ladder to tell me we'd lost an airplane. The pilot was a young captain named Mike who had joined us only two weeks before because he'd stayed back in Utah to get married. He was on his second night ride.

We think that somehow Mike got a light on the ground confused with his flight lead's rotating beacon. He hit the ground going 600 miles an hour--he died relaxed. I don't think dying relaxed was good news to his wife when I called and spoke to her after we'd confirmed he was in that smoking hole, or to his mom and dad when I called them. I'll never forget those phone calls. And I'll never forget looking at his airplane, the helmet with his name on the visor, his spare G-suit hanging under the wing, and his crew chief saluting the jet while bagpipes played "Amazing Grace" in the background. Every fighter pilot on base had on big stupid sunglasses so nobody would know he was bawling. And I won't forget thinking, How many more of these are we going to have when the war starts?

The night before the war, we gathered our squadrons together at about 5 p.m. to give them their first briefing. Then I did what I thought was a real "commanderly" thing--I told them to go back to their rooms and write a letter to their families. In that letter they were to shed all of the emotional baggage they'd otherwise take into combat. I told them they didn't fly until I got that letter.

Now, if you haven't had the pleasure of sitting down and thinking about your family, of telling your children you're sorry you won't be there to see their next ballet recital or Little League game, that you'll miss their high-school graduation, won't meet their future spouse or get to know your grandkids, you should try doing it on a piece of paper at midnight, from 9,000 miles away. If you haven't had the pleasure of telling your parents how important they were to you, or told your wife how the sun rises and sets in her eyes, then you haven't lived. I'd recommend it. I won't forget writing that letter.

The next morning we got up at about 1:30 because we had a 2:15 a.m. briefing. All my guys met in the chow hall, and then we jumped in cars to drive down for our mass briefing. As we drove down the road parallel to the runway, two things happened. The first was that Col. Tom Rackley's 421st fighter squadron lit its afterburners as part of the first launch of the Gulf War. At 20-second intervals they lifted off, accelerating to about 400 miles an hour and disappearing at the end of the runway. I suddenly realized that it was the first time I'd ever seen airplanes take off without lights. We were blacked out for combat, and it was pretty sobering.

Then, as we were about halfway down this road, one of the guys in the car pointed. On the right was the base's tent city. Thousands of people--all those who weren't working that night--had come out of their tents when they heard the afterburners. They were in uniforms, in jeans and cutoffs; they were wearing underwear, pajamas--everything. But not one of them was talking. They were just watching these airplanes take off.

Also, each person was somehow in contact with the next. They were holding hands or arms, or they had an arm around a neighbor's shoulders or back or they were just leaning on each other. These people didn't even know each other. But they were all Americans. They were all warriors. And they were all part of the cause. I will never forget their faces in our headlights.

Later that morning, after our initial briefing, we went to the life-support trailer where all the flying gear for my squadron was located. Now, anybody who's been in any kind of flying squadron knows that life support is a pretty raucous place. You're giving people grief; you're arguing about who's better at what--something is always going on and it's fun. That morning there wasn't a sound, not a whisper. I dressed listening to zippers as people pulled on flight gear. As each one left I wondered if he'd be coming back that afternoon. I'll never forget watching their backs disappear into the darkness.

During Desert Storm, Father John was our squadron chaplain. Father John was popular because he was the first guy to buy you a whiskey, the first guy to light up a cigar, the first guy to start the party and the last guy to leave. We knew Father John well and he fit in great with a fighter squadron.

The first day of the war, as I walked to my jet, I noticed that he was standing right in front of the nose. "Hey, I thought you might like a blessing before you go," Father John said. I immediately hated myself because I consider myself fairly comfortable in my religion, but I'd never thought of that. So I knelt down on the cement and Father John gave me a blessing.

As I was getting ready to climb up the ladder, I noticed all these guys running out of the darkness; my other pilots had seen me and wanted Father John to bless them, too. So he did. And when everybody came back safe from the first sortie we decided: "That's it, Father John has to bless everybody." And from then on it didn't matter if you were Jewish or Baptist or Muslim, Father John gave a blessing.

Later on, talking to Col. Rackley, I found that Father John did the same for his guys. And every time I landed from a combat sortie, every single time my canopy opened, I'd first shake the hands of my crew chief, Sgt. Manny Villa, and then I'd climb down the ladder to Father John, who'd bless me and welcome me home.

When I came back from Desert Storm, I ended up returning to Hill Air Force Base in Utah a couple of days after my squadron. When I pulled into the parking spot, folks were waiting out front, including Father John, my wife, Betty, and a couple of my kids. I'd written to Betty and told her about Father John and his blessings, and do you want to know how cool she is? When my airplane stopped and the canopy came up, Manny Villa climbed the ladder and shook my hand, and when I walked down the ladder, Betty told Father John, "You first." Father John walked over and blessed me and welcomed me home.

