Diversity and versatility increasingly reflect the roles of the Air Force professional and are the underlying theme of this issue of the Review. Brigadier General Robert N. Ginsburgh and Captain Pember W. Rocap set the theme with their analysis of the military profession's changing role, and it is further elaborated through insights into several aspects of that role: leadership, research and development, professional education, communication and decision-making, domestic action, and others.
THE CHANGING ROLE OF THE MILITARY PROFESSION

Brigadier General Robert N. Ginsburgh
Captain Pember W. Rocap
HE primary role of any professional is to meet the requirements of his profession.

There was a time when a military officer could be called upon to do anything—and be expected to do it well. This spirit was well expressed by the old cavalry soldier who described himself as “lover, fighter, wild horse rider, and pretty durn fair windmill man.”

Although many modern fighter pilots may fancy themselves to be as versatile as the old cavalry soldier, the military profession no longer requires an officer to be able to do everything. The military, like other professions, recognizes that this is an age of specialization.

Yet at the very time when the likelihood of having to fill a number of diverse roles has become less for the individual military man, it has become greater for his profession as a whole. These conflicting tendencies are at the root of much of the criticism of our profession from without and soul-searching from within: all are centered on the question of the proper role for the military profession.

Answering that question is complicated because, first, the military has not one role but many; and, second, these roles are changing. Thus, a serious examination of the changing role of the military profession must include the factors that are causing changes and the effect of those changes on the military profession per se—that is, on its expertise, corporateness, and responsibility. These are the parameters of this article.

There are four major determinants that shape the role of the military: American society, the world environment, technology, and the profession itself. As such, changes in each of these determinants are the source for changes in our professional roles. An exhaustive analysis of all these changes cannot be given in one brief article. However, we offer a few examples that may help to stimulate thinking in preparing oneself to cope with the dynamics of our fast-changing profession.

American society

All societies have a part in determining the role of their military. The military mirrors the character of the people from whom it draws its manpower. Obviously, in a democracy society’s direct influence is greater than in an autocratic society. The American military, while directly controlled by the government, is ultimately responsible to the people because of the government’s own responsiveness to the citizenry.

The basic role of the military is to provide for our nation’s defense. That is our very raison d’être. Our professional expertise is built around that role. But the military profession is expected to engage in other roles in support of American society, roles quite outside the traditional concept of the military as a force for the defense of the nation.

Actually, the idea of nonmilitary roles for the American military establishment is not new. Some forty years ago Captain A. Robert Ginsburgh wrote an article entitled “Things the Army Does Besides Fight.” Modern military men may recall some of those things from their own knowledge of history: exploration and survey of the West; the building of roads and railroads; flood control; construction of the Panama Canal; medical discoveries, such as yellow fever immunization; and the Civilian Conservation Corps.

In more recent times we have seen the military’s significant role in racial integration. The armed forces’ example in leading the way toward integration is well known. But because the continued existence of racial prejudice is
contrary to the basic principles of this country and detrimental to our strength, the military profession will continue to have a role in this area. On the strictly practical level, every good commander should know that the effectiveness of his organization is reduced by racial prejudice in any form.

Another of the military's socioeconomic roles is exemplified by Project 100,000. Whereas the Selective Service has been just that—selective, especially for the Air Force—Project 100,000 required the services to accept and train a large number of young men who, because of poor educational achievement and background, otherwise would have been rejected by the military and left on the lower economic fringe of society.

These are the kinds of domestic action roles for the military profession which will be continuing if not actually increasing. Last year Secretary of Defense Melvin R. Laird outlined several general areas in which the Defense Department could do more toward resolving this country's domestic problems: procurement, manpower, transfer of knowledge assets, community relations, and equal rights and opportunities.1

The military's role in these areas is often misunderstood by some American military men and civilians, both convinced that domestic action is really none of the military's business. The former see such involvement in domestic problems as a certain reduction in the ability to prepare for and fight wars; the latter are apt to see it as a "potential extension of military authority if not authoritarianism." 2 Both are also likely to view the military as separate from the mainstream of American society and largely unreflective of society's values; and some fear that going to all-volunteer armed forces will make the military's isolation complete. To show them wrong on all counts, one need look no further than the latest news.

During the past few months there have been reports of the following: clashes between the races on military installations in the U.S. and overseas; military personnel with membership in organizations ranging from the Ku Klux Klan to black power groups; a marijuana and drug problem that reaches from the Air Force Academy to Vietnam; and the existence on military bases of enough soldier unionizers, protest groups, and underground newspapers to rival some college campuses.

On the positive side, many people in the military are trying to find solutions to prevent the individual and institutional destruction that often accompanies these problems. Thus, the military has a growing role in helping to solve domestic problems not only because we have been told to do so by the civilian leaders of this country—not only because what is good for the country is good for the armed forces—but also because these problems are the military profession's own problems in a very real sense: most of us face them daily in our own units.

We do not want to overstate the case. The primary role of the military is—and should be—national defense. But we do have important roles involving our country's socioeconomic problems, which we should not and simply cannot ignore.

There are two other roles arising directly from the demands and needs of American society. One, disaster relief, occurs as regularly as the hurricane season and will continue as long as man is the victim of storms, floods, and earthquakes. The other role, that of law enforcement and riot control, will, hopefully, belong less and less to the military. Unfortunately, this is not because rioting and other large-scale disorders are occurring less frequently in this country; it is because the relatively common occurrence of civil disturbances in large cities and on college campuses has compelled police forces to direct much of their training and efforts to coping with such problems. The more proficient they become, the less likely it is that the military will be called on to augment them. A second reason
for the change in the military's role in this area is the plan for increased dependence on reserve forces to meet this country's external security needs. Recently the Nixon Administration has ordered the armed forces to depend on the National Guard and Reserves—not on increased draft calls—to meet future overseas emergencies. At the same time, when situations arise that are beyond the capabilities of the police, they will still have to be handled by the Guard and Reserves. Meeting these twin responsibilities will present an even greater challenge to their professionalism.

**world environment**

The Administration's policy of placing increased importance on the Guard and Reserves to cope with external threats to our national security leads to the second determinant of the role of the military profession: the world environment.

The world environment—including adversaries, allies, and friends—gets directly to the hard-core role of the profession, the national defense responsibility. If we look closely, we can see that we are really concerned with four roles in one: a preventive role, a fighting role, a negotiating role, and an advisory role. None of these is static; all are dynamic.

As far as the preventive role is concerned, deterrence has been a fundamental role for the military profession during the entire career of more than 90 percent of the current officer force and during most of the career of the others. Yet for the generation that preceded us deterrence was not a major military consideration. Instead, as one historian described the period between the world wars, "the armed forces of Britain and the United States disintegrated under a violent reaction of war, and the French Army suffered a decline in morale and efficiency so severe as to constitute an inadequate defense force for the nation."

Thus, the American military establishment was not directly concerned with preventing or deterring war. Instead, its task was to maintain relatively small military forces which could serve as a cadre for a vast military manpower expansion and to maintain plans for an industrial mobilization necessary to equip such expanded military forces. The military and industrial potential of America (as opposed to our military strength in-being) was, of course, a factor in the possibility of deterring war. But deterrence itself was supposed to be the province of the diplomats. Fighting was the role for the military if the diplomats failed to deter.

With the advent of nuclear weapons and intercontinental delivery capabilities came the possibility of a violent, short, decisive war. Under these conditions America's great mobilization potential, which was amply demonstrated in two world wars, became even less significant as a deterrent factor than it had been between the two wars. With the nation's very survival at stake, deterrence of nuclear war by combat-ready forces in-being became a primary role of the military profession.

This role seems unlikely to change in the foreseeable future. President Nixon indicated this in his February 1970 Foreign Affairs Message to Congress when he said that "the nuclear capability of our strategic and theater nuclear forces serves as a deterrent to full-scale Soviet attack on NATO Europe or Chinese attack on our Asian allies" and that America has "primary responsibility for nuclear defense."

In thinking of deterrence, we most often worry about the problem of deterring nuclear war. This should properly be our greatest concern. At the same time we should not ignore our objective of deterring all wars, large or small.

The military's role in helping to prevent wars does not diminish the role of the military profession as a fighting force; in fact, successful deterrence depends in part on the profession's ability to fill its fighting role. General Thomas D. White, while he was Chief of
Staff of the Air Force, was fond of stating that "forces which cannot prevail will not deter." And because deterrence is constantly liable to failure, especially in the lower spectrum of conflict, the profession still has an active combat role. But here again, while basic, the combat role is subject to change and is dependent on the changing world environment. The current counterinsurgency role is one example, among many others. Most military professionals, if they have not actually participated in or supported counterinsurgency operations, are aware that coin has become a basic role for the U.S. military. This has happened because Communist aggression in recent years has been at that level, in part, because of the successful deterrence at the higher bands of the warfare spectrum. Twenty years ago a coin role for the U.S. military was not a serious concern of most professionals. Yet seventy years ago counterinsurgency was the primary role of the U.S. Army in the Philippines.

Future changes in our counterinsurgency role will depend on the way President Nixon's proposed foreign policy is implemented. Rather than expect U.S. military forces to cope with the entire spectrum of threats, the President has said:

The best means of dealing with insurgencies is to preempt them through economic development and social reform and to control them with police, paramilitary and military action by the threatened government.

We may be able to supplement local efforts with economic and military assistance. However, a direct combat role for the US general purpose forces arises primarily when insurgency has shaded into external aggression or when there is an overt conventional attack.5

Perhaps the newest role for the military profession resulting from the changing world environment is that of negotiator. The end of hostilities in Korea resulted not from diplomatic negotiations, although diplomacy paved the way. The end of these hostilities, a truce, resulted from negotiations at Panmunjom, in which military men played a major part. Almost twenty years later their military successors aided the negotiations for return of the Pueblo crew.

These are just a few examples of the new military role in negotiations. As military men, we are well aware that once a war starts, the civilian leaders no longer simply turn the conduct of the war over to the military. Nor is the military simply turned out by the diplomats at the time of negotiating, once the war is over. The U.S. will probably always be willing to sit down and talk about possible conditions if they will shorten a conflict and decrease the destruction. When this occurs while the fighting is still going on, the military is required at the negotiating table to insure that conditions are not agreed to that would either immediately or eventually jeopardize American security and interests. This role is still being accomplished by the military in Korea, and there is U.S. military representation at the Vietnam talks in Paris. Similarly, the military is directly involved in the Strategic Arms Limitation Talks (SALT) in Helsinki. As long as military forces have a role in preventing conflict or stopping it once it has started, they also will have, as experts, a negotiating role.

Our relations with our allies, as with our adversaries, also shape the military's role. Since World War II we have had a large advisory role because of the needs of our allies. This occurred first to our European, Asian, and Latin American allies, especially during the forties and fifties, and more recently to emerging Third World nations.

In conjunction with the $350 million approved for military assistance in the 1970 Foreign Assistance Act, there are thousands of U.S. military involved with Military Assistance Programs and Advisory Groups around the world. Although often overlooked, much of our effort in Vietnam has been in this
area; the Vietnamization program calls for more. In Latin America, providing military equipment and advice has been almost exclusively our role. President Nixon's re-emphasis on this particular form of partnership and military assistance to other nations makes this an even more significant role for the military in the future.

And as this advice and assistance specifically include our technology and the knowledge required to use it, our advisory role becomes greater. In the nineteenth century the care and use of the most complicated weapons (a Gatling gun, for example) could be quickly learned by one man. The technological complexity of modern weapons, however, makes complete mastery by one person impossible. Inasmuch as our assistance to our allies is in the form of weapon systems, it must be accompanied by much operating and maintenance instruction. Providing a country with a squadron of aircraft, for example, often requires extensive instruction of the allied pilots in the United States and the lengthy assignment of USAF personnel in the receiving country to train their maintenance personnel. Recently as part of the sale of F-86s to Tunisia, 14 Air Force personnel spent a year in that country on a training mission. Now, the F-86 is hardly the most modern aircraft in the inventory, and the training was essentially flight-line maintenance rather than more complicated field or depot-level maintenance. As our assistance to friendly nations becomes more heavily technological and advisory and less in the form of conventional troops, the importance of this role for the military profession will increase.

technology

Actually, the major effect of technology on the role of the military has been paradoxical. Technological advances have greatly increased the variety and power of the weapons available to the profession. Simultaneously, there has been a decrease in the autonomy of military commanders in deciding what weapons to employ when and where. There seems to be an inverse relation between the power of a weapon and the authority to employ it: the more powerful the weapon, the less likely the military will retain the final authority to use it. In the case of the most powerful weapons—nuclear bombs and missiles—the decision has been completely removed from the military. As Alastair Buchan has written: "... as long as nuclear weapons exist, no government will grant to a military commander in a distant part of the world the freedom of action that Allenby had in Palestine in the First World War, or Alexander, MacArthur and Eisenhower had in the Second."6 And because of great advances in communications, even the use of conventional forces down to the lowest tactical level may be subject to civilian monitoring and decision-making.

During every crisis of the sixties—such as in Berlin, Cuba, and the Dominican Republic—hardly an aircraft or a platoon involved moved without direct authority from Washington. Technological advances have lessened the authority of the military professional in his role as commander and manager of violence.

Technological advances, combined with the military's deferring to the political nature of war, have also caused a change in conventional tactical roles. The aircrews that flew F-4s and F-105s over North Vietnam from 1965 to 1968 can confirm this. For them the change took the form of ignoring the fundamentals of an established role: this occurred whenever the strike force flew over a North Vietnamese air base, and the training and experience of each fighter pilot there told him that today he should be hitting those MiG's on the ground; tomorrow he could bomb the bridge or power plant or whatever was actually on the frag. His training said, "First remove the challenge to air superiority, then hit other targets." His experience said, "Those MiG's down there will be up here challenging you when you come off the target." But his
Disaster Relief—Peru, 1970

The primary purpose of the U.S. military is national defense, but socioeconomic problems and natural disasters pose other important roles. The need for rescue and relief occurs as regularly as the hurricane season and will continue as long as man is victim of storms, floods, and earthquakes.

Aircraft and personnel from U.S. Air Forces Southern Command (USAFSO) airlifted more than one million pounds of emergency relief supplies in response to a plea for help from the government of earthquake-stricken Peru in 1970.
Commander in Chief had decided that, for the time being anyway, Phuc Yen and Kep and other bases would not be bombed. And they were not until he said otherwise. It was a classic example of a military man having to make what on the surface appeared to be a gut rejection of the requirements of one particular role in order to meet overriding requirements of the profession.

That technology is constantly creating entirely new roles for the military profession is obvious. A new type of weapon means a new role for the military. A weapon does not become operational until someone has learned to use it. And if the other side has a new weapon, someone must learn to defend against it. These role changes are occurring at an increasingly faster rate. Before 1950, intercontinental missiles existed for the most part on paper and in the minds of a few rocket scientists; today ICBM's constitute a large portion of our strategic power. Before Vietnam, our tactical aircraft had never been threatened in combat by a surface-to-air missile; now SAM suppression has become a vital role in our tactical as well as our strategic air arm. Future technologically related changes will appear even more quickly.

the profession itself

Finally, the military profession's own influence in determining its roles cannot be overlooked. This influence occurs through the actions and decisions of military leaders and because of certain qualities that are inherent to the profession.

A leader's effect on the profession's role occurs not simply by the orders he carries out but by those roles which he personally fills or otherwise favors. The Army has an airborne role today for a variety of reasons, among them the ever possible need to move troops quickly over a long distance and have them hit the ground combat-ready; and in the case of battalion-and division commanders in helicopters in Vietnam, the need for a commander to know and control all the action on the battlefield. Yet this emphasis on an airborne role is underscored by the personal endorsement of it from Army leaders, full colonel and above, either by their words or by their actions, such as, at the last part of a career, learning to fly.

Another role occurring, in part, from the actions and example of leaders is the one the following men have in common: Admiral Leahy, General Hines, General Walter B. Smith, Admiral Standley, Admiral Kirk, Admiral Anderson, Admiral Spruance, General Gavin, and General Maxwell Taylor. The list goes on and is quite impressive. The role these men have in common is not just that they are military leaders; it is that they have all served as United States Ambassadors to foreign countries within the past thirty years. For several that role came after they had taken off the uniform, but for some it did not. All of them served with the same dedication that had marked their military careers. And the example set by them is bound to affect the profession.

Naturally, one reason why members of the military are often called upon to fill roles somewhat removed from their normal duties is that their careers have demonstrated their possession of certain qualities that are often required in the successful accomplishment of difficult tasks—qualities such as courage, resourcefulness, a sense of public duty, the ability to remain calm and act with judgment even under conditions of great stress, and many others.

Possession of these and other qualities was partly responsible for the diplomatic roles being given to the generals and admirals just mentioned. Similarly, such qualities have also been responsible for the explorer role given the military profession, from Lewis and Clark's trek across the continent to Admiral Byrd's polar expeditions to the more recent substantial participation of military professionals
in the exploration of space and ocean.

There are also attributes and abilities that the profession as an organization possesses which influence and determine its roles. Arising essentially from the military's expertise, these attributes often attract noncombat roles. For example, the military's ready capability to move large amounts of men and supplies quickly and in an orderly fashion is one reason for its disaster relief role. And its ability to deal with violence on a large scale gives rise to its role in riot control.

The roles of the military profession, then, are being changed from without by influences from American society, the world environment, technology, and from within by its own leaders and organizational abilities. These changes have a significant impact on the core of the military profession; its expertise, corporateness, and responsibility are all affected.

A previous examination of this subject indicated that of the three areas constituting the military's expertise—strategy, tactics, and administration—the greatest challenge was to strategy. That challenge has continued. The strategy guiding the military today is just as much a product of lay strategists now as it was then. Furthermore, a similar civilian involvement in tactics has become commonplace since 1964. The selective and restrictive use of air power in North Vietnam is one clear example of this.

If the trend appears to be for ever narrower limits of the area where the military is the exclusive practitioner of its skill, the cause is technological as well as political. Although as Samuel P. Huntington has pointed out, "it must be remembered that the peculiar skill of the officers is the management of violence and not the act of violence itself," technology requires an even higher degree of technical competence from the officer. This has had several results. First, there is a greater requirement for specialists. In the Air Force there are now over 300 specialties identified for officers, not counting the legal, chaplain, and medical fields. A similar situation exists in the other services. Second, there is even less of a chance now for an individual to be used in a wide variety of jobs.

One of the results is that a premium is placed on professional education for the individual to learn about the rest of the profession. The overriding demand growing out of the increasing complexity of the profession is for generalists to tie it all together. The need is for what General William C. Westmoreland has called "spherical" thinkers, "men who can view the several parts as a whole." This need affects the profession's corporateness as much as its expertise. Officers who can be found to transcend specialty differences, command rivalries (of the SAC versus TAC type), and service competition will without doubt strengthen the corporateness of the profession. But our sense of corporateness will also be affected by the changes occurring in relations between career officers and reservists and between senior and junior officers and by requirements to incorporate those who before would have been forced out.

The reference to career officers automatically includes both regular and active duty career reserve officers. This particular portion of the Reserves is in reality already incorporated in the profession; now the inactive Reserves and National Guard will be to a greater extent.

In the fifties, Huntington's rationale for placing the reservist essentially outside the professional officer corps was based on the following: "The reservist only temporarily assumes professional responsibility. His principal functions in society lie elsewhere. As a result, his motivation, values, and behavior frequently differ greatly from those of the career professional." The greater role in national defense planned for the reservists in the next few years will alter this observation. The new corporateness of the profession can
no longer be said to exclude the Reserves.

Our corporateness will also change as manpower requirements and transformation of society compel us to rehabilitate and accept personnel who until recently would not even have been considered by the military. Much of this will be caused by elimination of the draft. Assistant Secretary of Defense for Manpower Roger T. Kelley has said, "We should examine whether we can get better use out of people." The interpretation that "this would mean enlisting more women, and people who are now rejected as being overweight, underweight or who have limited mental capacity" is only the beginning. An Army Medical Corps member has recently suggested unofficially that "perhaps we need to regard marijuana as we do alcohol: if it doesn't interfere with (a soldier's) duty, it should be overlooked." Not too many years ago such a suggestion would not have been made.

The military's concept of its responsibility has also been affected by many of the changes mentioned in this article. After his Korean experience, General Douglas MacArthur protested against, in his words, "a new and heretofore unknown and dangerous concept that the members of our armed forces owe primary allegiance or loyalty to those who temporarily exercise the authority of the Executive Branch and the Government rather than to the country and its Constitution which they are sworn to defend." The protest was singularly MacArthurian; the profession as a whole has realized that it has a definite job in implementing political decisions. And since World War II military professionals have accepted the need for public speeches to be cleared for security and policy. This insures that they do not speak out against policy while still in uniform; however, the extent to which the profession should be called upon to advocate current policy is unsettled.

Within seven months after he took office, President Eisenhower had replaced the entire Joint Chiefs of Staff, including the Chairman, General Omar Bradley. This "was interpreted as an effort to remove the military chiefs from the shadow of politics." The relations between the President and General Bradley, his West Point classmate, were further strained by General Bradley's reported statements about the new Administration's fiscal policies: "that economy, conditioned by politics, and not military reasons, dictated the decision to cut spending by so much." In short, the old Chiefs had become too closely identified with the Truman Administration. Curiously enough, the new service chiefs, approved by President Eisenhower, were all a year older than their predecessors.

A more recent example occurred in 1967 when General Westmoreland, then MACV Commander, was asked to return to the States to speak in support of the effort in Vietnam. One congressman said that he regretted "that General William Westmoreland has been making public statements in the United States on questions going far beyond his area of responsibility and expertise." A senator said that "if General Westmoreland is to become a propagandist for the Administration in this war, let him take off his uniform and come back in civilian life." On the other hand, another senator saw fit "to commend the distinguished commander of the Advisory Group in Vietnam for acting in a manner which is consonant with the responsibilities and duties of the military." It is not enough to argue that this particular disagreement about the military's responsibility arises from the peculiar war that is Vietnam. It is an issue that the profession will have to face even after Vietnam. The military profession does have a responsibility to support the Commander in Chief; but the military will continue to be subject to criticism as long as the critics fail to recognize that such support is based on professional duty and not on political motives.

This article has indicated many of the changes and some of the problems currently
facing the military profession. To meet the requirements of the profession, older officers must be receptive to new ideas, even those seemingly contrary to past experiences, and younger officers must be more understanding about the responsibilities of being prepared to fight, not only five or ten years from now but next week or tomorrow. Therein lies the inertia confronting new but untested ideas.

Aerospace Studies Institute

Notes

5. Ibid.
12. Ibid.
MORE
MILEAGE THAN
PROGRAMMED
FROM MILITARY
R&D

Dr. Alan M. Lovelace
AN EXPENSIVE high-temperature and corrosion-resistant cobalt-base superalloy developed by the Air Force to solve a serious propulsion problem was the only material that a fountain pen company found satisfactory for making the snorkel tube in its pens.

A sealant developed by the Air Force for application to joints to prevent fuel leakage in integral fuel tanks in military aircraft has been used extensively for sealing windows in modern all-glass office buildings. Another commercial application of this same material is the sealing of lapstrake and other joints in wooden-hull pleasure boats.

The Air Force development of a di-3-ethylhexyl-sebacate high-temperature synthetic oil, considered a breakthrough in engine lubricants a few years ago, is now available commercially in small cans as a lubricant for washers and driers and, in modified form, as a high-grade gun oil.

Polyester-cotton blends, developed originally for Air Force summer uniforms, have become the leading man-made fibers for wash-and-wear garments. Synthetic mouton fur, designed for military arctic wear, has also found its way into the civilian wardrobe in such forms as coats, coat linings, and collar materials.

These are but a few of a great number of Air Force materials developments that are proving invaluable in civilian applications. The Air Force Materials Laboratory (AFML) at Wright-Patterson Air Force Base, Ohio, had a predominant role in the development of these materials. The AFML is the principal Air Force Systems Command organization charged with planning and executing the USAF exploratory and advanced development program for materials. It also manages the entire Air Force Direct Manufacturing Methods Program.

Usually, once a material is developed and becomes available commercially, tracing it in the myriad products manufactured for civilian use is extremely difficult. Commercial aviation has probably received the greatest benefit from the fallout of Air Force materials research and development and is the easiest area in which to trace a material because of the close similarity of environmental conditions and patterns of usage. Many airframe and engine alloys, protective coatings, greases, fluids and lubricants, elastomeric materials, adhesives, etc., being used in commercial planes are the direct result of programs conducted by the Air Force for military purposes.

PBI

Pioneering polymer research conducted by AFML scientists resulted in a novel approach to polymerization without formation of undesirable weak links in the polymer chain. One of the first polymers made by this approach was the polybenzimidazoles, or PBI polymers. Increasing requirements being levied by the Federal Aviation Administration for nonflammable materials in items such as upholstery in commercial planes will undoubtedly lead to extensive use of PBI fiber.

As a result of AFML programs to develop the potential of PBI, re-entry drogues, booster recovery parachutes, ballistic capsule recovery parachutes, tire reinforcements, and a wide variety of expandable structures became available with an increased temperature capability of more than 200°F. Yarns made of high-temperature-resistant PBI fibers were successfully transformed into fabrics, webbings, tapes, ribbons, and sewing thread suitable for use in supersonic and hypersonic decelerators.

Further research revealed that PBI fiber is nonflammable in air and in an oxygen-rich environment. Fabrics previously used for aircrew clothing, emergency escape systems, and cockpit and cabin equipment included nylon, cotton, and Nomex, which burn or melt or both when exposed to flame. Characterization
investigations on woven and knit fabrics made from staple and continuous-filament PBI fiber demonstrated that these materials are nonflammable and, in addition, are abrasion-resistant, can transmit moisture as well as cotton and therefore offer comfort equal to cotton, and are more heat resistant. These results formed the basis for the development of a number of clothing and hardware items that are already in use or in the process of being evaluated for use not only by the Air Force but by the Army, Navy, and National Aeronautics and Space Administration as well.

NASA has made extensive use of PBI fiber in the Apollo missions. PBI webbings, tapes, ropes, fabrics, and sewing threads were used in the Apollo command modules and lunar excursion modules (LEM). In all the Apollo missions the crew restraint system, in-flight exerciser, debris netting, and helmet and tiedown straps were fabricated from PBI. Although previously available Beta glass materials are nonflammable, PBI provides abrasion resistance and fold endurance not available from Beta materials and is also lighter in weight. In addition, the higher elongation or stretch in PBI fibers results in webbing with greater energy-absorbing capability than is attainable with Beta glass or even metal fibers. The Apollo XI lunar excursion module had a PBI crew restraint system, and PBI rope was the means of conveying the sample boxes from the lunar surface to the LEM.

Experimental items made of PBI fiber that are currently being evaluated include complete personnel parachute packs and harnesses, flight suits, flight gloves, underwear, cushion covers, bunk covers, and sheets.

This material will undoubtedly find innumerable applications where nonflammability is desired. In addition to extensive use in commercial planes, it has a potential in clothing for firemen and race car drivers.

titanium

The Materials Laboratory was instrumental in the meteoric development of the metal titanium from a laboratory curiosity until the late forties to a readily available material of wide applicability. Titanium was exploited as an airframe material because of its high

The OV1-10 near-earth polar-orbit satellite carried Air Force Materials Laboratory thermal control coatings, mounted on two circular sample holders at right. Based on ten months of data transmitted by the satellite, a correlation was established between the effects of laboratory-simulated space environment and the effects of actual space radiation environment on the coatings.
strength-weight ratio and great corrosion resistance. Its high cost has limited its application both militarily and commercially, but if the cost pattern follows that of most other metals, industry will find a way to reduce this cost. As an example, aluminum and platinum were once competitive in price.

**Magnets**

After several years of research, the first “super” magnet is about to be put to use. In 1966 scientists of AFML measured and reported the outstanding magnetocrystalline anisotropy of YCo₅ (yttrium/cobalt) and detailed the basic fabrication techniques that could provide permanent magnets of record properties from a large family of compounds of light rare earths and 3d-transition metals (the RCo₅’s, where R is yttrium, cerium, praseodyminum, or samarium). As this program continued, samarium-cobalt magnets were developed to the point where their properties make them far superior to magnets of all other materials for most applications.

Initially, a samarium-cobalt magnet will replace platinum-cobalt in traveling-wave tubes where it not only does the focusing much better but is much cheaper. Moreover, its energy product is two to three times greater than that of the alnicoes, with usable coercive forces up to ten times greater, making it possible to replace alnico in many applications with less material, thereby saving space and weight. Also, the extremely high coercive force of samarium-cobalt makes possible application of permanent magnets heretofore considered impractical. Only very recently have engineers begun to appreciate the potential of this material for devices such as motors. These are the only materials other than the ferrites and platinum-cobalt that are really “permanent” magnets (immune to self-demagnetization for any shape). This is particularly important to dynamic applications such as electric motors and generators.

These magnets will have direct application to electronic and communications equipment and will permit more precise, more rapid, and
more reliable computerized techniques, particularly in automated and machine processes.

**foam helmet liner**

A life-support item that recently evolved from an AFML in-house program was the development of a foam formulation and procedures for the economical fabrication of form-fitting helmet liners. An ill-fitting helmet causes headaches and skin irritation and does not provide proper protection.

The technique in use for fabricating a form-fitting helmet liner for aircrew personnel is laborious, time-consuming, and costly. It entails making a plaster cast of the individual’s head and then using it to make a plaster reproduction of the head. The plaster model is then placed in a special helmet mold, and a polystyrene-foam liner is made. This liner will conform to the head exactly. The procedure takes 47 days and costs around $85.

The technique developed by the AFML involves a foam formulation that is notable for an unusually low exotherm (heat generation) and an optimum viscosity and reaction rate for foaming the liner in a special mold fitted right onto the individual’s head. With this procedure the form-fitting liner is made in several hours and involves about 25 cents worth of chemicals. The simple procedure can be readily performed worldwide and thus be available to all aircrew personnel.

Inquiries concerning this technique have been received from manufacturers of football helmets, motorcycle helmets, and baseball caps.

The area of plastics and related composite materials represents an extremely broad activity in which the Materials Laboratory has had and continues to have a primary leadership role. As early as 1941 the laboratory expended considerable development effort on plastic resins and glass-fiber reinforcement materials. AFML personnel were concerned with both transparent and structural plastics, and although they did their utmost to stimulate interest in the use of these lightweight materials, application during World War II was limited to glass-fiber-reinforced plastic radomes. As a result of AFML persistence, interest in plastic materials for structures has increased greatly since the war, and according to the August 3, 1970, issue of Barron’s: “When Pan American World Airways put into commercial operation its first jumbo jet, the Boeing 747, earlier this year, it carried aloft an estimated 10,000 pounds of plastics, more than had ever been used in airliners.”

**adhesive bonding**

The laboratory has done much work on composites, those hybrid materials formed from two or more distinctly different materials that cure intimately bonded together in a deliberately oriented manner. The laboratory demonstrated use of plastic resins as metal-to-metal adhesives, and subsequent military applications proved that adhesive-bonded structures can be stronger, lighter, and more fatigue-resistant than other forms of joining. Leading automobile manufacturers have tested adhesive-bonded car doors that withstood four times as many slams as spot-welded doors. Aluminum storm doors are another adhesive-bonded product.

The field of fiberglass-reinforced adhesive-bonded products for both military and civilian purposes is extremely large, and growing. One producer of fiberglass advertises that it is now being used in more than 33,000 products. Considerable strength is achieved in composite materials by precise orientation of the reinforcing fibers. As a means of producing simple structures with controlled fiber orientation, AFML developed a filament-winding technique to fabricate high-strength fiber-reinforced rocket motor cases and pressure vessels such as oxygen bottles. Filament winding is ideally suited for making cylindrical shapes, and in view of the corrosion-resistance of fiber-rein-
Compared to the standard issue helmet, the AFML custom helmet fits better, has only four inside pieces, and weighs less. . . .

The photomicrograph (below) shows fiber orientation in a composite material reinforced with boron/epoxy tape. The boron fibers do not touch because better composite properties are thus obtained.
forced plastics, this method has found civilian application in filament-wound pipes.

heat-sensitive dyes

The Materials Laboratory demonstrated that heat-sensitive dyes can be used to indicate appropriate processing conditions for making reinforced plastic parts. This is an extremely significant development inasmuch as there was previously no nondestructive technique available to determine if time/temperature curing cycles used in making plastic parts were correct. The heat-sensitive dyes are mixed into the plastic resins in very small fractions (less than one percent), and time/temperature integration can be determined by the color changes that occur. A great deal of interest in this technique has been demonstrated by industry, and the AFML is cooperating with a number of industrial concerns to evaluate the process for their use.

Heat-sensitive dyes can also provide a nondestructive inspection technique to determine defects in plastic composites. A phototropic paint, white in color, is applied to the surface of the material. Upon exposure to ultraviolet light, the paint changes to violet color. Subsequent application of heat bleaches the paint from violet to the original white. However, defects or foreign matter interferes with heat transfer, and the paint in these areas remains violet, enabling visual observation of defects.

No less than twenty-three aircraft companies are presently investigating the use of phototropic paint for detecting voids and debonded areas in honeycomb-core composite material. Other potential applications are to determine the integrity of brazed sections in abradable jet-engine seals and other jet aircraft engine components; the adequacy of the bond between composite brake shoe linings and steel brake shoes; the adherence qualities of ceramic paints applied to kitchen appliances (stoves, refrigerators, automatic clothes driers, etc.); and the adequacy of the bond in plastic/metal laminates for underground electrical conduit applications. The phototropic paint, which is
structural composites

Considerable progress has been made in the development of structural composites. These advances are the result of government and industry effort, both of which were spearheaded by AFML. The materials development field has seen rapid growth in the production and quality of reinforcing filaments, primarily boron and graphite. Sufficient boron production capacity has been developed to make systems application of boron composites a near-term reality. Inherent also in the capability to produce advanced composite structural hardware is the requirement for large quantities of high-quality resin-preimpregnated tape, and this capability has been developed for boron/epoxy. The need for composite materials with specific performance characteristics beyond epoxy composites resulted in development of high-temperature organic-matrix and metallic-matrix composites. Boron/polyimide fan blades with a 500°F temperature tolerance have been fabricated and will be evaluated for use in an advanced supersonic turbine engine—just one potential application for this material. The metallic-matrix composites have been demonstrated in such applications as the boron/aluminum missile payload adapter, which was successfully fabricated and tested. Fan blades from SiC-coated boron filaments in a titanium matrix have been produced, raising the temperature tolerance for composites to the 1000°F range.

Production-oriented fabrication techniques are being developed which will reduce the cost of finished composite structures while improving reproducibility and reliability. High-speed, numerically controlled machines are now in operation. The use of these machines, as well as other improved fabrication techniques, will reduce the amount of hand labor required to make composite structural components, thus making high production rates of accurate parts economically feasible.
Design and structural development activities have emphasized the application of analytical techniques and experimental verification to upgrading the understanding of the structural performance of advanced composite materials. Typical of this activity are the continual growth of the engineering data base and the compilation of engineering design information in reference documents for government and industry application. This growth in the understanding of the performance of materials has resulted in solutions to specific technological questions. A wing-to-fuselage attachment fitting has been developed based on design concept evaluation for a V/STOL aircraft wing. The successful fabrication and test of this joint specimen graphically demonstrated the capability of advanced analytical techniques to impact on and improve the design of very complex composite structures. Composite analytical techniques, with emphasis on computer technology, are continually improving and expanding to include more sophisticated structures.

A great variety of prototype hardware has been fabricated under AFML contract or through industry-sponsored efforts in cooperation with AFML. In-service evaluation of these structures on an experimental basis has established technological feasibility and has confirmed that substantial weight savings and performance improvements can be achieved through the use of reinforced composite materials. Long-range projections indicate that advanced composite aircraft structures will not only be vastly superior in performance but also may cost less than conventional aluminum aircraft structures. It is logical to surmise that this new technology will find wide application beyond the military market.

Much AFML effort is based on original and pioneering research that establishes feasibility and the fundamental technology for broad areas of development. Civilian and military
personnel number slightly over 400, with nearly 75 percent in the professional category. The laboratory has an average of 70 in-house projects, which represent about 40 percent of its total man-years. The in-house efforts keep AFML scientists ahead in their professional area and provide a technological base line for contracted programs. This enables them to select those contractors who can contribute most significantly to the advancement of materials and manufacturing technology. AFML scientists are encouraged to publish the results of their work, and during 1969 a total of 54 in-house reports and 118 journal articles, books, and patents covering AFML programs was published. This was in addition to the technical reports on contract programs.

AFML personnel are extremely active in the materials-related technical societies, and during 1969 they presented 179 papers based on Materials Laboratory programs at technical society meetings. Close ties are also maintained with the academic community, and during the 1969–70 academic year fourteen AFML scientists taught graduate-level materials-related courses at five area universities. In addition, AFML technical personnel have presented a great number of lectures related to materials technology at universities throughout the United States and abroad.

The laboratory supports six information analysis centers, which have been designated officially as Department of Defense centers: Air Force Machinability Data Center, Defense Ceramic Information Center, Defense Metals Information Center, Electronic Properties Information Center, Mechanical Properties Data Center, and Thermophysical Properties Research Center. It also operates the Aerospace Materials Information Center, which provides data on those materials not specifically covered by the other centers. The services of these centers are available to government agencies, government contractors, subcontractors, suppliers, and such research institutes and universities as are in a position to aid the defense posture. Thus every effort is made to disseminate the results of the AFML research program, thereby promoting the rapid utilization and expansion of materials technology by both the military and civilian communities.

Air Force Materials Laboratory, AFSC
The gunfighter rode into the small Texas town and reined up at its main saloon. He needed money and figured on winning a few dollars in a card game with some local cowboys. He rarely lost, since he was naturally lucky and skillful at bluffing. Besides that, he cheated and had a fast draw. Only twelve men had ever dared to call his game, and they could be counted by the notches on his gun.

He suddenly changed his mind, however, when the saloon's bartender told him that the town's sheriff had the fastest draw in the West and could shoot the head off a flying arrow. The gunfighter recalled hearing about this man, and although he doubted the truth of all the stories, he did not care to chance a showdown. He finished his drink and quietly left town...
CAN this psychological effect be used on a larger scale to deter war? A basic premise of deterrence is to have the will and the capability to use force to punish an aggressor. But will and capability together will not deter aggression unless they are made known to the would-be aggressor and understood by him. Henry Kissinger has said that “a threat meant as a bluff but taken seriously is more useful for purposes of deterrence than a ‘genuine’ threat interpreted as a bluff.” Since this type of gamesmanship in the nuclear age can be catastrophic, communication and cross-cultural analysis should be major factors in the military decision-making process.

Communication Defined

John Dewey wrote that communication is the most wonderful affair of man. It has also been remarked that almost every human tragedy represents a failure in communication. Communication is an art—the art of addressing humanity, the art of cooperation, the art of interpersonal and cross-cultural interactions. It is also the art of exercising power. The word communication is derived from the Latin communis, meaning “common.” According to public relations authorities Scott Cutlip and Allen Center, the purpose of communication is to establish a commonness. In this article, we are concerned only with the human aspects of communication (as distinguished from technological and mechanical means) between individuals and nations to produce dialogue or to achieve desired objectives through persuasion.

Human communication is not so much a matter of heredity as of tradition and culture. The fact that communication is largely learned is evidenced in the history of deaf mutes, whether their deafness was inborn or acquired early. Before modern educational methods were perfected, the deaf remained retarded; since they could not hear speech, they could not develop this ability as a means of assimilating their cultural heritage. A most dramatic example is Helen Keller, whose early life was devoid of intelligent communication with her fellow humans. Only after she learned to communicate through a symbolic touch system was she able to absorb her culture and become a part of the world around her.

Human learning consists principally of a building up of symbol relations and integrating them with the stimuli received through the senses. In this way a huge depository of symbols is accumulated for everyday use in problem-solving situations and in deciding alternative courses of action. Out of these symbols man creates his own environment or “culture.”

All culture is communication. But because of the infinite combinations of local circumstances and environmental conditions, many diverse and exotic world cultures have developed, making cross-cultural communication extremely difficult. Anthropologists explain this by attributing to every culture what is called the “cultural mode of communication.” In this definition, every member of a culture is a complex communication system. The form that that communication system takes depends almost entirely upon the cultural conditioning which the individual undergoes within his culture.

Human communication includes all those processes by which people influence one another, i.e., by the spoken word, by kinesics or nonverbal type communication, such as gestures and actions, and by signs and symbols. A sign is a concrete and categoric denoter or signal that relates mostly to the world of things. In contrast, a symbol is abstract, connotative, and contemplative and relates to the world of ideas. A sign is external; a symbol is internal. Although most animals use the sounds they utter as signs, only man can assign abstract meanings to symbols, and these abstract meanings differ among cultures. These cultural differences create the major problems in cross-cultural communication and explain why many interactions between national gov-
Governments are misinterpreted and consequently misunderstood.

Communication is a dialogue between two parties using the same "vocabulary." This means that there must be a common experience upon which to establish understanding. As the model shows, there are four basic elements in communication: the source or sender, the message or symbols, the channel or method of transmission, and the destination or receiver.

A fifth element that has been added to the model is the key to communication, and that is how the receiver interprets the communicator's message or intent. It is important that the communicator present his message to the receiver in symbols the receiver will understand, using appropriate channels to transmit the message. The message must be within the receiver's capacity to comprehend it and must motivate his self-interest. When there has been no common experience upon which to establish commonness, communication becomes impossible. A communicator can encode his message and a receiver decode it only in terms of their respective experience and knowledge.

Studies in word-perception by Postman, Bruner, and McGinnies (1948) illustrate the importance of encoding messages in a language familiar to the receiver. In dealing with common words, the receiver perceives with a minimum of surprise. When the words become rare, he gives up trying to predict what they are, and his values take over to make "his" words—words relating to his values—more readily perceptible.

An experiment in 1947 by Bruner and Goodman reflects the relation between value and need on one hand and perception on the other. Two groups of ten- and eleven-year-old rich and poor children were asked to adjust the size of a controllable opening to the size of various coins. Predictably, the psychological value of the coins was greater for the poorer boys, indicating that perceived size is related to perceived value. This experiment demonstrates the part an individual's relative values play in his perception of reality.

In the communication process, the receiver rarely responds to information in a direct and naive way. Rather, response is conditioned by past experience, personal and cultural value systems, attitudes, position in social structure, personal and social needs, beliefs, norms, premises, and all the other factors that guide perception.

Human history is marked by many serious instances of the failure of communication because of cultural differences. Sometimes even one word can weigh heavily in the balance. This appears to have happened when the Japanese were given an ultimatum to surrender prior to the use of the atomic bomb in 1945. The erroneous translation of the Japanese word mokusatsu so that it was understood to mean "to ignore" instead of "to withhold comment" led to a failure in communication at a time when negotiations were under
way to end the war. The bombing of Hiroshima and Nagasaki, the entry of the Soviet Union into the war against Japan, and a train of serious consequences followed that might have been avoided had the message been understood as intended.\(^{1}\)

**National Character**

The same factors that influence the receiver’s perception of a message also influence his perception of the communicator. This holds true for nations as well as for individuals and depends upon national character. In all international affairs the national cultures, which mold character on both sides, must be considered. Quite often the measures that may be best for one nation—and ultimately for the world—may be quite unfeasible because of deeply ingrained attitudes of other nations or men involved.\(^{13}\) This cultural relativism causes conflict and a breakdown in communication.