A year and a half later, Father John dropped dead of a massive heart attack. Too much whiskey, too many cigars and too many parties, I guess. By the week week after he died, 16 of the 28 pilots who flew in my squadron in Desert Storm had contacted his family in Stockton, Calif. They called from Korea, Europe, Australia and all over the U.S. to tell his family about Father John, and to bless him and ask God to walk him home. I'll never forget Father John.

Early in the war, we attacked a barracks complex in northwestern Iraq. There's a guy I want to tell you about who had a lot to do with a number of holes in that barracks' ammunition storage bunkers. His name's Ed.

Ed left for the desert while his wife, Jill, was pregnant with their first child. Obviously, he couldn't go home for the birth. One night, my exec woke me up and told me I had a call at the command post. It was my wife, calling from Utah, who said, "Mark, I'm at the hospital in Ogden, and Jill is in labor, and she's having problems. Is there any way we can get Ed on the phone?" We went and rousted Ed, and brought him down to the command center.

And as he held the phone with one hand and talked to his wife, I sat in front of him in a chair and I held his other hand. I could see the happiness in his eyes every time she talked back to him. And I could see the worry and the pain in his eyes every time another contraction started and he heard her gasp or scream. I saw him smile when he heard his son, Nate, cry for the first time, 9,000 miles away. I'll never forget Nate.

Twelve hours after Ed hung up that phone, he was in a 12 ship of F-16s that hit those bunkers. It was the best battle-damage assessment we had in our squadron during the war. Ed went from a caring, loving father and husband to intense, indomitable warrior in just 12 hours. I'll never forget watching the transformation.

One of the most important things about combat is sound. Anybody who's been there will tell you that the things you hear are the things you remember the longest. I want to tell you about two things I heard that I'll never forget. The first one was during one of our missions in the Baghdad area. An F-16 from another unit was hit by a surface-to-air missile. Over the strike common frequency, we listened to the pilot and his flight lead talk as he tried to make it to the border so that rescue could get to him. He'd come on every now and then and talk about how the oil pressure was dropping and vibrations were increasing. Then his flight lead would encourage him to stick with it.

This went on for about 15 minutes. Finally he said, "Oil pressure just went to zero." And then, "My engine quit." And then, "That's all I got. I'm outta here." There wasn't another sound on that radio for another 15 minutes. . . and the silence was defeaning. I'll never forget those 15 minutes.

The other thing I heard was when the ground war actually started and an F-16 pilot was shot down in the middle of the retreating Republican Guard. A call went out asking if there was anyone with the ordnance and fuel who could go to him. A lot of people responded, but the first one I really paid attention to was the voice of an Army Chinook helicopter pilot, who came on the radio and said, "I've got this much gas, here's my location, I can be here in this many minutes. Give me his coordinates, I can pick him up."

Now, everybody knew where the Republican Guard was, and everybody knew he was right in the middle of them. And you need to remember a Chinook is about the size of a double-decker London bus with props, and it doesn't have guns. We kid around a lot about interservice rivalries, but I guarantee that I would follow that Army helicopter pilot into combat. I'll never forget her voice.

One of the last things I want to mention is the Highway of Death. This road leads north out of Basra, and was a retreat route for the Republican Guard until they were cut off. What's significant is that I killed people there. Me.

Combat is an intensely personal thing. I'd killed people before this war, but this time I saw them. I saw the vehicles moving before the bombs hit. I saw soldiers firing up at me, then running as I dropped bombs to make sure they wouldn't get away. War is a horrible, horrible thing. There is nothing good about it. But it is sometimes necessary. So somebody had better be good at it. I am. You better be. I'll never forget the Highway of Death.

As I was flying back with Col. Rackley's squadron to the East Coast of the U.S., we checked in with the first U.S. airtraffic control site of the entire route. Col. Rackley said something along the lines of "This is Widow flight; 24 F-16s coming home." And the air traffic controller responded "Welcome home, Widow." And then at regular intervals for the next five to six minutes, every airliner on that frequency checked in and said something. "Welcome back." "Good job." "Great to have you home." "God bless you." About 10 minutes after that I got my first glimpse of the U.S., the coast of Massachusetts. I sat in my cockpit and I sang "America the Beautiful" to myself. I'll never forget how bad it sounded, or how proud I was when it was over.

Take a look at this flag, folks. Those white stripes indicate the integrity that you represent here at the Air Force Academy and that you had better carry with you into our Air Force. Those stars are the courage of all the people who have gone before you. They belong to you now. And that red is for Mike and for the millions more like him who died serving their country. And in the not too distant future, one of you is going to be standing up here talking about your experiences in combat to the classes of 2015, or '16, or '17. This is who you are. And this is what you face in the United States Air Force. You are damn good. You need to get better. All these people I just talked about are counting on it.

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