Excellent examples of cultural relativism can be found in the clashes between the various national delegations to the United Nations Educational, Scientific and Cultural Organization (UNESCO). These clashes can be traced to the different cultural orientations of the delegates. One of the most deeply rooted and largely unconscious features of any culture is the “time perspective.” Within the United Nations at least three different time perspectives operate. For instance, the Anglo-Saxon believes that the duration of meetings should be fixed in advance and meals taken on schedule; the Eastern European delegate is less rigid about fixed timetables and believes that people should eat when the inclination moves them; and the Far Eastern delegate comes from an area where life is considered to be a “continuous stream,” where people can quietly come and go in meetings as they see fit, going out to eat when necessary.\(^{14}\)

A national character, like a personality, has both content and pattern. But just as the mere listing of an individual’s traits does not describe his personality, so the mere listing of the separate institutionalized ways of a society does not describe its national character. Two cultures, like two personalities, may contain highly similar elements and still be extremely unlike in pattern. Other data are needed.

**Cross-Cultural Character Analysis**

Successful analysis of another culture depends upon correct interpretations of the motives, needs, and anticipated actions of the recipients in that culture by the communicator. Presuppositions derived from assuming that conditions taken for granted at home also exist in the foreign situation must be avoided.

The value and need for reliable cross-cultural character analysis was demonstrated during World War II by a group of anthropologists in support of the American war effort. This group, which included, among others, Margaret Mead, Ruth Benedict, Geoffrey Gorer, Elliot Chapple, D. W. Lockhard, Clyde Kluckhohn, and Rhoda Metraux, explored those aspects of national behavior that could be assumed to be relevant because they were related to national institutions.\(^{15}\) The work has become controversial, however, because the methods used in the research could neither be codified nor taught, and the need to consider peoples as a whole did not allow for the complex historical differences between local groups, geographical areas, and other variables. Nevertheless, the studies proved remarkably valid in explaining and predicting the behavior of the German and Japanese people. The outstanding example was the recommendation by the anthropologists that the Americans refrain from attacking the Japanese Emperor, as he was needed at the end of the war to insure the complete surrender of a still militant Japan.\(^{16}\)

Of all the actions by the Japanese during the war, the most difficult for Americans to comprehend were the kamikaze raids on
American warships. The Japanese kamikaze pilot typifies the axiom that each culture shapes and focuses the feelings of its people relative to that society. Margaret Mead was one of the anthropologists who diagnosed this Japanese cultural phenomenon before the kamikaze raids became known. According to her, the raids were possible because of a very different Japanese attitude toward war and the chances of return.

Whereas Americans regarded death in war as bad luck, the Japanese treated a soldier leaving for war as already dead; his return was a piece of tremendous and unexpected good luck. This difference in attitude accounted for many miscalculations on the part of the Americans, until a better understanding of the Japanese could be built into our expectations.17

Another anthropologist who helped give us a better understanding of the Japanese philosophy was Ruth Benedict. Her outstanding success in this endeavor has been attributed to several important factors:

(1) She already possessed broad competence and experience in her profession. (2) She approached her problem with an open mind, being quite prepared to accept beliefs widely different from her own. (3) She made a concerted effort to acquire an empathy with the Japanese people and, as far as possible, to “think like a Japanese.” (4) She attacked every line of approach to the problem including all aspects of the Japanese culture and the interviewing of Japanese living in America and Western travelers who had lived in Japan.18

By divorcing herself from the ethnocentrism of her own cultural mode of communication, she was better able to analyze Japanese customs and cultural value systems in their relative and proper context.

The Study of National Character

The study of national character by anthropologists has declined since World War II.19 This may be due to the many new complications in the use of cultural anthropology in policy-making since the early 1940s. The increased mobility of today’s peoples has caused significant fissures in old cultures, and many new nations are so young that they cannot be said to have either a national culture or a national character. Fortunately, however, the decreased interest in national character by anthropologists has been offset by an increased interest in the subject among other social scientists.

A recent sociological report by Howard L. Boorman and Scott A. Boorman on the conceptual foundations of the Chinese character is an example. The report pays particular attention to the Chinese concept of “face” as a national characteristic of Chinese strategic psychology. According to the Boormans, “Chinese face is gained or lost by acts which may have no relation whatsoever to the counterpart deterrents of psychological utility generally considered significant in the West...”20 They state:

Chinese strategy is pre-eminently manipulative. Western strategy is chiefly mechanistic. Although oversimplified, this dichotomy symbolizes a fundamental defining characteristic of Chinese national character: the contrast between the direct and the indirect approach to conflict resolution. Chinese military strategy, for example, seeks to manipulate an entire set of variables left almost untouched by its Western counterpart: the enemy commander's mind, his self-image, his face; the view of the situation and of its objective potentialities; the psychology of the opposing army; and so on. By contrast, Western strategic thought is far more oriented to the objective situation: given such and such troops, such and such road conditions, and such and such deployments, we can concentrate our forces at point P to annihilate enemy unit Q and break through the position.21

This variance between Eastern and Western philosophies can be illustrated by the time-
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spatial concept. Regarding time, the Boormans state that the Chinese have demonstrated in countless military engagements an ability to maintain an objective over an unusually long period of time without any seeming frustration or impatience resulting from long delays or setbacks. The Chinese and Western concepts of space are also polarized. While Western strategy of conflict means directing all efforts toward a decisive obtainable goal with definite front lines between opposing forces, Chinese strategy relies heavily upon encirclement and moving against an opponent in all directions rather than on a continuous front.22

National Character and Military Strategy

Although all human beings have the same physiological equipment for the common human emotions (i.e., they can love, hate, weep, caress, and feel anger), the emotional reactions of different peoples are largely determined by their cultural value systems. What is considered normal in one society may be considered abnormal in another. While this makes any overall theory of human nature unreliable, generalizations about national character do have a heuristic role in interpreting and predicting the behavior of a people. An understanding of an enemy nation's behavior, even if it is probabilistic in nature but based on sound analysis, can, in the long run, be more important to the strategic planner than technological superiority. As an illustration, United States policy in Southeast Asia might have been considerably different if our government had constructed a conceptual portrait of the Vietnamese national character in the manner that Margaret Mead and Ruth Benedict did with the Japanese. This means a systematic application of cross-cultural analysis leading to the development of a practical and usable body of knowledge for the strategic planner and deterrent theorist. This, and not statistics, must be the basis of the decision-making process, with emphasis on recognizing a people's cultural motives and symbolic derivatives. This is critical in a milieu such as Southeast Asia if there is to be a steady amelioration of the problem rather than a venture in utopianization.

Military-Political Implications

War and politics should never be considered as separate entities. While pent-up aggressive drives and territorial imperatives influence man's behavior, it is his need to identify with some ideology, cause, or group that plays the major role in conflict.23 This means that military power cannot be used as a panacea for solving the world's sociological ills. What makes the use of military power so difficult to apply today is the Januslike quality of modern warfare. Peter Paret of Stanford University describes war as demanding both the most extreme forms of violence of which man is capable and the coldest, most objective reasoning. Under these conditions, it is difficult to apply the Thomistic doctrine of a just war, particularly in wars involving guerrilla and counterinsurgency operations. "War, to be effective," says Paret, "must be measured violence. The uncertainty about the right proportions of violence and control in limited wars such as Vietnam is one of the most perplexing problems." 24

If the amount of force required in limited war is perplexing, the amount and type of force necessary to deter a nuclear war is a problem of the first magnitude. Luckily, the fear of escalation, whether it be in a limited war or in a nuclear arms race, is an inhibiting factor in the exercise of power. But it is not a great enough inhibitor to lessen the danger to an acceptable degree. The problem of communicating one's intent remains.

Defining Deterrence

Defining the concept of deterrence is a
major problem in communicating intent to an aggressor. Deterrence is, as we have said, the ability to prevent threats or actions from being carried out by posing an equivalent or greater threat. But a threat is not an absolute; it is relative. The deterrent effect of the town sheriff in our earlier illustration was built upon his reputation. This, plus his role as sheriff, inferred his intent to prevent aggression or violence in the town. When the bartender communicated this information to the gunfighter, it created enough doubt in the gunfighter’s mind to convince him that a showdown was not worth the risk. Thus, as Kissinger has observed, deterrence is as much a psychological as a physical problem, for it depends on the aggressor’s assessment of risks, not the defender’s.

The concept of deterrence on a national scale is relatively new. Before 1939, national governments thought of their armed forces in terms of national defense. The impact of the atomic bomb and more sophisticated weapons gradually persuaded some policy-makers that modern war could not be won and that defenders would be virtually helpless against nuclear attack. If there was to be no victor, and defense was ineffective, what were the alternatives? American policy-makers decided that our military power should be structured to prevent wars from ever beginning. The word “deterrence” was applied to this new policy.25

The question then arose as to what type of deterrence was best. Actually, if aggression does not occur, it can never be proved why it did not happen. The argument could then be made that the enemy never intended to attack in the first place. But this argument is academic, and the question remains as to what is the best deterrence. Numerous answers have been proposed. During the late 1950s United States strategy emphasized a single all-out response or “massive retaliation” to an attack. In a general or nuclear war, the objective was to destroy the enemy’s society in a single blow. The Kennedy Administration replaced this strategy with an approach that offered more alternatives by attempting to develop the maximum number of options even for the contingency of general nuclear war.26 This strategy was called “flexible response.” Variations of this strategy have since been developed, e.g., multiple options, counterforce, damage-limiting, and others.

Some deterrent theorists treat deterrence as an integral part of an overall grand soldier-statesman strategy, making deterrence a means to an end, not an end in itself. They speak of a four-tier strategy of peace, cold war, conventional war, and nuclear war. Cold war is the most important level because it is at this level that the Soviet Union and the United States are involved in a “tough form of negotiation,” with both nations “employing simultaneously violence at a low level together with the dissuasive or persuasive pressure exerted by threats of conventional or nuclear war.”27 The objective of these threats is deterrence, producing a certain psychological effect in the other which prevents the enemy from using his armed forces. Threat is also treated as the basic dynamic of deterrence: “the threat is no more than a communication of one’s own incentives, designed to impress on the other the automatic consequences of his act.”28

One of the many criticisms made of deterrence theorists is that not one of them has yet produced an analysis of American and Soviet national character which shows deterrence behavior to be a cultural norm in either society. This has created a cultural gap that is quite relevant to our treatment of deterrence as a type of cross-cultural persuasion. For example, we do not know nor can we really determine the strength of Soviet perceptions. We have made the assumption that most perceptions relevant to short-term policies are changeable and amenable to influence in a crisis situation. While attitude change depends on communications, the extent and quality of the change depend upon the many biases and
other influencing factors (already discussed) that affect the receiver. It has not been possible, for instance, to examine extensively Soviet reactions to different Western communications sources and to study whether and to what extent these crisis communications have been consistent with previous Soviet perceptions.29

Deterrence theory is a social-psychological theory based on the beliefs that we can correctly generalize about the perceptions of our national leaders and that we can make assumptions that are accurate enough to generalize about the perceptions of the leaders of another culture. So sure are we of these generalizations that we go so far as to apply them in situations of extreme crisis.

Communication in a Crisis

The 1962 Cuban missile crisis is an excellent example of the perceptive dangers of nuclear machinations. Evidence of this can be found in Nikita Khrushchev’s memoirs, which, while they should not be taken as the verbatim truth, illustrate the wide gap that exists between the American and the Soviet mind, between the way Washington and Moscow view any given international event in this nuclear age.30

From the beginning of the Cuban crisis, the fear of further escalation prompted each side to continually probe and estimate the other’s degree of commitment and fears. These estimates of the opponent’s psychological mood in turn affected the other’s estimates.31 Throughout the crisis, the United States was careful to avoid direct confrontation with the Soviets. At the same time, President Kennedy communicated the American intent to use conventional forces in Cuba if necessary by publicizing our military buildup in Florida. It has been postulated that Kennedy’s willingness to escalate this far may have sharply decreased the probability of a more serious escalation later.32 Since world peace depended upon each side correctly interpreting the other’s intent, every word and action was carefully studied for its obvious or implied meaning. This difficult task was further complicated by the fact that there had never been a nuclear war and, therefore, no common precedents upon which the opponents could judge each other’s intent in a nuclear crisis situation.

In the eighteenth and nineteenth centuries, communication of intent was conveyed to the opponent in simple, precise format. The wording of such communications gave the receiver a pretty good indication of the level of escalation the communicator intended. When such statements were made, all sides recognized that war was actually possible because there were precedents to make clear the implications of the language.33

Escalation and De-escalation

The precedents today are less clear, and each opponent may be climbing a different escalation ladder in accordance with his own peculiar cultural and ideological self-interests. Again, the war in Southeast Asia serves as an example. Two principals of radically different cultural backgrounds are locked in combat. On one side, the United States is fighting a limited war; its strategy is based upon its technological superiority. From the American point of view, the war’s progress is often judged by the number of enemy shellings, the flow of men and material coming down from the North, the number of enemy killed, and the amount of enemy supplies destroyed or captured. On the other side, North Vietnam is fighting a total war; it is employing Chinese “strategy by stratagem.” This strategy calls for the conscious deception or manipulation of the enemy, as regards his perceptions either of the objective payoff in the situation or of the probabilities of those payoffs. Western strategy, to paraphrase one sinologist, attacks
the enemy’s body while Chinese strategy is the black art of attacking the enemy’s mind. The observations expressed in this example raise an ominous and serious question: Can two nations with totally different concepts of war find common ground upon which to negotiate peace?

De-escalation is even more sensitive to accurate communication and shared understanding than escalation is. The opponent may have a different conception of escalation and still understand well enough the pressures being applied to him; but typically, in order to coordinate de-escalation moves by easing pressure, both sides must have a shared understanding (commonness) of what is happening. As we learned in the Cuban missile crisis, and as we are learning in Vietnam, opponents may not have a sufficient shared understanding if one side’s paradigm of the world differs in important ways from the other’s.

In any study of national character, the present political ideology and other contemporary influences must be considered. For example, how much has the Japanese attitude toward war, as defined by Margaret Mead and Ruth Benedict, changed as the result of Japan’s defeat in World War II and the subsequent influence of Western culture upon Japanese society?

The plasticity of man makes any definite statement about his national character suspect. Nevertheless, the study of national character is of great importance to the military strategist and deterrent theorist. The key to many international problems lies in the insight to be gained from achieving empathy with a foreign people. The enlightened communicator and cross-cultural analyst can thus make valuable contributions to the military decision-making process.

The Chinese have a saying that before a man can begin to learn he must first admit how little he knows. Successful cross-cultural communication starts with the realization that the character of other peoples is not what we think it is; it is different from our own. The communicator must gain a broad and comprehensive understanding of the receiver, for it is not enough to be strong and ready to fight aggression. Deterrence, to be successful, must prevent aggression by communicating this intent to a potential aggressor in a way he can readily understand. If war comes, communicating with the enemy is even more important to prevent further escalation of the conflict. In negotiating the peace, communication is paramount to reach agreement at the peace table.

To help accomplish these things, the Air Force (and the Department of Defense) should establish an office for the study of national character as it relates to cross-cultural and persuasive communication. This office should be manned by officers and civilians who have professional experience and academic training in anthropology, sociology, psychology, communication, and international affairs. Their roles would be those of international communicators and communication analysts. These professions have already been identified by Bryant Wedge of the Institute for the Study of National Behavior. He defines the international communicator as one who would render services to the “practice” of cross-cultural communication: these include the refinement of useful theory and techniques, and problem-solving study in specific cases of communication difficulty. The analyst of cross-cultural communication is professionally concerned with the communication process itself; he has no role or responsibility other than the practice of his specialty. He is specifically not a communicator nor a policy maker, but a technical expert and advisor.

The importance of communication and cross-cultural analysis in the military decision-making process is echoed by Dr. Don Mar-
tindale, Professor of Sociology, University of Minnesota, who says:

Since national character refers to properties that pluralities display in national communities, the sociology of national character has significance for anyone dealing with the conflict situations of our age: national uprisings, the formation of international blocs, and cold and hot wars in which nation-states are the ultimate antagonists.37

The fact that present research methodology and the application of the knowledge thus gained need further refinement should not deter our accepting communication and cross-cultural analysis as major factors in the military decision-making process. We can ill afford to underestimate their importance.

Washington, D.C.

Notes
4. Ibid., p. 446.
5. Ibid., p. 447.
6. Ibid., p. 446.
7. Channels of communication between national governments take many forms, including official messages and visits by government officials, normal diplomatic actions, open and secret talks, speeches by government leaders, overt and covert acts, “off-the-record” remarks, background briefings to newsmen, calculated “leaks” to the news media, press releases and statements, military maneuvers and actions, propaganda agencies, etc.
10. Ibid., p. 296.
15. Mead, p. 93. Also, national characteristics are “a category of traits that individuals come to display in national groups. Their importance derives from the place of the nation in the contemporary world.”—The Annals of the American Academy of Political and Social Science, March 1967, p. 35.
17. Ibid., p. 97.
19. For example, between 1942 and 1953 only ten books were published by anthropologists on the subject of national character, and there were no articles of any sort devoted to national character in the American Anthropologist during all of 1965.—Adamson Hoebel, special ed., “Anthropological Perspectives on National Character,’’ The Annals of the American Academy of Political and Social Science, March 1967, p. 2.
20. Ibid. Since psychology studies human adjustments which are the complex relationships of organism and environment, the judgments and conclusions reached reflect the idiosyncrasies of each culture. Western philosophy is based upon Greek law and Judeo-Christian beliefs. Chinese philosophy is less systematic than that of the West. Its special genius lies in the profundity of its insights into social relations which frequently exhibit subtleties and nuances unknown to Western thought.
22. Ibid.
32. Ibid., p. 250.
33. Ibid., p. 222.
34. Boorman and Boorman, p. 152.
PSYCHOLOGICAL OPERATIONS AND AIR POWER: ITS HITS AND MISSES

Colonel Robert L. Gleason
In reviewing United States military experience in Vietnam, one is impressed with the vastly increased importance that must be attached to the psychological aspects of that conflict. These aspects emerge as both challenges and opportunities. In many cases the challenge has not been fully met, nor have the opportunities been fully exploited.

There are many philosophies on the role of psychological operations (psyops) in military activities. They range from that expressed by Richard Crossman, Britain’s Deputy Director of Psychological Warfare during World War II: “There is no such thing as operational psychological warfare . . . military operations must be left to services with responsibilities for operations and psywarfare must be coordinated with other military or diplomatic activity . . .” to the more inclusive concepts that consider psyops as one of four major weapon systems available to a nation-state.

Regardless of one’s basic concept, many agree that today psychological operations are, in effect, a great magnifying glass by which the total impact of all our military actions can be increased manyfold; and in some cases this is the only way our objectives can be achieved. The challenge, then, is for the schooled and trained psyops and political action experts to consciously seek out the psyops potential of all our military weapons—whether they be Army, Navy, Marine Corps, or Air Force—and skillfully apply their special talents to produce this magnification effect.

Accounts of psyops in the narrower context of psychological warfare (psywar) go back to ancient times. In more recent history, however, it has played an important role in the development of our country from its beginning. For example, just after the Battle of Bunker Hill, George Washington dictated a message which carried a four-point contrast between the conditions of the British, who were holding Bunker Hill, and the Continental Forces entrenched on Prospect Hill close by. This leaflet described the British soldiers as “being paid three pence a day, fed rotten pork, suffering from scurvy, and living as slaves and beggars in want.” Meanwhile, the Americans were receiving “$7 a month with fresh provisions aplenty, enjoying good health, and looking forward to a life of freedom, ease, affluence, and a good farm.” Loosely speaking, these leaflets were delivered via the air lanes—they were tied to rocks and thrown by the Americans to the British.

In 1846 during the Mexican wars, the United States was more the victim than implementer of psyops. Mexico launched an effective psywar campaign against U.S. forces across the Rio Grande, using strong religious appeals. General Zachary Taylor reports that on 6 April he lost thirty men who deserted to the Mexican government plus six more who were shot or drowned while crossing the river. These men were not deserters avoiding the war, for they formed the nucleus of the “San Patricia” unit which later fought against their former countrymen. (The United States does not employ political actions towards our own forces, but history indicates that General Taylor could have used a little help here.)

The timing, wording, and ancillary political statements surrounding the Emancipation Proclamation present a classic example of both a psyops and psywar effort during the Civil War, the former oriented towards the European neutrals and the latter against the Confederacy. An excellent example of combining peacetime psyops activity with military action can be seen in President Theodore Roosevelt’s actions and associated public statements of 1907–1909 when he sent the U.S. fleet with most of its battleships around the world on a goodwill tour as a counter to Japan’s rumblings in the Far East following her victory over Russia in 1905. For this occasion, these battleships were all painted white as a symbol of peace; but the large, prominent Naval guns

* In the context of this article, psywar is considered as psychological actions against the enemy; psyops is considered the broader field and includes psychological actions targeted towards both enemy and neutral populations.
also contained an unmistakable psyops message.

**World War I**

The science of psywarfare and psyops was used extensively by both sides during World War I. This period saw the first practical use of airplanes for leaflet delivery. Balloons were also used as leaflet vehicles, although the time-fuze balloon technique was first used in 1870-71 by the French defending Paris during the Franco-Prussian War. (Even earlier, kite delivery techniques were used in battle between warring Chinese cities in A.D. 549.)

Over one million leaflets were dropped over the German lines during the month of September 1918, shortly before the Armistice. This effort resulted in as many as fifty surrenders per day in certain sections of the front. One ponders the impact of this psywar effort on the surrender of the German armies two months later, especially since these armies, though somewhat mauled by the Allied summer offensive of 1918, were still generally intact. Not a single Allied footprint had been made on German soil, nor for all practical purposes had a single Allied bomb or bullet struck her territory. From all indications, the Germans attributed greater achievements to the Allied psywar efforts than did the Allies themselves. In one of the Germans’ last propaganda efforts they stated: “The enemy has defeated us not as man against man in the field of battle or bayonet against bayonet. No, bad content in poor printing on poor paper has made our Army lame.”

**World War II**

World War II and the events leading up to it saw a rather extensive marriage of psyops and air operations. Germany foresaw the impact of air power more clearly and a little earlier than other nations. As far back as 1927 she appointed a committee of psychologists to study the possibilities of air propaganda. The Nazis launched the Luftwaffe in 1935 and gave it both a military and political peacetime mission. The political or psychological mission involved such techniques as inviting leading airmen from all countries of the world to visit Germany to bear witness to the might of her emerging air force. Some prominent Americans became involved in controversies over this development. Additionally, Germany staged mass flights of several hundred bombers and fighters along England’s and Scotland’s coast in 1937. These propaganda efforts were augmented periodically by massive flyovers during Nazi military parades. These impressive displays of air power witnessed by the visiting observer were genuine enough. However, they were represented as only a part of the Luftwaffe’s capability when in reality they represented eighty to ninety percent of the entire German tactical air force. One wonders just what part this psyops effort played in the 1938 Munich conference and Neville Chamberlain’s policy of appeasement.

During World War II, two uses of psywarfare in conjunction with air operations loom above all others. One occurred in the Pacific, the other in Europe. One contains a prime example of the magnifying effect of psywarfare on bombing operations; the other is an example of psywarfare, skillfully applied, coming to the assistance of the Air Corps people who found themselves almost totally frustrated.

Most people are generally familiar with the extensive fire bombing of Japan during the spring of 1945. Many are less aware of the equally extensive psywar campaign carried on concurrently. In fact, the psywar mission was included in the Joint Chiefs of Staff directive to the Twentieth Air Force not only to inflict physical destruction on Japan but also to “undermine the morale of the Japanese people to where their capacity is decisively defeated.”

This psywarfare campaign, launched by General LeMay and later taken over and run by Hq CinCPac, started with leaflets dropped by the bombers along with their bomb loads.
Later the campaign became considerably more sophisticated, and leaflets were dropped on separate missions preceding the bombing raids by a day or two. These leaflets would name about ten towns in Japan and state that a number of them would be bombed and that the people should evacuate the area. We could afford to bomb only a few of the towns listed, but the uncertainty and fear of the unknown created a severe mental strain on all the cities involved. As reported by the U.S. Strategic Bombing Survey (USSBS) following the war, this psyoperation was most effective. At the height of the campaign, more than 8½ million Japanese were involved in evacuating their cities—many from cities never touched. This caused mass confusion and completely saturated the various municipal services. A measure of the effectiveness of this two-pronged attack can be found in the USSBS’s finding. As late as June 1944, only 10 percent of the people of Japan expressed concern that their government could not achieve a victory. With the commencement of the night firebomb attack in March 1945, this figure climbed to 19 percent. In June, after the initiation of our extensive psywar campaign and intensive bombing, the figure rose to 46 percent. In July it rose to 68 percent. All this occurred prior to the first atomic attack on 6 August.

In Europe psywarfare played an equally important but distinctly different role. Here a psywarfare campaign enabled air power to achieve an objective that for a while appeared unattainable. This was in conjunction with Operation POINTBLANK, an operation intended to neutralize the combat potential of the Luftwaffe. The problem was to destroy sufficient German aircraft in the months prior to OVERLORD to assure Allied supremacy of the air over the beachhead. It was obvious that the German Air Force was closely husbanding its fighter resources in the spring of 1944. Intercepts against Allied bomber intrusion were down to less than 1800 in March of that year. Moreover, German fighter attacks were most conservative and launched only under the most favorable conditions. The psywarfare people from the Office of War Information were called upon to assist in initiating a campaign to force the Luftwaffe into launching more intensive attacks so that their aircraft could be destroyed by the Allied bomber formations, which at the same time adopted new tactics to provide maximum protection against fighters. The theme of this campaign was “Where is the Luftwaffe?” The subtlety with which it was done made it a classic. After initiation of the campaign, the number of fighter intercepts rose from 1800 in March to 2500 in April to 3200 in May. At the same time the Luftwaffe began to abandon its conservative tactics. In May alone, 1315 enemy aircraft were destroyed in battle. This figure represented 25 percent of the German first-line fighters. After his capture, German Lieutenant General Dittmar related an emotion-laden argument between Air Marshal Goering and Propaganda Deputy Goebbels in which Goering was goaded into relaxing his caution by some biting remarks from his own propagandists, who also began to ask “Where is the Luftwaffe?”

Not all of our psywarfare efforts during World War II were as effectively handled as these two. The Strategic Bombing Survey found that the people of Munich were very bitter towards the Allies after the bombing raids of 1944. These raids were carried out in retaliation for the German buzz-bomb attacks on London, but this reason was never relayed to the people of Munich. They only received propaganda emanating from Berlin. The Strategic Bombing Survey people expressed the opinion that had the Allies employed an adequate psywarfare campaign in conjunction with the bombing raids they could have turned much of this resentment against the Nazi government.

All told, however, the military came out of World War II with a healthy respect for the
Psyops/World War II

Thousands of leaflets attacked German morale, sowing seeds of doubt that the fight was worthwhile. Each 5-bundle “bomb” weighed 500 pounds. . . . Five 300-pound leaflet bombs are ready for hoisting into a Boeing B-17. . . . Leaflets dropped over occupied Belgium, February 1944, indicated extent of Allied bombing of Germany. . . . Firecracker-like containers, set to open at 6000 feet and scatter leaflets over a wide area, follow the bombs whose explosions are seen at Merseburg, Germany. . . . Psywar leaflets, fired by light artillery into a German-held area, paid off when recipients followed the advice and surrendered.
contribution of psychological operations. General Eisenhower best expressed this sentiment when he wrote: “Without a doubt psychological warfare has proven its right to a place of dignity in our military arsenal.”

Korean War

Between World War II and Korea an event occurred that, for all its other virtues, caused a recession in the progress made in the natural affinity between psychological operations and air operations. This was the establishment of an autonomous Air Force in September 1947. The new service was not steeped in a knowledge of the science of psychological operations, nor was this expertise transferred into the Air Force from the parent service, the Army. As a result, air operations lost connection with the science of psychological operations. For example, at the outbreak of the Korean War, the first war the USAF fought as a separate service, there were only two fully qualified USAF psywarfare officers in the Far East. One was in Headquarters Far East Command and the other in Headquarters Far East Air Forces; neither was in a tactical unit. Later a few more arrived, but some of these were siphoned off into intelligence jobs. Although some notable psywar operations were carried out, many more opportunities were missed, and some psywar miscues also occurred, as when the USAF was dropping surrender leaflets to the enemy while United Nations troops were hastily “redeploying south” from the Yalu.

Early in the Korean War, the USAF experimented with loudspeakers in the door of C-47s. The idea was given up as too dangerous because of the circling tactics involved. A design was then drawn up for belly installation, and in May 1951 they started installing loudspeakers in the bottom of the planes. Although at the time this was considered to provide increased efficiency, the same installation proved totally inadequate when again tested in the early part of the Vietnam war.

The leaflet picture was not much brighter. Although about half a billion leaflets were dropped during the Korean War, postwar surveys indicated that more than one-third of the bundles or leaflet bombs failed to open. (Incidentally, over fifteen times that many were dropped in Vietnam during the single year 1968.) Another revealing Korea statistic is that out of 220 different leaflets examined in one postwar analysis, only 22 alluded to or contained themes on air operations or bombardment. This was a far cry from the Japan psywar campaigns of World War II.

In February 1951 the Air Force, becoming painfully aware of its weakness in psyops and unconventional warfare, took a giant step in the right direction. It formed three aerial resupply and communications (ARC) wings. These units were equipped with aircraft that included long-range B-29 and SA-16 amphib-

Psyops/Korea

A U.S. Air Force B-26 bomber drops leaflet-loaded “bombs” over Communist-held territory in Korea. . . . Leaflet bombs are carefully packed, to be dropped over enemy front lines. . . . Safety lines secured, a USAF sergeant and a Korean throw out bundles of “Surrender” leaflets, timed by a Fifth Air Force member, over a mountain hideout of Communist guerrillas in South Korea.
ians. Although their primary mission was the logistical support of friendly guerrilla units, their almost equally important secondary mission was psyops. Concurrently, the Air Force initiated a comprehensive program with Georgetown University for training officers in psychological operations. This university instruction was followed by a training period with either the Voice of America or an Army psywarfare unit. Specialization training was also given ARC wing personnel at a psywar and intelligence school at Mountain Home AFB, Idaho. Unfortunately, this excellent start was one of the first victims of post-Korean War economizing, the units being gradually disbanded and the talent diffused throughout the Air Force. The disbandment was abetted by the belief held by many USAF officers that all psyops missions belong to the Army.

**Vietnam**

In 1961, in response to President Kennedy's order to all services to bolster their counter-insurgency capability, the USAF established the 4400th Combat Crew Training Squadron. Known as Jungle Jim, it later became the 1st Air Commando Squadron and finally evolved into the present Special Operations Air Force. Its original mission gave high priority to the conduct of psychological operations. Because of scarcity of experience in psyops, the Jungle Jim personnel turned to the US Army Special Warfare Center for some accelerated instruction in the subject. On 15 November 1961 they deployed to South Vietnam. On 4 December they flew our first psyops mission in C-47s equipped with belly-mounted loudspeakers, following the idea conceived during the Korean War. This mistake cost us about two years in redesign time. The systems proved to be totally unfeasible because of the Doppler effect. Like the train blowing its whistle as it comes down the track, the voice from the air kept changing pitch as the aircraft approached and departed, leaving no more than two or three intelligible words out of a complete sentence. Of course with the speakers protruding down and directly to the rear of the aircraft, circling techniques were out of the question. So back to the drawing board.

In 1964 the Air Force, still searching for its legitimate and complete requirement in the psyops area, contracted with the Data Dynamics Corporation to survey just what was needed. Although the report identified many areas for USAF concentration and application, implementation of these recommendations has been slow and hesitant. For example, establishment of a USAF psyops school was recommended, but only one or possibly two classes were conducted. One reason might be the belief of some in the Air Force that we should merely be concerned with flying aircraft and that someone else will assure that
Psyops/Southeast Asia

A USAF U-10 drops psywar leaflets over Southeast Asia. . . An O-2 Super Skymaster, flown by psywar pilots of 9th Air Commando Squadron, Da Nang AB, releases a stream of leaflets over an enemy-held area of Vietnam. . . A Viet Cong surrenders, using a psychological warfare leaflet as a safe-conduct pass.
the total psychological impact inherent in the tactical employment of aircraft will be properly calculated. Therefore, if the psychological aspects of air power or air operations are to be maximized, most of the impetus, at least at present, must come from graduates of non-USAF psyops schools. Many of these officers (members of all services) will find themselves on joint staffs where they will have an opportunity to parlay their special talents by applying them to the extensive potential of air power. There is room for questioning whether this has always been adequately done in South Vietnam (SVN).

Besides the early SVN problems already mentioned, many people more recently have expressed disappointment at the failure of the limited bombing of North Vietnam (NVN) to completely disintegrate the morale of the North Vietnamese. Perhaps an indication of what we should have expected can be found by again reviewing the findings of the U.S. Strategic Bombing Survey. In brief, it found that although the demoralizing effect of the bombing of Germany was almost complete, there were certain categories of people who retained an exceptionally high degree of resistance to morale erosion. They can be
categorized in three groups: (1) highly disciplined Nazi party members, (2) firm converts to the philosophy of Nazism whether or not a party member, and (3) those who were convinced in their own minds that their government was doing everything possible to protect them from the bombing raids. Another point made by the Survey was that the psywarfare effect (not necessarily the total military effect) can reach a saturation point under prolonged and incessant bombing. This is brought about by the fact that after a period of time most of the vulnerable and weaker elements of a society flee from the cities and only the strong-willed and dedicated elements remain. This, of course, makes the psywarrior’s job much more difficult, for among other things it reduces the contagious effect of demoralization. A third significant finding of the Survey was that a government can do much to prepare its citizens psychologically for nonatomic air attacks.28

Applying these lessons to the North Vietnamese campaign is rather provocative. We know, for example, that the North Vietnamese government was given ample time and warning by the slowly escalating nature of the U.S. air attacks, and did, in fact, move great numbers of people into the countryside before intense raids commenced. They also had ample time to prepare those remaining psychologically. Additionally, we expended a considerable amount of rhetoric describing the intense aircraft defense system employed in NVN. Was this not in effect telling the people of North Vietnam just how well their government was trying to protect them? Perhaps instead we should have launched a psychological campaign emphasizing that their defense was unable to halt our penetrations, that no single authorized target was spared, and that their government was not doing all it could to defend its people. For example, “Where was North Vietnam’s air force?”

Many other parallels or reciprocals can be drawn between psyops past and present. The purpose of this article is to direct attention to the facts that in new and changing situations military planners must constantly re-evaluate their techniques and that in so doing they should not ignore the lessons of history. If they apply, we should use them. If they do not, we should disregard them. But in either event, we should consciously examine them.

A new challenge facing psychological operations officers concerns the nature of today’s conflicts. Before the advent of nuclear weapons, most wars involving major powers were fought to a conclusion: victory for one side, defeat for the other. Deficiencies and omissions that may have occurred in conducting the psychological aspects of those wars were to a great extent obscured by the euphoria surrounding the final and total surrender of the enemy. Today’s conflicts are not fought to such black-and-white resolutions. Indeed, in today’s wars a military operation may be judged a success or failure not by its tactical accomplishments but by the effectiveness of the psywarfare and military/political actions that accompany it. Put more bluntly, many victories are victories because one side convinces the other, or neutrals, that this is so.

This situation places psywar in an entirely new context and demands a greater awareness of both the favorable and unfavorable psychological impact of every military action, even, for example, the selection of operational nicknames. Richard H. S. Crossman, the British authority, points out, “The central substance of effective propaganda is hard, correct information . . . and it is necessary to make truth sound believable to the enemy.”29 Therefore, while such a name as “Operation Total Victory” (for the U.S. sweep into Cambodia) may have a euphemistic sound when used by friendly troops, it may provide grist for the enemy propaganda mill if the operation does not achieve the goal the nickname portends. This is not the first occasion
when the choice of a nickname has been questioned from a psychological warfare viewpoint. In February 1951 the Eighth Army in Korea launched “Operation Killer,” a nickname obviously in conflict with the accompanying psywar effort to persuade the Chinese troops to surrender. Similarly, the Fifth Air Force in Korea launched a railroad interdiction campaign as “Operation Strangle,” a name that was counterproductive in that those who did not understand the real objective of interdiction were given a vehicle for proclaiming its failure.30

Finally, the psyops officer is challenged to conduct his programs and develop his themes in a manner to avoid their neutralization by information emanating from other sources. According to Sir Stewart Campbell, a British psywar expert, “There must be no conflicting arguments not only between outputs from the same sources but also those of different sources.”31 Every conflict fought since the Crimean War (when the invention of the telegraph first allowed war correspondents to communicate on a daily basis with their home editors) has been subject to criticism from the press as well as the loyal opposition within the government.32 In wars where the vital interest of the United States is obvious, such as World Wars I and II, criticism from these sources has been minimal. In conflicts where our vital interest has been more obscured (albeit just as legitimate), the criticism can be expected to be more vocal and persistent. The psyops officer’s challenge is to avoid the vitiating effects of this criticism to the extent possible and, above all, to resist the temptation to use the psyops arena to engage the press in any semblance of a military/political psyops argument. Steps in this direction would include limiting psyops actions as much as possible to military objectives and continually soliciting the cooperation of the press in the conduct of these efforts. This latter suggestion lends itself more to psyops activities than to conventional military actions, for the essence of psychological warfare is subtlety and truth, not secrecy or deception.

If this discourse appears somewhat critical of past Air Force participation in psywar operations, it is not intended to detract from the dedication of aircrews performing these missions. In fact the first USAF crew lost to presumed enemy ground fire in South Vietnam during the early phases of the current conflict was on a psyops mission. This occurred on 11 February 1962 (a Ranch Hand C-123 was lost nine days earlier but on a crew familiarization mission). On 10 February a Farm Gate C-47 carrying USAF and USA instructors, together with Vietnamese personnel, distributed leaflets bearing Tet greetings from RVN President Diem to numerous villages between Da Nang and Saigon. Upon landing at Tan Son Nhut, the aircraft was discovered to have picked up several bullet holes. The program called for a return flight the following day over the same villages to deliver another Tet message, this time from President Kennedy. The crew, not knowing where the ground fire was picked up but anxious to complete the two-phase psyops project, elected to fly the return mission. It was on this flight that the aircraft was lost north of Da Lat, causing the death of its joint (USA-USA) and combined (U.S.-Vietnamese) crew.

Despite its initial shortcomings, the air psyops campaign has proved productive. For example, over ninety percent of the Chieu Hoi defectors first learned of that program from air-dispersed leaflets.33 More revealing are the reactions of the Communist world to our psyops efforts. One can easily detect a “whistling in the dark” attitude in an article contained in the World Marxist Review in which the author says “... moreover [s]cattering leaflets urging the population to turn against their government in areas that were the cradle of the Vietnamese revolution is one of the stupidest blunders the ‘psychological war’ experts ever made.”34 One wonders just
what part this “blunder” played in causing North Vietnam to issue its infamous decrees “on the punishment of Counterrevolutionary Crimes” a few years later. These decrees list fifteen specific crimes that needed special attention and punishment, including treason, plotting to overthrow the people’s democratic power, espionage, defecting to the enemy, undermining the people’s solidarity, disseminating counterrevolutionary propaganda, and others. The necessity of issuing these strongly antisywars decrees in the “cradle of the Vietnamese revolution” is perhaps our best evidence that our air war and psywar campaigns were having a telling effect against North Vietnam. The vastly increased importance of psychological warfare, especially in a restricted Vietnam-type war environment, is illuminated in the remarks of General Van Tien Dung, chief of staff of the North Vietnamese army, when he repeated an often emphasized theme that it is “the people, not the weapons, who form the backbone of [North Vietnam’s] air defense.” We should also remember that it is the people, not the weapons, who are targeted through psychological warfare.

Aerospace Studies Institute

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Notes
3. Dougherty and Janowitz, p. 60.
11. Ibid.
18. Ibid.
21. Ibid., pp. 45-46.
22. Report of Army Concept Team in Vietnam (ACTIV), Department of the Army Active Project No. ACG 47F PH-10, 7 June 1969.
25. Straubel, p. 11.
27. Peters, p. 15.
28. Ibid.
IMPLICATIONS OF A VOLUNTEER FORCE

Major Neal G. Sorensen

As America moves into the 1970s, it is painfully apparent that our society is deeply troubled and divided over a broad range of social and political issues. This generation of youth, in revolt against many established values, traditions, and institutions, is demanding responsiveness and relevancy from the nation's academic, governmental, and social institutions. Perhaps no other public institution has experienced more severe criticism than the Selective Service System. For many individuals and groups, it has become
the focus of hostility as a symbol of tyranny and arbitrary governmental interference in a democratic society.

The crisis in the legitimacy of the current system of military recruitment has resulted in a variety of proposals to reform or replace the draft. An all-volunteer system is one proposal that is offered as a basis for producing a greater consensus in a turbulent society.

While an all-volunteer system is supported by a number of national political leaders and other distinguished Americans, it has also generated much criticism. The range of criticism includes problems of cost, efficiency, feasibility, and flexibility, as well as arguments that such a force would be incompatible with democratic institutions and thus constitute a threat to society. The following discussion will focus on some implications of an all-volunteer force in terms of changes that could occur in civil-military relations. It will also identify certain changes within the military that are necessary in order to maintain social responsiveness and professional viability.

civil-military relations

One of the implications of establishing a volunteer system is that the traditional civilian-military relationship may be altered. As the draft is eliminated, a volunteer military might tend to become a more self-contained establishment, the danger being if a professional volunteer military began to see itself as distinct and alienated from society.\(^1\)

While this idea seems generally valid, it is also important to note that concern about social alienation may tend to exaggerate the difference between volunteer and conscripted forces. Two aspects of voluntary recruitment need clarification, namely, the qualitative composition of a volunteer force and the estimated turnover in a volunteer military.

The Gates Commission, appointed by President Nixon to study the feasibility of an all-volunteer force, estimates that the qualitative standards for entry into military service will probably be no different from current standards. Mental, physical, and moral standards will continue to determine the types of personnel found in the armed forces. It is unlikely that men who fail to qualify for military service now will qualify under an all-volunteer system. In terms of numbers and personnel turnover, the Commission offers the following analysis:

At a force level of 2.5 million men the volunteer force must attract 325,000 men, the conscripted force 400,000 men. The men who join the volunteer force will not all become long service professionals. An estimated 215,000 men will leave after serving a single tour. As a result, about half the men will be in their first tour of duty. The large infusion of new men will help insure that neither force becomes isolated from society.\(^2\)

An important distinction is necessary at this point. Many critics of a volunteer system reason that a conscripted military, because it is a so-called “citizen army,” involves closer contact with the community at large and is therefore less likely to constitute a separate military class and independent political force. The fallacy in this argument is that the political danger has little if any relation to the method of recruitment. In short, the danger comes from the officers, who are for the most part a professional corps of volunteers. Hence, the focus of the discussion will be on the officer forces and the means to prevent the isolation and alienation anticipated by critics of a volunteer system.

One of the means by which the nation has maintained an effective and loyal military leadership is by recruiting officers in such a manner as to assure a wide distribution of social and economic backgrounds. Because of the increase in size of the military and the need for trained specialists, the patterns of recruitment have tended to encompass a wide social base. There has been very little self-perpetuating of a professional military elite because of the diverse career opportunities
open to an increasingly educated youth. Recruiting officer personnel from a variety of social levels helps maintain a strong bond between the officer corps and society. In addition, the growth in social representativeness of the military profession has contributed to a diversification of social and political outlooks within the profession. A related concept is that a relatively high turnover rate in the armed forces serves to keep the military attuned to the larger society. If these features are considered of great importance, the question is whether an all-volunteer system could maintain them.

The Gates Commission emphasizes that the men attracted to an all-volunteer force will not necessarily make military service their career. It is estimated that about 65 percent of the men who enter the volunteer force will leave after a single tour of duty. The turnover under a volunteer system is estimated to be three quarters of the turnover in a comparable mixed force. In the words of the Commission, "...52 per cent of the men in the projected voluntary force will be first termers—only slightly less than the 60 per cent in the mixed force." These estimates, if valid, suggest no dramatic changes in the composition of the armed forces, hence no major changes in the relationship between the military and society.

Foremost among the current policies which aid in giving the officer corps a wide social, economic, and geographical background is the ROTC program and various officer candidate school (OCS) programs. To a lesser extent, the distribution of appointments to the service academies has given a wide range of social and geographic origins to the students of these schools.

However, increasing problems related to ROTC programs at a number of universities, particularly those in the northeastern section of the country, suggest that movement toward a volunteer system will narrow the base of recruitment into the officer corps. These events may indicate a trend toward regional recruitment for the bulk of the officer corps. This regional bias may shift to the southern and southwestern areas. Professor Janowitz suggests as another trend that the military seek a higher percentage of officers trained in the service academies. If this becomes necessary, it will emphasize the trend toward social separation, if more officers are trained at the academies in contrast to ROTC units and officer candidate programs.

To the extent that a diverse distribution of social backgrounds is desired, the officer recruitment policy under an all-volunteer system must be flexible enough to bring this about. In effect, programs such as ROTC and OCS should be strengthened under a volunteer system.

A number of Department of Defense studies have recently been undertaken concerning the future of ROTC. While differing somewhat in goals and procedures, all recommend an increase in the number of ROTC college scholarships. These scholarships would attract those whose skills or aptitudes are in short supply in the military. The Gates Commission recommends an increase of 4500 scholarships a year for each service, producing 1000 additional ROTC officers a year per service.

It is also important to note that under an all-volunteer system it is likely that fewer students will volunteer for ROTC training, thus compounding the recruitment problem. Summarized below are the recommendations of the Gates Commission concerning the recruitment of officers from various programs:

1. To insure that ROTC instruction remains available to interested students on a broad social base, it may be advisable to establish area training centers. This would permit students from a number of schools in one geographic region to participate in the same training program.
2. Officer candidate programs should be
expanded to provide greater flexibility in the recruiting of officers. These programs require less lead time, three to nine months as opposed to two to four years for ROTC. In addition to new college graduates, the services will probably try to attract somewhat older civilians who desire to enter the more specialized branches of the military. The military training required by these volunteers can probably be provided more efficiently through officer candidate programs.

3. Direct commissioning programs, in addition to those aimed at lawyers, physicians, dentists, and chaplains, should be available to civilians who already possess the training and skills required by the military.

4. The Commission recognizes that the planned expansion of the Army and Air Force academies will be adequate to provide this source of new officers. Any further expansion would be very costly and would detract from the advantages of recruiting from a wide range of civilian universities with broad social distributions.

In a wider context, it is important to recognize the problems which many ROTC programs are experiencing at a growing number of universities and colleges. Antimilitary sentiment further complicates the difficulty of resolving such issues as academic accreditation and professional qualification and status in the university community of ROTC instructor personnel. In short, these problems suggest that major revisions of ROTC programs are necessary to make them relevant to the needs of a changing society.

Of importance here is the fact that officer recruitment programs must be structured to attract the kind of people that will make a volunteer force responsive to the needs of a complex military organization as well as the demands of an increasingly divided and turbulent America. A professionalized, volunteer military can ill afford to become a sanctuary for militant individuals seeking immediate solutions to national and international problems. The military establishment of the 1970s must be able to adapt itself to a new set of national priorities. These priorities suggest that national security is as much dependent on improving the quality of American life and reforming archaic institutions and processes as it is on aggressive military preparedness.

Obviously, economic incentives and overall upgrading of the quality of service life are fundamental to the success of a volunteer system. Success means not only the ability of a manpower system to recruit the required personnel to manage the military enterprise but, more important, the ability of a system to recruit, develop, and retain people of a quality that will insures professional vitality.

To prevent the isolation and alienation of a volunteer military described by some critics, the all-volunteer force concept should be based on a comprehensive recruitment effort that must encompass the whole range of living and working conditions which shape the image of military service. It is highly unlikely that any partial program that does not substantially alter the entire scope of military service can hope to succeed.

The troubled British experience with a volunteer system may be instructive to the United States by dramatizing the need to match economic incentives with overall improvement of the military image. Monetary rewards alone do not necessarily produce the required perspectives or professional commitments.

In their role as advisers and managers of the instruments of war, the military services need to re-establish a strong professional image. To be effective in meeting the challenge of this responsibility, all the services must earn the attention and respect of all Americans. They must re-establish themselves as purposeful, reliable, educated, and efficient managers of people as well as weapons.

The end of Selective Service and reliance on a volunteer system emphasize the need of the services to challenge the imagination of
youth who are today better educated, more skeptical, and more politically and socially aware. For a volunteer force to achieve social and professional viability, it must draw from these resources and offer them meaningful career opportunities. Today’s youth, although cynical about many of our social institutions, are not lacking in patriotic and humanitarian concerns. They are eager to contribute to peaceful social progress and improve the conditions of world order. These values and goals are no different from those that have always been a part of the military profession. The task of the military profession, then, is to strengthen these common motivations and show that the military is an integral part of society and exists only to serve that society.7

Another means of strengthening the representative character of a volunteer professional force is to provide opportunities for lateral recruitment. Professor Janowitz suggests that lateral recruitment could involve limited tours of duty or the opportunity to take up a full career in the professional military even several years after university graduation. These opportunities will tend to make the military more flexible and attractive to a wider range of skills and professional expertise.8

education

There is little doubt that education is fundamental to the development of a military profession capable of dealing with an increasingly complex world, more and more unforgiving of miscalculation: The image of a professional volunteer military dramatizes the importance of education as fundamental to integrating the military with society. It should be emphasized that educational development in the sense intended here encompasses not only technical or managerial expertise but a heightened consciousness of the responsibility of the military to society as a whole. Speaking for this kind of professional consciousness, General Albert P. Clark has noted:

... we do have a troubled society and the Armed Forces, being composed of a cross section of this society, can hardly maintain themselves much above it in the long run. Thus, we cannot remain aloof to the issue. We must participate in the national effort to save this society . . . or we shall perish with it.9

Various domestic action programs and Project 100,000 reflect a growing awareness of the military to social needs.

Another aspect of education that is central to strengthening civil-military relations is the requirement to increase the awareness of the military to the limits of force in international relations.10 Any evolving military profession must continue to demonstrate increased sensitivity to the political and social consequences of military action.

IN CONCLUSION, it is important to understand the changes and social implications of an all-volunteer force. Broadly speaking, this movement expresses a trend toward greater institutional specialization.

A social consequence of the movement suggests that traditional civil-military relations may be changed as a result of the military’s becoming more self-contained. This is not to say that the volunteer force will threaten democratic institutions, be unresponsive to civilian control, or become isolated from society. However, institutional specialization emphasizes the need for the military profession to adapt itself to rapid social change if it is to prevent alienation from society.

Recruitment, particularly in the officer corps, should draw from a broad social and educational base as well as provide opportunities for lateral entry. This flexibility can strengthen the vitality and representative character of a volunteer force.

The discussion has also highlighted the need for a complete upgrading of the quality of military life and the necessity of improving the military image. In every sense, military institutions are a reflection of the value system
of the society which produces them. Certainly a volunteer force cannot operate in a political democracy without a variety of social links to civilian society. Flexible recruitment policies and broad educational opportunities are links which are vital in providing meaningful rela-
tions with society. It is the strength and relevance of these ties that will determine the vitality and responsiveness of a volunteer force to the needs of society as well as serve its own demands.

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Notes
7. Ibid., p. 10.
Military Affairs Abroad

A COMPARISON OF PROFESSIONAL MILITARY EDUCATIONAL SYSTEMS

LIEUTENANT COLONEL WILLIAM BRUENNER

IN VIEW of the increased interest in professional military education in the United States Air Force, occasioned partly by the recent augmentation of attendance quotas, a comparative examination of some of its basic educational objectives and methods may be useful. Although the additional quotas do not reflect normal peacetime conditions, they indicate a considerable improvement over the school years between 1967 and 1970, when personnel requirements for Southeast Asia (sea) reduced USAF active duty officer inputs to professional military education (PME) to 30 percent of the normal quotas. However, for the sake of validity, it will be assumed that the USAF professional military education schools are operating at peacetime levels, so as to be able to compare them with like institutions in Germany and Britain.

The USAF System

The USAF PME system is structured on a three-step basis. This can best be represented by the three major PME schools at Maxwell Air Force Base—Squadron Officer School (SOS), Air Command and Staff College (ACSC), and Air War College (AWC)—although it is recognized that at the second (intermediate) and third (senior) levels there are many alternatives available for Air Force students in schools of the other services, joint institutions, and even certain foreign facilities.
The key rationale behind the USAF PME system is the desire for the preparation of all career officers for the assumption of command and staff duties. Under ideal conditions, this would be attainable through resident schooling only at the lowest (SOS) level, where students are selected on the basis of quotas to be filled by the major air commands. Even there, in practice, only about 50 percent of those eligible can attend. At the ACSC level the percentage drops to 18. For the senior schools the percentage varies depending on the selection criteria, but in any case it is even less. The availability of comprehensive correspondence courses at all three levels through the USAF Extension Course Institute is an important factor in enabling active duty and reserve officers who are not able to attend the resident courses to further their professional military education. However, certain aspects of resident training cannot be provided in a correspondence course. The idea of substituting correspondence for resident training has received special emphasis during the last few years, when sea commitments prevented
Bracknell, with its spacious grounds and library, has enlarged its facilities to accommodate the former RAF Staff College at Andover and has revised its curriculum to accommodate allied students. The college thus carries on the tradition of air force staff training initiated by the RAF.

many officers from attending PME schools.

The basic pedagogical methods employed in these schools are (1) the lecture, presented to the entire class (usually supplemented by a question-and-answer period) for conveying basic principles; and (2) the seminar, involving student- or faculty-led discussions among groups of 12 to 15 students, for expansion of the ideas presented in the lectures and for their practical application. While textbooks sent through the mail can convey many of the ideas presented in the resident school lectures (provided the books are kept up to date), there is no correspondence course equivalent of the seminar discussions, where the individual experiences of the participants combine to provide the sum of knowledge required to solve the seminar problems. Therefore, the Air Force formulated the associate program of the Air War College, whereby groups of participants at various installations not only receive instructional material but also meet periodically and conduct seminars similar to those of the resident course at Maxwell. The Air Force is implementing a similar program...
at the ACSC level. The officers participating in the correspondence and associate courses receive credit for course completion in their personnel records similar to that of officers who attend the resident courses.

**philosophy of PME**

Professional military education is concerned with military professionalism for all officers, whatever their specialties. The basic objective is to prepare officers to assume higher levels of command and staff duties and responsibilities. New PME selection and attendance policies were approved in May 1968 and fully implemented for the fiscal year 1970 classes at the Air Command and Staff College and other intermediate PME schools. For the Air War College and other senior schools, these policies were partially implemented in FY 1971 and will be fully implemented in FY 1972.

Briefly, the "to major" promotion board reconvenes as the intermediate PME selection board, and the "to lieutenant colonel" promotion board reconvenes as the senior PME selection board for the resident PME schools. These boards then select the best-qualified promotees for PME resident school attendance. The Military Personnel Center at Randolph Air Force Base, Texas, then schedules the selectees for attendance within a four-year period, preferably at the end of a normal tour of duty. There are no assignments for which attendance at these schools is a firm prerequisite. Not even for PME school faculty duty is attendance required, although it is desired.

The school curricula provide for survey-type courses covering a wide spectrum of management, foreign affairs, and military employment subjects. They are not aimed at preparation for a special type of assignment after graduation or at any other particular point in an officer's career. On the contrary, they are designed to furnish the student with a fund of knowledge and procedures whose payoff may be phased over his entire postgraduation career.

**problem areas**

While this system is outstanding in theory, problems have arisen in its practical applica-

__The European Systems__

In comparing the USAF PME system with some of its European counterparts, it is important to realize that there are basic differences in tradition. The European military services tend to take a somewhat more realistic view of officer career potential than the U.S. services, which persist in the Horatio Alger concept of "every line officer a potential chief of staff." This difference in attitude should not be surprising, since most Europeans are used to an educational system in which it is still decided by the time a child reaches the age of ten if he will attend college. Consequently, it is somewhat easier for a European officer to adjust early in his career to the idea that he will never attain a grade higher than captain or major (or, in a few exceptional cases, lieutenant colonel). Moreover, in European military systems age is the main criterion for retirement, rather than the Ameri-
can “up or out” career progression philosophy.

Luftwaffe

In the German armed forces, it is planned to commence command and staff training for career officers after their promotion to captain with a four- to eight-week Unit Commander Training Course at a level comparable to the USAF Squadron Officer School. (Figure 1) In the sixth year of commissioned service all career officers enter the German Air Force (Luftwaffe) Field Grade Officer and Selection Course, with the dual purpose of determining qualification for promotion to major and pre-selection for general staff officer training. This two-year course includes classroom instruction during short periods of temporary duty (TDY) and correspondence assignments completed at the home station. It is concluded by five weeks of instruction at the Luftwaffe Academy and a qualifying examination. Most of those considered qualified for promotion to major then attend a three- to five-month course at the Joint Federal Field Grade Officers School. The others, who were also preselected for general staff officer training, are subjected to further testing and interviews for entry into the German Armed Forces Staff College (GAFSC) in Hamburg, until the field has been narrowed to approximately twenty-four officers. These attend the Luftwaffe Department course at the GAFSC, which is the highest-level PME course in the Federal Armed Forces (Bundeswehr) available for attendance on a permanent-change-of-station basis. Although conducted by a joint services school, over 70
percent of the curriculum is devoted to Luftwaffe Department instruction. The GAFSC “Joint
Defense” and “Territorial Defense” courses, given at the lieutenant colonel/colonel level, last
only six weeks or less and are attended by officers detached on TDY from their parent units.
These courses are conducted on a joint-services basis in classes consisting of army, navy, and
air force students.

The Luftwaffe is not entirely satisfied with its present practice of terminating most pro-
fessional military education by the time an officer is 34 years old; it has recognized some
of the advantages of longer senior-level courses. Currently the only provisions for the updating
of GAFSC graduates within the Luftwaffe Department are two-week continuation courses held at
three- to four-year intervals after graduation. In the future the GAFSC course may be divided
into a 15-month basic phase at the captain/major level, followed by a 9-month supple-
mentary phase at the lieutenant colonel/colonel level. Another concept calls for basic and sup-
lementary phases of 12 months each. In either case, the GAFSC could work on the assumption
that most officers selected for attendance at the first phase would return for the second phase.
The curriculum could be restructured accordingly, to avoid any duplication and provide for
smooth transition between the phases.

It should be pointed out, however, that the current concept primarily reflects the Luftwaffe’s
attempts to adjust to the joint PME policies of the Bundeswehr. From the Luftwaffe’s
own point of view a more desirable course would be the revision of the officer candidate training
course. Under this concept the part of the course at the Luftwaffe Academy would be
shortened, while the remainder of the training period would be devoted to several semesters
of college-level studies. This would mean that all officer candidates would complete officially
accredited courses in education, business administration, or engineering at the Technical Acad-
emy of the Luftwaffe. Thus the overall training period would be extended from the present two
to three years to include a fourth year or even more. This would also make it easier for officers
serving limited tours of active duty to transition into civilian life upon completion of their mili-
tary service. Furthermore, all career officers selected for promotion to major would attend
The free exchange of ideas in seminar and reading room is but one of many learning devices encouraged at USAF's professional education complex, Air University. . . . Air War College is the highest level of the schools and courses conducted by Air University. . . . An unexcelled collection of aerospace knowledge is stored along the cavernous shelves of Air University's Fairchild Library.
the Federal Field Grade Officers School. Some of these officers would then enter the basic phase of the gafsc. The quota would be greater than the current twenty-four. Another aspect of this new Luftwaffe concept envisages the inclusion, among the students attending the gafsc supplementary phase, of a small number of specially selected officers who did not attend the basic phase but whose performance in the field has been outstanding. As a result, the Luftwaffe system would be much more like the current USAF professional military educational system.

Royal Air Force

The lowest level of PME schooling in the RAF, comparable to SOS, is the Junior Command and Staff School, which offers a two-month course for all career officers. This is followed by the Individual Studies School (ISS) course, which lasts two years. It is a correspondence course with two progress checks at an examination center. Successful completion qualifies an officer for selection to attend staff college. Qualification for promotion to squadron leader (major) is handled separately by means of promotion examinations. A further weeding-out process then narrows the field to a number compatible with the capacity of the 12-month course at the RAF Staff College. A few others are picked for attendance at equivalent intermediate-level schools. The RAF also conducts a 5 1/2-month Air Warfare Course at the wing commander/group captain (lieutenant colonel/colonel) or senior level. Higher-level courses, such as the Royal College of Defence studies (formerly the Imperial Defence College), conducted at the colonel/brigadier general level, are operated on a joint-services or Ministry of Defence basis. This is also true of the Joint Service Staff College, where most students are lieutenant colonels.

One advantage of these systems is that both the German and British staff colleges can count on a certain amount of preparatory study by all their future students and on having only the academically most promising officers selected for attendance. Hence their curricula can use a starting point at a somewhat more advanced level than that of ACSC or other U.S. counterparts.

European Career Advantages

Perhaps the most significant difference between the European and American PME systems lies in the career advantages attached to attendance at the staff colleges.

In the Luftwaffe, its class of approximately twenty-four students represents 8 to 10 percent of the eligible career officers. These officers are trained at the gafsc to become general staff officers. Approximately 360 positions for Luftwaffe officers in the grades major through colonel are earmarked as general staff officer billets. These positions are at the levels of air division (Luftwaffen-Division), major air command (Luftwaffen-Kommando), and air staff (Führungsstab) within the Luftwaffe and at comparable (or higher) levels on joint national, international, attaché, and other staffs. General staff officers wear distinctive uniform emblems and are expected to spend most of their careers in these earmarked assignments. Although there are provisions for periodic rotation to troop commands, these are being held to a minimum until such time as the Luftwaffe has more general staff officers than general staff billets. Currently there is a deficit of about fifty officers, but it is hoped to achieve the desired surplus by the end of this decade.

The advantages of this system, in terms of the prestige of gafsc graduates, should be obvious. In addition, the general staff officer's chances for promotion are usually better than for his line counterpart. For example, over half of the promotion-to-colonel spaces each year go to general staff officers. Thus, while the outstanding line officer still has some chance for advancement and high-level unit commands, his chances continuously diminish, since with increasing rank a greater percentage of the positions in the field grades is earmarked for general staff officers.

Consequently, the GAFSC has a better-defined objective than its USAF counterpart. The Luftwaffe Department adjusts its curriculum to meet the requirements of the 360 general staff officer positions, particularly those to be filled by majors, since these are virtually the only assignments the students receive upon graduation. Furthermore, the inherent prestige of becoming a general staff officer minimizes the normal
school problem of student motivation.

Since the Luftwaffe is smaller than the USAF and deals with fewer weapon and support systems, it can narrow the subject matter to be covered and, because of the 24-month length of the course, deal with it in much greater detail. The small size of the student body makes an extremely close student-faculty relationship possible. The net result is a nucleus of highly trained general staff officers who have been uniformly educated to the point where they can be interchanged in their staff assignments with little noticeable interruption in the activities of the staffs involved.

In the Royal Air Force there exists a compromise between the two extremes presented by the USAF and the Luftwaffe. The RAF Staff College graduate has some clear advantages over his nongraduate colleague, although they are not formalized through a general staff officer system or distinctive uniform emblems. The "Passed Staff College" (psc) notation in the RAF List opens the door to key assignments within the service, and chances for advancement are commensurately better. Since the RAF sends approximately 25 percent of its eligible career officers to the RAF Staff College and equivalent schools, a broader base of trained officers is available. This in turn permits more rotation between staff and troop duty after graduation. The RAF Staff College, similar to the GAFSC, emphasizes training in military employment subjects, rather than a broad survey of many different topics. Similarly, in the RAF it is possible for a few outstanding nongraduates to attain the rank equivalent of lieutenant colonel; but all the higher-level staff jobs are normally earmarked for PSC officers.

Methodology

The RAF Staff College uses lectures and seminar discussions as its main instructional methods. The seminars consist of syndicates of six students each, so the instructor can observe and guide each student more closely than in the larger ACSC seminars. Again, the smaller size of the RAF and the limited range of postgraduate assignments permit concentration of the 12-month curriculum on a narrower range of subjects, similar to the GAF Staff College.

The GAFSC uses the lecture as its main instructional method, since the seminar discussion is still a relatively new pedagogical device in the military schools on the European continent. The lectures are supplemented by a variety of student presentations and employment exercises, which emphasize operational aspects and tactics as well as those management topics required for the peacetime leadership of the Luftwaffe.

The European schools are subject to some of the same problems faced by their American counterparts. Because of the increasing complexity of air weapon and support systems, the question of "generalist" versus "specialist" staff training has arisen in each country. In effect, it is becoming more and more difficult to train an officer to handle all types of staff assignments at a high level, particularly in the technical fields, such as communications-electronics (C-E). Hence some argue that it might be simpler to train the specialist to do staff work, but only within his specialty. The problem, however, is to determine on a long-range basis how much specialization a service can live with at the higher levels.

Each of the professional military educational institutions discussed has had to incorporate systems analysis, operations research, electronic data processing, and other new management techniques into its curriculum. This again is a direct reflection of the increasing complexity of air force technologies.

Another common problem is the desire of the students who have completed a difficult PME course to obtain formal academic credit for their achievement, as is done, for example, in the Soviet Union. Although all three of the cited air forces support this trend, there is no easy solution to the problem in view of the differences in the educational systems of the three countries and the generally conservative attitude of the civilian educators who would have to accord accreditation. This lack of academic credit is a greater problem for the European services, where many officers do not hold academic degrees at the time of commissioning.

The USAF, RAF, and Luftwaffe professional school systems have much in common. In the
European systems professional military education is used in selecting an elite from among career officers at a relatively early stage in their careers (after approximately ten years’ commissioned service). It is understood and accepted in these services that this elite will, under normal circumstances, provide the future leadership for their respective services. The net effect of this closer integration of the PME school selection system and the officer promotion system is to eliminate some of the career progression uncertainties and the attendant morale problems for many able officers.

All of the schools discussed are designed to improve the staff skills of the students, including briefing, military writing, and logical thinking techniques. However, only the Luftwaffe and the RAF have carried this concept to a logical conclusion by designating specific staff positions for which school attendance is mandatory. In addition to improving job performance, this has proved beneficial both in enhancing the prestige of the schools and for motivating the students.

The similarities in the missions of the three education systems described far outweigh the differences. Most of the more difficult problems are common to all three. Therefore, an active interchange of ideas and experiences might be helpful in solving these problems. Such interchanges could be furthered by continuing and expanding the exchange of students and liaison officers and by periodic visits to the other nations’ schools, particularly by senior faculty members.

German Armed Forces Staff College
REFLECTIONS ON AN AIR FORCE/NAVY EXCHANGE TOUR

Major William J. Breckner, Jr.
I CANNOT help feeling that the end-of-tour reports required of officers on exchange tours, though probably accurate in detail, really never quite convey the true value of the experience. I say this not because I believe my experiences during exchange duty were of any greater significance than the experiences of those who preceded me but because the reports are written prior to tour completion; and it is only now, a full year after my tour, that I begin to sense the real importance of the exchange program. For this reason, I think that a little time spent reflecting on a completed tour would be worthwhile in evaluating the program. To begin, let us review the program from its inception to be certain that we understand its intent.

The USAF/USN Pilot Exchange Program got its start 10 May 1949 in a letter from the Secretary of the Navy to the Secretary of the Air Force recommending that the services exchange approximately twenty-five flying officers on a temporary basis. A parochial joke at that time had it that the Navy would do anything to get its foot in the door of jet aviation. If true, the Secretary of the Air Force was feeling benevolent, for he concurred in the Navy's recommendation in his letter of 22 June 1949. Full agreement on the program was reached on 26 July of that year. The purpose of the USAF/USN exchange program was to gain a better mutual understanding and appreciation of each other's problems, capabilities, and limitations. It was hoped that through this understanding more effective cooperation could be achieved between the services, with a more efficient utilization of our military resources as the ultimate objective. How well this objective has been met is difficult, if not impossible, to quantify. However, the program is still in being, and it is hoped that its continuing existence is due to its intrinsic value and not to bureaucratic perpetuity.

The program as it exists today calls for 23 USAF pilots to be exchanged for a like number of Naval aviators. Upon reporting to their sister service, these officers complete whatever training is required so that they may join their unit fully qualified. Once assigned, they perform the same duties expected of any other member of the unit. In fact, the only detectable difference between an Air Force officer on exchange duty with the Navy and a Naval officer is the color of the uniform. Perhaps one of the reasons for the program lies in the philosophy expressed in an old Indian prayer: "Help me never to judge another until I have walked two months in his moccasins."

The training which the exchange officer receives depends, obviously, on his assignment. For example, an Air Force pilot assigned to a Navy attack or fighter squadron will complete aircrew survival training, instrument school, combat crew training (in aircraft of the type flown by the unit), and carrier qualification. Of course not all exchange pilots are assigned to seagoing units; many fill billets in the Training Command or other shore-based units. Though the type and duration of training do not necessarily affect the length of the exchange tour, they do affect the length of time the officer will be in his assigned unit.

Tour lengths are designed for an optimum period of two years, up to six months of which can be spent in training. In no case are tours intended to be more than three years. It is felt that more than three years away from an officer's parent service tends to be counterproductive. As one who spent 38 months on exchange duty, I must admit that after three years one is really out of touch with his own branch. I hasten to add, however, that anything less than a full tour falls short of fulfilling the exchange objectives.

The question that comes to mind now is, What is a full tour? A tour in the context which I intend to address is not necessarily for a stipulated time period, nor is it merely two months in some Indian's moccasins. However, it should be of sufficient length to insure
accomplishment of enough tasks or missions to enable the exchange officer to approach his duties with the viewpoint of the host service.

My experience was that of an Air Force fighter pilot on Navy exchange as a light attack carrier pilot. One might expect my views, therefore, to be somewhat deficient in objectivity. But, objective or not, they are views from the operator level, and that is where the services are truly different. All the services share many of the same problems—retention, appropriations, management efficiency, etc. However, it is the particular service’s unique application of force that establishes its individuality. Air Force and Navy pilots both use the same technique to drop bombs. After all, how many different ways can bombs be delivered? But the employment of the weapon remains the significant difference. The one thing that the Navy does with airplanes that is totally different from the Air Force way is to fly them on and off boats. This is the area that requires the most appreciation and, therefore, is the heart of the exchange program. It seems logical to assume that a more meaningful appreciation and intimate knowledge of the operations that are unique to a service would best be gained by practical experience at the “doer” level rather than by vicarious experience at the staff level. My own exchange tour convinces me that not only must one get down to the working level but must remain there long enough to be thoroughly indoctrinated. Because of the situation in which I found myself, I am quite sure that many exchange officers have felt that they had a thorough understanding of their host service when in reality they had experienced only a superficial familiarization.

I reported to my exchange assignment in June 1966. After completing the required training, I joined my Navy squadron in November of the same year. The squadron had just completed a deployment to the Mediterranean and was commencing a new training cycle in preparation for a Southeast Asia deployment the next summer. Even though my training at this time was complete—I was combat-ready and carrier-qualified—I was not what one might call a Naval aviator in the purest sense. Although I was reasonably confident of getting aboard, day or night, I always looked on the opportunity to recover on the beach as the ultimate in good fortune. I witnessed many of the more experienced pilots doing everything in their power to bring aircraft back to the ship when, due to maintenance difficulties or some other unusual circumstances, an option of recovering either on the ship or on 10,000 feet of runway was presented. They always seemed to prefer the ship.

My confidence increased and my comprehension of the capabilities of Naval air power expanded as training was intensified prior to deployment. As we finished the Operational Readiness Inspection and set sail for the southwest Pacific aboard the **uss Forrestal** in June 1967, I felt extremely confident in my ability to perform the mission. As I was to find out for myself in the very near future, I was well enough trained for combat, but I had not begun to think and feel like a Navy aviator.

On 25 July 1967, we commenced operations from Yankee Station in the Tonkin Gulf. For four days the missions were flown exactly as we had trained, and the air wing performed flawlessly. I felt, as I am sure everyone who was a member of that air wing felt, that we put on the line the best trained and equipped air wing in the war. The fifth day heralded one of the most tragic Naval disasters since World War II. Fire and explosions swept the flight deck of the **Forrestal**, and before it was over 134 fighting men were to lose their lives. The air wing and ship’s company sailors carried out their duties with diligence and heroism, in the finest Naval tradition. Only as I observed the efforts of over five thousand officers and men fighting valiantly to save the ship did I sense a deeper allegiance to her and the sea. I had walked just a month in another’s moccasins.
We returned to the States in September and began to reconstitute the squadron. We were informed that we would receive later-model aircraft and return to Southeast Asia the next summer as a component of another air wing aboard a different ship. Unfortunately for me, my tour would be completed before the deployment. Had I terminated my duty with the Navy at this point, I would never have experienced the rapport and intimate association with Naval aviation that I now enjoy. I applied for and received permission from the Air Force to extend my tour with the Navy for one year. I wanted to make the combat cruise purely for selfish reasons: First, I wanted to complete my Southeast Asia tour. Second, the ship in which we were to embark was the uss Intrepid (CVS-11). This is a small ship, called a 27 Charley class, and one of the few remaining that still has a wooden deck. I never wanted to be intimidated by Navy pilots for only having flown from the decks of “super carriers” of the Forrestal class.

It was during the training cycle for this cruise, sometime shortly after I had completed my one-hundredth carrier landing, that I began to consider myself as something other than an Air Force pilot on a Navy ship. I do not remember the exact incident, but I do recall that we were conducting training operations just off the coast of Jacksonville, Florida, where my family was living. Something occurred during the recovery phase which indicated that some of us might have to divert to the beach to land. I can distinctly remember how, for the first time, I hated the thought of diverting and how badly I wanted to recover on the ship. In fact some of the aircraft did divert, but I managed to trap aboard. It was only in retrospect that my thoughts turned to the pleasant evening I could have enjoyed at home with my family had I not been so zealous in my efforts to get back to the ship.

We deployed in June 1968, and this time we were able to complete our combat cruise successfully. After seven months at sea and daily continuous combat operations, I soon lost nearly all of my identity with the Air Force. Actually, my knowledge and experience of combat operations in Southeast Asia are limited almost solely to the same perspective shared by most Navy personnel. If this is a disadvantage in the short term, as I return to take my place in the Air Force, it is certainly offset by the long-range advantage of having walked “two months” in another man’s moccasins.

So how does this exchange experience benefit the man who has participated in it? How do the services benefit from the program? I think the benefits accrue mainly through a gradual process of assimilation. This process is brought about by the many interpersonal relations of the officers who have completed exchange tours. Several times this past year, as a student at the Air Command and Staff College, I have found myself looking on as a third party to a discussion between Air Force and Navy officer classmates. Even though the participants remained objective, I was a witness to the failure to achieve perfect communication. I was in perfect harmony, at least as far as understanding the point of view, with the Navy side of the discussion, while at the same time I had an insight into my fellow Air Force officers’ struggle for comprehension. Each of the participants had explained his position as well as possible, but each felt that the other had not really grasped what he was saying or feeling. This inability to insure complete understanding between people of different backgrounds is immutable. Not merely similar but the same background and experience are needed for better communication and understanding. Herein lies the worth of the exchange program. Perhaps we could paraphrase the old Indian prayer and, with a little poetic license, modify it to read: “You can never have true understanding of a man until you have walked two months in his moccasins.”

Air Command and Staff College
What are the basic elements of our total national security? The answer, I think, is clear. First, the power of the weapons of our armed forces. Second, the quality of the training and leadership of those forces. Third, the unity of the American people. The most modern of weapons will be inadequate to insure our survival in today's world unless our society is keyed to the steady improvement of our political institutions and concerned that all our people participate and share in the benefits of that society.

I submit that the Department of Defense is not doing enough to promote in a positive way those aspects of our national life which are so essential to the preservation of our fundamental institutions. . . . I submit that . . . a department which consumes nine percent of the gross national product of our nation, a department which employs four and one-half million Americans, has a deep obligation to contribute far more than it has ever contributed before to the social needs of our country.

CLARK CLIFFORD

SPEAKING before the National Security Industrial Association, on 26 September 1968, former Secretary of Defense Clark Clifford pointed the Department of Defense toward a program to help alleviate pressing domestic social problems in the United States. His original frame of reference was “total national security.” We know the program today as “Domestic Action.”

In this address Mr. Clifford assured his audience that he had no intention of turning the Department of Defense into something that it should not be. It was not his intention that the Department of Defense should take over the responsibilities of other government or private agencies; he did not regard the Department of Defense primarily as an instrument of social welfare. He made it very clear that nothing
should be permitted to interfere with the performance of the department’s historic mission to defend the nation. He was just as adamant in his conviction that we have the opportunity and the responsibility to make a greater contribution to the social needs of the country—and that the nation will be the better and the stronger for it.

There is little doubt that our nation has tremendous social problems today. The rioting, the burning, and the unrest that exist in cities across the country are not the result of a satisfied populace. The rising crime rate, the quantum leap in drug addiction, the poverty and the prejudice that still abound—all provide us with irrefutable evidence that our society is not as healthy as it could be. The question is: How can the Department of Defense contribute to solutions for these difficult problems?

Although the Department of Defense may not be able to solve the nation’s social problems unassisted, it can certainly help in many ways. In searching for ways, Mr. Clifford turned to his staff and to the service secretaries for ideas. Within the Air Force, the challenge was directed to all major commands. The response was overwhelming. In spite of a relatively short suspense time, which would ordinarily have led to the old standby reply, “Negative input,” field units responded with no fewer than 2500 suggestions. It was an extraordinary response and gave clear indication that many Air Force people not only shared Mr. Clifford’s concern for the nation’s social problems but were eager to contribute their ideas for solving them.

Naturally, there were many duplicate ideas and closely related suggestions. When committees on the Air Staff completed their review and evaluation, 66 general proposals remained for submission to the Department of Defense. To handle all the ideas that came into DoD, Mr. Clifford appointed a special assistant, Mr. George Elsey, to head an interim planning committee to process them. The committee completed its work and submitted to the Secretary a very comprehensive report, outlining specific courses of actions and responsibilities for implementing projects that would help alleviate domestic problems. The committee’s report was never officially released to the public or to the services, but Secretary Clifford commended it to his successor, Mr. Melvin Laird, for further consideration.

Just before leaving office in January 1969, Secretary Clifford released a statement announcing five steps that were then being taken by the DoD to increase its contributions to the total national security. Some of these steps evolved from the 66 general proposals that had been submitted. The new actions were: (1) Increased defense contracts for ghetto areas; (2) Modified rules for contract requirements in ghetto areas; (3) Federal contract research centers to apply skills to domestic problems; (4) Allowance of training costs in pricing problems; and (5) Job Corps recruiters to assist military service rejectees.

It may be noted that the bulk of these actions concern how Defense dollars are spent. This is in keeping with the concept of doing business in ways that will help alleviate social problems without committing additional Defense dollars or people to the effort. The objective was to redirect the flow of some Defense dollars to areas that were experiencing high unemployment or had a dearth of unskilled workers.

In the Job Corps recruiter project, the Job Corps helped by implementing a new referral program at selected Armed Forces Examining and Entrance Stations. Men who are rejected for military service are given counseling and offered immediate enrollment options that will provide them with training and employment assistance. This project, like the other actions, could be implemented without incurring increased costs to the Department of Defense.

In addition to announcing the five new projects that were getting under way, Secretary Clifford recounted five other actions that had been directed since the previous September. They consisted of the following:

1. Testing new methods of home construction in a military family housing project at George AFB, California; the lessons learned in reducing military housing costs would be applicable to certain types of civilian housing. The project is being monitored by the Department of Housing and Urban Development.

2. Hospital construction and administration costs can hopefully be reduced through modernization. A contract was awarded to develop plans...
for more modern military hospitals; civilian hospitals should also benefit from the work. The project is being closely coordinated with the Department of Health, Education, and Welfare.

(3) *Project VALUE* was undertaken with the Department of Labor to provide remedial education, specialized counseling, and on-the-job training for approximately 5600 hard-core unemployed people who lacked normal beginning job skills. They were hired in entry-level jobs at Defense facilities across the nation. The Departments of Labor and Defense shared the cost of the program.

(4) *Model School System Design* for educating military dependents is under way and being coordinated with the Office of Education of the Department of Health, Education, and Welfare.

(5) *Project REFERRAL* is a computerized service which will match the skills of the 64,000 military personnel who retire annually after a career of 20 to 30 years in uniform with job opportunities available in the civilian sector; the average age of retiring military personnel is 45. Project REFERRAL, which commenced in June 1970, can help these highly trained men and women find positions where they can contribute to the nation's productive capacity.

Shortly after taking office, Secretary of Defense Melvin Laird appointed a special body of key members from the Office of the Secretary of Defense, Joint Chiefs of Staff, and the services to provide direction for the department's efforts. This body was named the Department of Defense Domestic Action Council and was chaired by the Honorable Roger T. Kelley, Assistant Secretary of Defense for Manpower and Reserve Affairs. One of the council's primary functions is to work with other governmental departments and agencies as well as with the President's Domestic Council (formerly the Urban Affairs Council) on social problems so that the DOD effort will be coordinated.

The Domestic Action Council held its first meeting in May 1969 and, as a first order of business, developed guidelines for Defense involvement. The council was concerned with ways it could commit Defense resources, facilities, and equipment to help alleviate problems at the base/community level as well as at the national level.

The various projects and programs that comprise the Domestic Action Program fall into two broad categories: those that are centrally directed and controlled and those local programs that exist to satisfy local needs.

The first category includes such projects as Project 100,000, Project TRANSITION, Project HIRE, Project REFERRAL, Project VALUE, etc. Each has been established with definite objectives and goals, and specific instructions have been issued through normal staff functional channels. The special housing project and the hospital organization and administration project mentioned earlier are other examples of efforts being centrally organized and directed from Department of Defense level. The scope of these projects is truly national or "domestic" in nature.

The second category is more community-oriented. The extent of USAF involvement depends upon the needs of local communities and the resources an installation commander may muster to help satisfy those needs. Participation therefore varies from base to base. The authority for these programs and projects is to be found in directives that have been with us for some time; AFR 190-20 governs the Community Relations Program and AFR 215-8 governs support of the President's Youth Opportunity Program. Perhaps this category of Domestic Action is more properly called "Community Action" because the emphasis is on community problems, not those of the nation in general.

Anyone who has been in the Air Force very long realizes that all installations have become involved in problems of neighboring communities in one manner or another. In addition to bases' providing organized programs to hire youth for the summer, recreation facilities for the disadvantaged youth of the community, and community assistance in general, many officers, airmen, dependents, and civilian employees take an active part in the affairs of their communities. They, too, are contributing to solutions for our social problems.

At Luke Air Force Base, Arizona, for example, an airman has spent much of his off-duty time working with underprivileged children. He devotes an evening each week to tutoring a 13-year-old boy as part of Arizona State University's ACTION Program. The airman learned of the
ACTION Program in South Phoenix and decided he wanted to help youngsters who were having difficulty. “I’ve always wanted to do something like this,” he said, and his assignment to Luke gave him the opportunity.

A similar community-help program has been undertaken by a group of volunteers at Newark Air Force Station, Ohio. Under Project step up, volunteers conduct remedial adult-education programs for disadvantaged citizens of the community. At L. G. Hanscom Field, Massachusetts, volunteer tutors, both military and civilian, work with black children from ghetto areas. At Webb AFB, Texas, the Junior Officer Council initiated a project to develop a school playground. Together with help of military volunteers and local city and county commissioners and PTA groups, they have succeeded in giving the community a facility it needed.

These examples are just a few of many that could be cited. Throughout the Air Force, concerned individuals and organized groups are giving of their time and energies to make their communities better places in which to live and work. There can be little doubt that people are our most important asset and most valuable contribution to the Domestic Action Program. It is up to base commanders to encourage individual participation and create an atmosphere where it can flourish.

With his many on-base problems, the base commander may be slow to recognize community responsibilities. With the pressure of day-to-day mission accomplishment, tight budgets, “703” personnel cuts, and the seemingly endless major and minor problems of all descriptions, one can understand how a commander may see only the immediate problems facing him on the base. The time he spends helping the community with its problems gives him less time to solve his own.
It is sometimes difficult to realize that the fewer problems that exist outside the gate the less he will have to contend with inside it. As long as most of his officers and airmen live off base, this may be the case. The community's drug problems are not going to leave his people untouched. The community's racial biases and discrimination will affect not only those members of his command living off base but those on base as well. We may build chain link fences around our installations, but they do not give us immunity to the community's problems. As long as our people travel two ways through those gates, the pollen of disillusionment, dissatisfaction, and dissent will have its chance to affect our military population, too.

Many commanders are quick to recognize this fact. Some are also quick to realize that they can help, too, fund shortages or not. A DOD appropriation is not the only solution to a money problem. Other government agencies, federal, state, and local, also have funds. Charitable organizations, religious groups, and local merchants have a deep interest in the welfare of their communities and are not going to ignore their problems. Many commanders know that community problems can best be solved by a coordinated community effort. They become part of that effort; they do not try to shoulder the entire burden, since they have neither enough resources nor time. The mission must come first; military readiness is paramount.

The summer youth program at Offutt AFB, Nebraska, is an outstanding Air Force example of community cooperation and base dedication to a community problem. It is also an outstanding example of how to organize a successful program without using federal funds or taking people off their jobs to support a community action project.

Project REC, as it was called, was conceived in 1968 by the base civilian personnel officer to complement and enhance the Equal Employment Opportunity Program at Offutt. Project REC (Recreation, Employment, and Counseling) soon gained support from the Offutt base commander, the mayor of Omaha, and many Omaha civic leaders.

Although the program began on a relatively limited scale, it expanded greatly in 1969 as a new source of funds was found. With true community spirit, the Nashua Corporation, which operates two plant facilities in the Omaha area, donated $11,000 to underwrite the cost of hot lunches and transportation so that 2000 youngsters from disadvantaged families could enjoy a week of recreation at Offutt. The money also provided specialized instructors to train the youths in arts and crafts. Another 700 young people were given employment; all received counseling.

Many gave their time to plan, coordinate, and work with the youngsters while they were on the base. For the most part, the effort was voluntary. Many airmen participated in their off-duty time. Others, such as those at the base fire station, explained the workings of fire trucks and entertained the youngsters on a tour without detracting from their primary duty. Men in the dining hall had to work extra to serve the chil-

Project REC, 1969

At Offutt AFB, Nebraska, Project REC offered Recreation, Employment, and Counseling to neighboring youngsters. Some 700 got on-the-job experience—for instance, training in Finance (far left). . . . A week's recreation for 2000 disadvantaged held such pleasures as barbecues, thanks to base and community support. . . . All who wished, received counseling, from answering questions to planting ideas for career vocations.
After the regular meal hour, but they obviously enjoyed the work.

The Offutt program is the result of imagination, dedication, cooperation, and hard work. The community could not have done it without Offutt, but neither could Offutt have done it without the help of the community.

Another outstanding community action program is at Robins AFB, Georgia. Robins personnel contributed selflessly to the May 1969 cleanup campaign, which was featured in an *Air Force Now* film used for Commanders Call in February 1970. Less well known are the excellent summer youth programs and extensive contributions to the welfare of Warner Robins and other surrounding communities.

In an effort to expand the good work being done and encourage greater participation, Dr. Robert C. Seamans, Jr., Secretary of the Air Force, established a Domestic Action Policy Council within the Air Force. It is chaired by the Under Secretary of the Air Force, Dr. John L. McLucas. Membership includes General John C. Meyer, Vice Chief of Staff; Mr. Richard Borda, Assistant Secretary for Manpower and Reserve Affairs; Lieutenant General Robert J. Dixon, Deputy Chief of Staff for Per-

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**Project Youth and Spring Cleaning '69**

Robins AFB, Georgia, through Project Youth, offered neighboring young people at least a nodding acquaintance with computers, at the computer center of Warner Robins Air Materiel Area, the South's largest. . . . Sessions on nutrition and on how to use a library typified the practical aim. . . . Robins assisted nearby Macon in "Spring Cleaning '69," refurbishing run-down neighborhoods.
sonnel; and Major General H. L. Hogan III, Director of Information. The council maintains liaison with the DOD Domestic Action Council and serves as the focal point for receipt and review of suggestions from within the Air Force.

High-level interest notwithstanding, there are those quick to challenge Department of Defense involvement in the domestic social problems of the nation. After all, we do have the Department of Labor and the Department of Health, Education, and Welfare with responsibility for these problems.

The Department of Defense is not trying to assume responsibility for these programs. As Mr. Elsey pointed out in his 17 January 1969 Interim Planning Committee Report to the Secretary of Defense:

> It is important that the Department of Defense does not substitute its policy judgment on domestic matters for that of the President and the other Executive departments and agencies which have primary responsibility for the particular areas of domestic concern . . . the Department of Defense should clearly and explicitly undertake programs in these areas only in cooperation with other elements of the Administration.

The DOD is adhering to this principle. It is one of the prime reasons for establishing the Domestic Action Council. The council, in close coordination with other governmental agencies, committees, and councils, can stay informed of national objectives and priorities and coordinate DOD efforts with them.

It must also be realized that it would be difficult, if not impossible, for the Department of Defense to justify to the Congress a need for funds and personnel solely for the purpose of relieving domestic problems. Critics would contend that any such investment should be more properly made through the interested domestic agencies of the government. But this is not to say that the DOD cannot or should not use its unique facilities, equipment, and personnel which other government agencies do not have and which would provide the most practical and economical method of attacking certain domestic problems. Even so, programs should be undertaken in cooperation with other interested federal agencies, and their funds should be used to reimburse the DOD when feasible; projects should cause no significant additional expenditure to the DOD. In all instances, the primary mission of the Department of Defense must remain paramount. Only projects that will not interfere with the mission should be undertaken or supported.

These guidelines have been distributed to all Air Force commands having bases in the continental United States, Alaska, and Hawaii. Naturally, there are those who believe that they cannot support Domestic Action unless they get appropriations. If the commanders at Webb, Offutt, and Robins had had that attitude, their adjoining communities and the nation as a whole would have been the losers.

Positive attitudes and sincere concern for the problems of the community will help to solve those problems. The community benefits from the opportunities that a base can provide for its underprivileged and disadvantaged citizens. The simple act of sharing what we have makes it possible for youngsters to enjoy themselves in recreation programs, learn to become independent members of society, and learn to work with others in a dignified and meaningful manner. Our summer employment opportunities for youth also help to alleviate deprivation, and a taste of success whets the appetite for more serious endeavor. Satisfactions brought about by changes in environment, treatment, and opportunities can do much to relieve tensions and create a more harmonious social atmosphere.

As the community benefits, so does the base. The increased goodwill and community understanding are invaluable. So are the personal satisfactions of the Air Force personnel involved. Much is said and written about the aspirations of youth today. They speak with sincerity and enthusiasm about making their country and the world a better place to live; they cry out for an opportunity to do something. An organized community action program can provide that opportunity; it can use dedicated, enthusiastic young people. Most of our Air Force population is just that, under 25 and eager to get involved. Many have felt so strongly that they have become individually involved, just as the airman did at Luke; they do not necessarily wait for the base to organize a program that can make use of their particular talents and aspirations.

To harness this energy and desire, command-
ers and supervisors should take a good look at their local communities and ask themselves if there are ways that the base and its people can do more to help make those communities better places to live and work in. They should take inventory of their assets and look for ways that they can be used to alleviate the community's social problems.

The purpose of the DoD Domestic Action Program is to generate more consideration for, and involvement in, the affairs of our local communities and the nation as a whole. The objective is not incompatible with our primary mission of defense. As Mr. Clifford pointed out, the unity of the American people is just as basic to total national security as the power of weapons in our arsenals. It behooves us then to share whatever we can with those less fortunate members of our society.

As individuals, every man and woman in uniform can contribute to the betterment of our nation. As citizen-soldiers, we share responsibilities with all other citizens for improving our society. History has shown that American citizen-soldiers have never shirked this responsibility. From George Washington to the hard-working officers and airmen who helped the unfortunate victims of Hurricane Camille in 1969, military men have demonstrated their concern for and acceptance of civic responsibility.

It is therefore quite fitting and proper for other government agencies to look upon the Department of Defense and its people as partners in meeting the social challenges of the nation. By acknowledging and developing this partnership, the Department of Defense can help insure the total national security that is so essential to our nation's survival.

Headquarters USAF
In My Opinion

LEADERSHIP

Seen from the Ranks

LEUTENANT COLONEL VICTOR D. SUTCH, USAF (RET)

WITH few exceptions, works on leadership seem to be written by two classes of people: scholars, usually psychologists interested in explaining group behavior; and successful businessmen and generals who, believing strongly that leadership is the key to success, feel compelled to press their principles upon those who follow after them. Very often the scholar becomes so bogged down in technical terminology and involved methods that his work is useful only to his colleagues. On the other hand the retired general or businessman, while often an outstanding leader himself, usually comes to intellectual grips with the problems of leadership only after thirty or more years' experience as a member of a managerial elite. Indeed, if his success has been such as to warrant putting his thoughts on paper, he very probably spent the final decade of his career in the rarefied atmosphere at the top of the pyramid. Thus, when the successful general or industrial manager begins to theorize about leadership, it may have been years since he had any significant contact with the man in the ranks. Consequently, to the foreman, the NCO, or the company-grade officer, all of whom work regularly at that level, his ideas may appear to lack realism.

This article, on the other hand, examines the subject of leadership from the standpoint of the "man in the ranks." It is based primarily on reactions of the author and his colleagues to actual leadership which they experienced in "real life" situations—though occasionally leavened with historical example.

what leadership is

Before defining leadership, one might first consider what it is not. It is not generalship, managership, or commandership—if I may coin the latter term. Generalship has to do with strategy and tactics, the movement of equipment and troops so as to achieve victory. (This quality has nothing to do with rank. Today most generals
are managers, while even noncommissioned officers on occasion display generalship on the field of battle.) Managership has to do with the ordering of equipment and men so as to achieve a certain end—such as the production of a product or the rendering of some needed service. Commandership, a military term, although it has its counterpart in industry, refers to the legal act by which a man is made responsible for a certain area of endeavor, along with the people who are assigned to work in that area. Official orders make a man a commander, but no official orders have been designed that can make him a general, a manager, or a leader. He becomes these things only as a result of his natural endowments, his training, and his experience. A man may be a brilliant general (in the sense defined), an outstanding manager, or a satisfactory commander—or all three—but being any or all of these does not necessarily make him a leader. In fact it is possible for a man with quite negligible leadership qualities to experience a measure of success in any of the three areas. However, one must conclude what is obvious: if he is a leader, then he is much more apt to enjoy a significant measure of success as a general, manager, or commander, simply because all these positions require him to rely upon and to motivate other human beings in order to accomplish his ends.

How, then, does one define leadership? Leadership is the attribute or attributes that a man possesses which cause other people to look to him for direction and guidance in accomplishing a common task. What those attributes actually are, scholars are loath to say. They find that leaders, being as variable in method and character as the whole of the human race, are almost impossible to categorize or describe in any comprehensive fashion. Whether able to describe them or not, however, all agree that some men do possess qualities which cause their neighbors to accept their lead in accomplishing group tasks.

Following this definition, if the general, the manager, or the commander is a leader, if the man in the ranks is indeed looking to him for guidance in accomplishing the common end and furthermore is willing to follow his direction in achieving that end, then these two—the leader and the follower—are each a part of a team, a team working to achieve a common goal. When one looks at any individual leadership situation, it seems evident that when leadership is effective the sense of team spirit is invariably present. Thus, one can say that where the majority of the men in the ranks feel themselves to be members of a team—a team composed of their fellow workers and the man who is ordering their daily activity—there is leadership. On the other hand, where the man in the ranks has no such feeling of unity with his comrades and his superior, there leadership does not exist. Thus, one might call this necessary ingredient team spirit, and, to reiterate, that term means a spirit which includes both the man in the ranks and his superior.

Team spirit is not the same as morale, nor is it the same as esprit de corps. Morale may be high in a situation in which team spirit is nonexistent. This may be true because the task assigned to the worker is inherently satisfying or rewarding, or because his fellow workers respect his outstanding ability to perform his job. Esprit de corps also may be relatively high when team spirit is not present. In fact a commander who is disliked or despised—and thus a poor leader—may create esprit de corps in a unit by his very presence. The members of the organization may achieve greater cohesion simply because together they are enduring a miserable, disgusting, or frightening experience which the commander—by stupidity, arrogance, or perhaps by design—is creating. If it is present, team spirit includes the commander or the factory manager; morale or esprit de corps does not necessarily have anything to do with him. However, again one must admit that both high morale and esprit de corps are more apt to be present if team spirit—and hence leadership—is present also.

Here is one example. A group of Air Force officers gathered in a small auditorium where they were to be briefed by a lieutenant colonel and his staff concerning a survey which the officers were to conduct. A civilian member of the staff was discussing the reasons for the survey, the forms to be used, and how they were to be filled out so as to minimize the number of errors. On the whole he was providing a satisfactory example of leadership. He spoke to them with
respect as fellow adults, and they were listening attentively, apparently accepting his suggestions concerning the survey. Team spirit seemed to be present.

Suddenly an officer interjected a question. “Do we,” he asked, “have to check every form for accuracy before we turn it in?” Such a check, he pointed out, would involve several hours of his time. The civilian paused to consider. His superior, the lieutenant colonel, had been sitting on a table at the front of the room, his legs dangling, saying nothing. The officers had forgotten he was there. Now he suddenly rasped out ominously, “I’ll tell you one thing, if there are too many errors, we will send them back to you, through channels.” The room grew quiet. Looking around, one could see resentment and even open hostility expressed on many faces. Leadership ceased, team spirit evaporated, morale sagged. But judging from the unanimity of opinion about “that arrogant ass” (which one heard as the officers filed from the room), the esprit de corps of that group had risen perceptibly.

What leadership does

In creating team spirit the aspiring leader must keep uppermost in his mind one basic principle: he must respect the men he commands. He must look upon them as men much like himself, with the same outlooks, desires, and needs which he himself possesses. No man will voluntarily follow another who looks down upon him or scorns him. It is not in human nature for team spirit to exist along with scorn. If, therefore, a man in a position of leadership feels that because of his breeding, his education, or his background he is inherently superior to the men he commands, he has failed before he ever picks up the reins of his organization. His basic attitude makes the creation of team spirit impossible. In fact, it would seem that anyone who considers himself inherently superior to the men in the ranks should choose his occupation very carefully. He may be qualified to work in a laboratory or to be a scholar in a library, or he might become a successful staff officer; but he is generally doomed to failure in any position requiring him to lead a group of men.

Nor can such respect be fabricated. Attempts at this sort of manufacture are common, frequently taking the form of a crude raillery by which the commander twits a subordinate about some personal shortcoming or error—much as one would tease a child who has committed a gaffe. Invariably the twitting is done in the presence of the man’s peers, and invariably the subordinate leaves the room seething with indignation. No adult wishes to be treated like a child, especially by a commander whose position renders him immune to counterattack. The most ignorant soldier or worker sees through such pseudo respect, or rather he feels the commander’s patronizing attitude and distrusts him. No trust, no leadership. Respect has to be sincere to be reciprocated, and mutual respect and confidence must be present if team spirit is to be generated.*

How does respect for the man at the lower levels manifest itself? In what kinds of activity on the part of the commander does it eventuate? Respect may be evidenced in a variety of ways, but all add up to one thing—a sincere interest in the career and welfare of one’s subordinates. In a SAC squadron it once took the form of a continuing survey of the daily activity of every crew member by the squadron operations officer. He knew every day what his people had done the day before, and any exceptional performance—in any area of his supervision—was noted and recognized publicly and immediately. Good navigation scores from the day before, extra long hours spent refueling aircraft by a copilot, extra diligence in preparing a plane for its scheduled flight by a ground crew—nothing went unnoticed or unrecognized by that operations officer, and the morale and team spirit in his unit were unbeatable.

In an actual military campaign, where a commander is infinitely busier, his concern for his people is all the more necessary, and its evidence is all the more appreciated. One might recall, for example, Marshal Henri de Turenne’s reac-

* It has been suggested that noblesse oblige is as good as or better than respect in terms of caring for and looking after one’s men. Noblesse oblige may, in certain societies in times past, have been a satisfactory outlook for the officer in relation to his men. However, in our democratic age no man in the ranks is willing to admit that his officers are “to the manner born” (nor are they). Noblesse oblige in the twentieth century would seem to be an anachronism.
tion when he and his army suffered a severe defeat in the 1630s and were forced to retreat to the safety of France's borders. It was winter, raining most of the time, and the 14-day march was a grueling ordeal for men and commander. Turenne threw his personal possessions into the mud to make room in his carriage for some of the wounded. Later, finding another of his soldiers sitting under a tree in the rain, nursing a shattered leg, he boosted the man into his own saddle and tramped for hours through mud and water until he found room for him in a baggage wagon. It was on this trip that his men began to refer to Turenne as *Notre Père*, a name which gained widespread acceptance among the rank and file.

A World War I leader recognized the truth of this principle. When shells first began exploding around his engineering company, a young South Carolina captain ordered all members of the unit to seek shelter behind a railroad embankment. He himself walked coolly up and down the crest of the bank until all his men were sheltered. No man in his unit ever afterward doubted that captain's willingness to take any risk he demanded of his men, and one soldier, describing the incident thirty-five years later, still spoke of his commander with the utmost admiration and respect.

Unfortunately, this kind of leadership was often lacking in that long and bloody conflict. Too frequently high-ranking officers and commanders lived and worked in safe bombproofs far from the front lines. Too few generals spent time in the trenches or ever went "over the top" with their men to face the enemy's fire. The men, of course, were well aware of their commander's preference for the place of safety. It caused grumbling and damning of officers in all units, and in 1917 it helped bring about a mutiny of such proportions that the French armies were on the verge of complete collapse. Needless to say, team spirit was nonexistent among those rebelling units.

The attitude toward those high-ranking French officers may be contrasted with the respect accorded General Robert E. Lee by his troops. On more than one occasion they refused to fight when he appeared in their sector of the battlefield. They feared their fire might draw a return from the Union side that could not help endangering Lee's life. On one occasion some of them grabbed his horse's bridle and led their protesting general to safety; and only when he was a satisfactory distance away did they resume the attack. Among those Confederate troops, team spirit prevailed. The soldiers recognized that their leader's life was too valuable to risk. However, let a commander himself decide that, and team spirit will immediately evaporate.

Not only does the leader experience what his men experience, he also gives as few orders as possible. The most effective leadership is that provided by example. Once he has satisfied himself that his men know what is expected of them—and here he must take them completely into
his confidence—the commander’s best ploy from then on may be to bend his own back to the work. The example of their leader pitching in will do more to unite the men in the task, and will elicit more wholehearted endeavor, than any other single act the commander can perform.

This approach to leadership was displayed by Swedish King Gustavus Adolphus, when debarking at Peenemunde in 1630. The first man ashore, the king picked up a shovel and began digging. Every man who followed did the same, and all worked steadily until the camp was completely entrenched and safe from surprise attack.

General George C. Marshall reportedly took the same tack when he arrived to take command of a drab Midwestern army post. Rather than order his commanders to beautify their areas, he merely took a shovel, dug extensive flower beds around his headquarters, and planted and cared for them himself. That example did not go unnoticed by his subordinates.

When, using these methods, a commander has enlisted his people enthusiastically to the task, he then must be extremely careful about his criticism of their errors of execution. If a subordinate, in his eagerness to get the job done, commits a blunder, the commander may well choose to praise him for it—assuming, of course, that the offender does not make a habit of such errors. He may choose to do this even though in the process the man has brought down the wrath of a higher headquarters on the unit and its commander. For nothing will more surely cement loyalty on the part of a subordinate than the knowledge that his commander will back him to the hilt in the event of an honest mistake. On the other hand, nothing will destroy team spirit more effectively than a commander’s use of a subordinate as a scapegoat to placate higher headquarters.

Finally, besides backing his people, a leader will build team spirit in his unit by keeping his men fully informed about their jobs and about his own problems and responsibilities. Here, to the fullest extent possible, he must take them into his complete confidence. There are two reasons for this: first, they cannot help him or protect him or even accomplish their jobs properly unless they have full knowledge of all that is involved; and, second, they will willingly endure many inconveniences and difficulties if only they know the reasons for them. Anyway there is no place in modern human relations for the old adage, “Shut up and obey orders,” particularly if there is no good reason for keeping the man in the ranks in ignorance.

An example will illustrate some facets of this matter of communication. At a large Midwestern air base, a year or two ago, over a hundred officers and enlisted men who regularly used the gymnasium for a noon-hour workout were suddenly informed that henceforth they would be required to furnish their own towels. For years the administration had provided towels; now suddenly it ceased doing so. Every day there was a chorus of complaints—voiced by all ranks from full colonels down to lieutenants and airmen—about an administration that could not provide towels for its people when they used the base gym. Two weeks of head-shaking and moaning about this problem passed. Then one day in the daily bulletin came the announcement that towels were once more available. A new shipment had arrived and had relieved what had only been a temporary shortage. Just one word—“temporarily”—inserted in the original announcement could have eliminated two weeks of grousing on the part of dozens of people.

what leadership does not do

Thus far we have been discussing the positive actions which the commander must take if he is to create the team spirit that is vital for the efficient functioning of his unit. Certainly the positive aspects are more important than the negative. However, there are certain things a commander must not do under pain of destroying the very spirit he is trying to create. For one, he must not regularly assign his people tasks which, by their very nature, are ridiculous or obviously of little value.

At a Western army post the general in command had a phobia about keeping the grass trimmed and the base area clean. It was his stated policy that every unit would police its area and cut its grass every working day. No exceptions to this rule were permitted. One unit in his command labored for a week to pass an
important inspection, even going to such lengths as working until 2100 hours the evening before the inspecting officer arrived. As a result of their outstanding efforts, the unit passed the inspection with excellent marks, and as a reward the commander desired to give his men the remainder of the day off. However, there was the general's rule, and his men had been so busy that they had not found the time that day to cut the grass. Since the inspecting officer had arrived in the area late in the afternoon, 1800 hours that evening found the soldiers in that unit cutting grass and policing the grounds—something that had been done only the day before, and the day before that, and the day before that. Instead of being rewarded for their good work, they considered themselves punished. Certainly nothing will more quickly ruin morale than superfluous tasks. Even the most ignorant soldier or worker bitterly resents being assigned such jobs regularly, and it was reported that young first-term soldiers were departing the army en masse from that post as soon as their enlistment ended.

Finally, leadership does not make war upon its own people. Unfortunately, there is in the military services, and to some extent in business too, the tradition of the “taut ship.” According to this tradition, the demanding, irascible commander who will not be crossed or who will accept no excuses from subordinates is a good leader. Such a commander relies upon fear to motivate his people to do their jobs; and he cultivates an image of himself as a grim, ruthless, driving individual who enjoys nothing so much as cutting down a subordinate—no matter what his rank or who is present—or dressing down a hapless man in the ranks. Such “leaders” often go to outlandish lengths to create their image. I once served under a commander who never permitted himself to smile publicly for two full years. Another, a budding Captain Bligh, refused a photographer permission to take his picture until he had gone to the mirror and adjusted his face into a ferocious scowl.

A few years ago a full colonel arrived at a Western air base to assume command of an air division. In “Twelve O’Clock High” fashion, he established his approach to leadership by angrily reprimanding the airman whose salute at the front gate did not come up to his standard. Dissatisfied with the airman’s response, he sought out his commander, the provost marshal, and fired him on the spot. Later, he fired the base commander—a full colonel—and then proceeded to use his first base conference to dress down a wing commander in the presence of his subordinates. After pointing up the wing commander’s intellectual shortcomings, he told him not to be so stupid in the future or he was not long for his job. Some enlisted men present were acutely embarrassed for their chief.

When the new division commander arrived at the flight line for his first flight—he had been instructor pilot in B-47s—one of the six engines failed to start. (Electric starters on the B-47 were notoriously unpredictable.) Without saying a word, the colonel climbed down from the cockpit, got into his staff car, and ordered the driver to take him to wing headquarters. Upon arrival there he stalked into the wing commander’s office and said grimly, “Come with me.” The startled officer grabbed his cap and trotted out the door behind his chief. The division commander then went to the wing maintenance office, where he picked up the chief of maintenance, to the squadron commander’s office, where he collected the lieutenant colonel who held that position, to the squadron maintenance office, where he summoned the major in that position, and finally to the wing maintenance office, where he summoned the major in that position. He took them all out to the flight line and lined them up at attention, starting with the colonels, down through the aircrew (captains), and ending with the ground crew (two sergeants). Then he proceeded to dress them down ruthlessly, viciously, violently, with all the power and venom which he was capable of mustering. He informed them that in the future when he flew an airplane on that base, it would start, and they had better see that it did! Needless to say, henceforth whenever that division commander flew from his home base, the wing commander, the chief of maintenance, and the squadron commander were on hand to act as his ground crew. None of the twelve men involved wished to repeat the experience.

This is a brutal example of what General Eisenhower once referred to with some scorn as “leadership by assault,” and there are several criticisms that can be leveled against it from anyone’s viewpoint.
First and foremost, it eliminates team spirit, and any unit commander who relies on this method of motivating his men is bound to suffer a decisive decline in efficiency. There can be no team spirit when one member of the team is continually making war upon the others. Faced with a commander who leads by "assault," the soldier or worker has two problems: one, to accomplish his job, and two, to defend himself from assault. The first cannot help suffering because of the other.

Second, "leadership" of the assault type is not leadership. A new name needs to be coined for it—some more descriptive term, like "drivership"—because a leader ipso facto must be in front of his men; they are following him. But the driver is necessarily behind his men. General George Patton is reported to have said, "I got to be a general because I am the best butt-kicker in the U.S. army." Perhaps he was joking. However, one can be a "butt-kicker" or one can be a leader. One cannot be both. To kick a man's butt it is necessary to be behind him. A leader, by definition, is in front of his men.

Third, efficiency suffers because under the "driver" only one man in the unit is thinking—that is the commander himself. By using fear as his total approach to motivation, the commander in effect has cut off the heads of all the other members of his unit. In the presence of a "butt-kicker," one does exactly what one is told to do and no more. When he completes a task, he waits until he is assigned another. To advance on his own, to show initiative, might lead him into making an error, and an error would certainly bring down the wrath of an angry commander. It is much safer to wait for further orders. Thus, instead of every man thinking about the unit’s mission and how it can best be accomplished, only the commander is thinking and ordering. He has effectively deprived himself of all the rest of the brainpower in his unit, and efficiency cannot help declining markedly over the long term. This is of course particularly true on the battlefield, where every problem is unique and where initiative and thought on the part of the man on the spot may make the difference between success and failure. It is true to only a slightly less degree in the more humdrum activities of industry.

No one will deny, of course, that there are times, both in industry and the military but particularly the latter, when to some people, in some instances, forceful coercion must be applied. When a commander is faced with an opportunity to exploit the enemy’s mistake in warfare, when speed is of the essence, when a sense of urgency must be imparted to subordinates and troops, when to delay an instant may be to lose a golden opportunity—when this situation faces the commander, no one is going to quibble with his use of the most direct and forcefully delivered order of which he is capable. Such a situation faced General Philip Henry Sheridan when he was attempting to flank Lee’s army south of Petersburg in 1865. He saw the opportunity and was himself everywhere in the fighting—driving, cursing his men on. In the heat of that battle Sheridan summarily and heatedly dismissed one of his corps commanders, a man with a national reputation, because he mishandled his troops and almost lost Sheridan this long-awaited opening.

In these circumstances no one is going to fault a commander for driving his units with all the power at his command. The very people whose skin is stung by his abrasive tongue will, after the battle, appreciate their leader’s actions. Without them they might not have won, and the war with its killing and slaughter would have continued. The lowliest private in the ranks will understand that the commander, by his action, was saving lives.

There is also the problem of the malingerer or, in service terminology, the goldbricker, the shirker. Almost every organization has a quota of these human derelicts who seemingly have no loyalties and who can be motivated by no method other than forceful coercion, and that continually applied. However, in our society their number is seldom great. One commander of a unit that had some 2500 enlisted men estimated that perhaps one percent of his people were in this category of the emotionally "halt and blind." The most desirable approach, of course, is to eliminate them from an organization as speedily as possible. This cannot always be done, though, and if they are ever to pull their share of the load then force, in one form or another, would seem to be a necessary tool.
of the commander in these instances.

The disagreement here is not with the commander who applies force in extraordinary circumstances such as these. It is instead with the peacetime commander who regularly and habitually resorts to “leadership by assault” to motivate the 99 percent who are healthy and willing and who can be motivated by normal leadership techniques. It is with the commander or boss who seems to know no other method than brutal coercion. Or perhaps he knows other methods but chooses this one deliberately because it is easy, requires no imagination, no sensitivity to his people, and quickly provides him with a reputation. Such a man is a driver, not a leader. And even if his methods may at times be useful to his superiors, still it should be clearly recognized that the driver is inferior to the leader, and his methods are to be scorned by all who aspire to that high calling.

The military services, as well as business and industry, have down through the years produced numerous outstanding leaders. Names such as Eisenhower, Marshall, Bradley, Arnold, Ridgway, and Westmoreland come immediately to mind in our own time. In business, too, the Fords, Wilsons, Sarnoff, McNamara, Hughes, and many, many others (one can fill in his own choices) are so well known that a list is redundant. Yet the question one might ask is: Why so often do people who are not leaders and are clearly recognized by most of those who work for them as “drivers,” “assaulters”—why do so many of these people get the promotions? Leadership is nowhere more thought about, analyzed, and discussed than in the military; yet too often here also the nonleader is the man selected for the higher ranks. Why?

Two factors would seem to explain this anomalously. One is the pressure on the commander to get the job done as rapidly and efficiently as possible. Any subordinate who seems to be able to produce, to bend the bureaucracy to his will, to get results, comes immediately to the harassed commander’s attention. And very often the pressure “to get the job done” blinds him to shortcomings in the subordinate’s methods. The results seem to outweigh all other matters, and he promotes the “assaulter” rapidly into more responsible positions and into higher ranks.

The other reason, it would seem, lies in the nature of the military social and hierarchical arrangements. The military traditionally has relied upon coercion. The whole fabric of its system is shot through with coercive elements—traditions, customs, and legal devices. A measure of this coercive underpinning is undoubtedly necessary in any martial organization, certainly no one would deny that. But in any case the tools of coercion lie ready to hand, and thus any commander who has despotic inclinations or who simply chooses to operate as a “driver” finds it relatively easy to do so. And there are no barriers, aside from personal judgment, some social pressures, and fear of one’s superiors, as to how far one may go in this direction.

In summary, what leadership is all about, what it is most concerned with, is the creation of team spirit. Where that precious commodity exists naturally—as with Cromwell’s Ironsides in the seventeenth century, Carnot’s French Revolutionary hordes in the eighteenth, and Moishe Dayan’s Israeli forces in 1967—there is no problem. All are concerned in the outcome, all—leaders and followers alike—are striving for the same goal. But where the kind of morale and team spirit which motivated those forces does not exist naturally, leadership can help produce it; drivership never will.

Dayton, Ohio
MODERN military aircraft, like the F-15, are complex and costly, but some of the reasons are not well known. Erroneous views persist. What are the facts?

Consider, for example, the money spent. Large aerospace firms are necessarily the prime contractors for any order of this size, but this does not mean that all the money ends up in their coffers. Far from it. Profit margins on military contracts have been shrinking steadily in recent years. Thus firms doing both military and civilian work generally realize a considerably larger percentage of profit on nonmilitary work and seek it with correspondingly greater zeal. There is also the matter of subcontracting and sub-subcontracting all branches of the “procurement tree.”

The procurement tree of a major piece of military hardware is something to behold. It is about an order of magnitude more complex than in the halcyon “good old days” and more complex than most people today have any conception of. More important, the roots of this vast procurement tree spread out through a good part of the nation and the
A TREE GROWS IN THE PENTAGON

national economy. A surprising number of these roots end up in small business. (The small business portion amounted to $5.49 billion in prime contracts and $4.37 billion in subcontracts in fiscal year 1970.)

That is the way it should be, and the Department of Defense is making a concerted effort to increase the share of small business in the defense dollar when at all possible. Anyone unacquainted with the situation might be surprised to learn how hard the Department of Defense does try to give small business a piece of the action and how many different ways it pursues this goal.

These activities include the enforcement of special regulations, production of special publications, convening of meetings and seminars, even the appointing of special officials, small business specialists, whose full-time duties are providing aid to small businesses. Let’s consider why. Why does DOD go to all this trouble—or, indeed, to any trouble at all—to help the small businessman?

There are some pretty good reasons why. Understanding the problems of the small businessman, as well as of the big industrial concern, lends solidity and realism to the whole picture and well-founded confidence that the motivation for this activity is strong enough to make it something fundamental that goes far beyond mere gestures of good will and is likely to be sustained through various political fluctuations. The Department of Defense tries to help small business for several reasons: (1) It is good for the country and the economy to do so. (2) It is the will of our citizens, expressed clearly and repeatedly by many administrations through Congress and the executive branch of the government. (3) It is definitely in the interest of the Department of Defense, both short and long term.

The essence of the American economic system of private enterprise is free competition in free markets, free entry into business, and free opportunity for expression and growth of personal initiative and individual judgment. The preservation and expansion of such competition are basic to both the economic well-being and the security of this nation. Such security and well-being cannot be realized unless the actual and potential capacity of small business is encouraged and fully developed.

Americans—especially business people—can never afford to forget that small business has been, and is, the foundation of our American way of life. Small business has been our nation’s path to greatness, and it still is. Indeed, the first Virginia colonies were essentially small business enterprises. Today 19 of 20 American firms are small, and 85 of every 100 small firms have 20 employees or fewer. Statistics never tell the whole story, but they indicate direction and scope.

Small business does not dominate production today as it did a hundred years ago, when just about every one of the then 300,000 shops and plants was small by our standards of today. Yet, in terms of human satisfaction and growth dynamics, small business is just as vital today as it ever was.

The gross national product of the United States now runs to $950 billion a year, and small business is today producing more than $375 billion of that total. That is what President Johnson had in mind when he said, “Small business is big business.”

the small business and the DOD

Even if all the foregoing reasons were not enough, the Department of Defense has ample grounds for fostering and supporting small business wherever possible, based on self-interest alone. Small business has saved a great deal of money for the department. Case after case can be cited in which a small business firm has successfully competed with big business, winning a contract with a substantially lower bid that produced significant savings. The very existence of aggressively bidding
small firms promotes a healthy spirit of competition in many areas obtainable in no other way, and the competition goes far beyond price competition alone. Some of the very best new ideas, products, and designs that have immeasurably strengthened our entire defense establishment have come from small firms. And there are some rather impressive evidence and statistics which tend to show that really new products and radical innovations are more likely to come from small firms than from large ones. With the need to make the utmost use of good new ideas and quality products, wherever they may occur, the Department of Defense could ill afford to disregard the small business, then.

The consideration of security is particularly relevant to the needs of the DoD. For vital defense items, it is contrary to the best national security interests to be dependent on a single supplier, or too few suppliers, however able and efficient they may be. Dispersion of procurement sources is good practice both economically and militarily.

The provisions mentioned thus far are part of DoD's program for small business, and all bear the approval of Congress and the President. But additional and supplemental to this is what might be called the "DoD Small Business Program Proper." For, after all, self-service is often the best service in this as well as other matters. Thus, the needs and emphases of the various departments, branches, and commands—down to the installation level—are stressed in numerous Department of Defense publications aimed at small business. And every procurement officer in every office, base, and camp throughout the country tries, in his own way, to aid and foster the role of small business in DoD procurement through primary contracting and subcontracting.

The volume and variety of DoD purchasing required for the local needs of this country and the world should not be forgotten. The military exchange services and the military commissary stores, for example, require moun-

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**Small Business/Big Savings**

*Under a $3.5 million contract, a small business in San Antonio, Texas, restored $17.5 million worth of jet engine parts (new acquisition cost) that otherwise would have been scrapped when cracks occurred. For instance, a $2014 J-57 "bird cage" (afterburner support) is prepared for braze repair with a high nickel-chromium alloy at a cost of $267. . . . At Tinker AFB, Oklahoma, a small firm builds a runway.*
tains of supplies and are always on the lookout for good local suppliers.

The Department of Defense tries to help the small businessmen in many other ways: by furnishing assistance in obtaining information on current and future procurements, identifying individuals responsible for products of interest, conducting procurement conferences and general seminars, arranging meetings with appropriate officials, advising on subcontracting possibilities, and helping small businessmen over technical and administrative hurdles. It is DOD's firm policy that no red tape should ultimately stand in the way of mutually beneficial business arrangements.

Perhaps the most striking thing that DOD has done to aid small business has been the appointment of 225 DOD small business specialists across the nation, who act as full-time advocates of small business within the department. They are "in the small businessman's corner" and serve as watchdogs of his interests in every respect. A typical letter of such DOD small business specialists is included to help illustrate their activities. It gives one a glimpse at the realism and hardheadedness of their
approach. No small businessman need feel like David facing Goliath when he has such friends and advocates.

So much for the general atmosphere and approach. The government has gone still further to ensure small business a share of the defense dollar. Three programs spell this out in an unmistakable manner: (1) the 100 percent set-asides; (2) the partial set-asides; (3) the breakouts.

Certain contracts are authorized by law to be “set aside” for small business exclusively. Small business can compete on all contracts with big business, of course, and does so successfully time and time again. But in the “set aside” competition, it is big business that has been ruled out. Since many contracts are necessarily large and comprehensive, “partial set-asides” are declared also, whenever practical, to guarantee small business a fair proportion of both the large and small defense contracts.

Finally, a special program in the interest of small business has been developed in procurement “breakouts,” which promote opportunities in subcontracting. From large, complex system procurements, certain components and subsystems have always been open to subcontracting to small business. The volume of such subcontracting has been substantial. But now the Department of Defense takes the initiative and insists that certain components be broken out from the primary contracts and opened for small business subcontracting. By means of this breakout technique, dod has been able to develop and stimulate competition, broaden the supply base, and secure better prices and earlier deliveries.

“Breakout” of the original Nike Ajax program, for example, resulted in a total savings to dod of approximately $4.7 million. In the Sergeant program, the original contract was awarded 91% to the prime contractor. Through “breakout,” this share was reduced to 71%, and a savings of over $1.2 million was obtained for the first year alone. During fiscal year 1970 the Air Force saved $21.9 million by improving the method of purchasing spare parts, by procuring competitively from the manufacturer rather than from the prime contractor. Small wonder that dod is actively and aggressively pursuing this “breakout” program, which has already produced such benefits for both dod and small business.

One of the best means of acquainting small businessmen with dod needs, requirements, and procedures is through procurement conferences. Many such meetings are held each year throughout the country; in 1967, 30 conferences, held in 18 states, attracted more than 10,000 businessmen and resulted in the addition of approximately 2000 names to dod’s list and 650 names to Major Prime Lists. During a recent year, 32 conferences were held in 16 states; 23 of them were cosponsored by 12 senators and congressmen—total attendance: 12,076. Public notice of these conferences appears in the Commerce Business Daily as well as in dod press releases.

Proof that all these efforts have borne concrete results is shown by a typical procurement tree. It is really a conclusive, as well as a graphic, final argument. If anyone doubts the role of small business in defense contracting or that the end effects extend wide, both geographically and economically, simply show him a complete procurement tree and ask him to take a closer look at the roots. They go deep, and they spread far and wide.

Mechanicsburg, Pennsylvania
THE MEANING OF SUEZ

Dr. Alfred Goldberg

HOW the wheel of fortune has turned for the United States since 1956! Then, at the time of the Anglo-French assault against Nasser at the Suez Canal, Vice President Richard Nixon told the world in a speech:

For the first time in history we have shown independence of Anglo-French policies toward Asia and Africa which seemed to us to reflect the colonial tradition. This declaration of independence has had an electrifying effect throughout the world.

Nowhere did the declaration of American opposition to the invasion of Suez have a more electrifying effect than in Britain and France. Not only did it signify the failure of the attempted intervention; it also marked the last
effort of the British to go it alone, independent of the United States, in a major international venture. Paradoxically, Britain's major effort undertaken after Suez to diminish its reliance on the United States and assert its capacity to act independently—creation of an independent nuclear deterrent force—could only be accomplished and maintained with U.S. technical assistance. The French, too, drew the same conclusions from the U.S. rejection of Suez and created a force de frappe, but they were more successful in making it on their own. The coming of De Gaulle carried the assurance that they would seek to establish an independent French policy not only in Europe but everywhere.

The truth of Nixon's statement was that for a decade before Suez both Britain and France had been harnessed to the wheel of U.S. policy in most areas of the world, and especially in Europe. As for British and French colonial policy, the United States had been at worst ambivalent and at best benevolent. From 1950 on, it had supported the French efforts in Indochina to suppress Ho Chi Minh and the Viet Minh, investing a billion dollars or more in military and economic aid and services. And only two and one-half years before Suez, when the fall of Dien Bien Phu to the Viet Minh was imminent, Richard Nixon had advocated employment of U.S. forces to support the failing French cause—colonialist and imperialist—in Indochina. But President Eisenhower's disinclination to become involved had prevailed, and U.S. refusal to join the fighting had confirmed the quickening turn of French public opinion in favor of getting out. The humiliation of the French withdrawal after the Geneva Conference of June 1954 left fresh scars on the already sensitive French military professionals as well as on many leaders across the whole spectrum of French politics.

In the years since Dien Bien Phu and Suez, it is the United States that has replaced Britain and France in the eyes of much of the rest of the world as the symbol of colonialism and imperialism. And, ironically, it is Richard Nixon who has inherited from his two immediate predecessors in the Presidency a country that is deeply divided over a political/military venture that has greatly affected the stature, the image, and the role of the United States in the world arena. In these circumstances, it is instructive and perhaps rewarding to examine the humiliating, frustrating, significant, and divisive experience of the British and French at Suez in 1956.

The parallels between Suez and Vietnam are perhaps greater than has been realized (especially as between the United States and Great Britain), even to the British and French refusal to become involved or to lend support to the United States effort in Vietnam. It is not necessary to claim that Suez has deep and relevant implications for Vietnam to accept that there are significant and striking parallels and that they are worth pondering.

1. The power, prestige, warnings, and threats of the great powers did not coerce the lesser powers into yielding; nor did the military operations coerce them. The British and the French stormed and raged at Nasser for months before they finally attacked, but they did not coerce the Egyptians into backing down from the nationalization of the Suez Canal. Russian support, no doubt, helped stiffen Nasser's backbone in the face of the Anglo-French threat. In the months preceding our active entrance into the war in Vietnam, the United States issued warnings to Ho Chi Minh on a number of occasions and sought to persuade him to cease support of the Viet Cong. We did not succeed any more than the French or the British did in 1956 against Nasser. Once again, the Soviet Union stood behind the smaller power.

2. The motivations of Anthony Eden and his most intimate advisers for undertaking the Suez invasion have a familiar and contemporary ring in this era of the Vietnam war. The “Munich reflex” was a powerful psychological influence, especially on Eden himself. The parallel between Hitler and Nasser, however farfetched, was drawn by Eden, and he frequently spoke to his colleagues of the folly and danger of appeasing Nasser. Guy Mollet, the French Prime Minister, saw Nasser as another Hitler even more plainly than did Eden. The dangers of historical analogy as a basis for international policy and action by political leaders are deserving of much closer
scrutiny and analysis than they have yet received.

The British leaders, and the French also, subscribed to the “domino theory”—the notion that if Nasser got away with it, there could be a chain reaction throughout Africa that might confront Britain and France with a “Suez a month.” The British were already engaged with the Mau Mau in Kenya, and the stirrings of anticolonialism were pulsating throughout the continent. The French, embattled in Algeria, hoped that by overthrowing Nasser they could cut off Arab assistance to the Algerian rebels and smother the rebellion.

Finally, the British maintained that they could not permit such a vital link in their strategic communications as Suez to pass to the control of another power. Here the symbol was probably greater than the reality, but Suez had been a glittering symbol to Britain for nearly a century.

All of these arguments for the Suez invasion have been used in recent years by the U.S. government to support its cause in the Vietnam war. The Malacca Strait has been the equivalent of the Suez Canal in the strategic communications argument, and Southeast Asia the equivalent of Africa for the domino theory. As for the “Munich reflex,” Secretary of State Dean Rusk and others pointed frequently to the disastrous effects of appeasing Hitler. Moreover, Rusk may have felt that he had been associated with still another Munich in the fall of China to the Communists in 1949, when he had also been a State Department official.

3. The failure to formulate clear political objectives to guide the military leaders did not permit the establishment of firm and well-defined military objectives as an effective guide to planning and operation. The Anglo-French military leaders at Suez never understood what were their political and military objectives because these were never explicated by the political leaders, who were never sufficiently clear and certain in their own minds about exactly what they intended and how they proposed to accomplish it. Consequently, the military commanders planned and conducted their military operations in a near political vacuum, and their successes occurred almost as much because of fortuitous local circumstances as of military effectiveness.

The appalling vagueness and uncertainty that characterized the British approach to the whole problem of Nasser and Suez were epitomized in a conversation between Field Marshal Viscount Montgomery and Anthony Eden. Montgomery, then Deputy Supreme Allied Commander of NATO forces, visited Eden at 10 Downing Street on 20 September 1956 at the latter’s invitation. Montgomery told the House of Lords (1962):

When the Suez operation was being tied up, I was in Paris and in close touch with the French Chiefs of Staff. The Prime Minister . . . asked me if I could come over here and see him, which I did; we had some conversation, and after that I said to him “Will you tell me what is your object? What are you trying to do?” And he replied: “To knock Nasser off his perch!” I said that if I were his military adviser—and I made it very clear that I was not—that object would not do. I should need to know what was the political object when Nasser had been knocked off his perch . . . because it was that which would determine how the operation was best carried out, what was the best disposition of our forces and so on. In my judgment, it was the uncertainty about the political object of our leaders which bedevilled the Suez Operation from the beginning.1

In Vietnam, U.S. political objectives have been less than models of clarity, precision, and consistency; military objectives and operations have been adversely affected accordingly. Regardless of any fault in the matter, it is difficult for military commanders to deliver the goods when they cannot understand and appreciate what is required of them and why. In World War II, the contending military forces had no doubt about their respective political objectives. The changed world environment since then has imposed constraints on the use of the military instrument by the big powers.

4. The omnipresence of the political factor in recent conflicts has meant the dominance of the political leaders in dictating the military actions. The plan for the Anglo-French invasion of Suez changed several times at the insistence of the political leaders—particularly the British. The political leaders—again particularly the British—dictated the timing and duration of the aero-psychological campaign against Egypt; they had more faith in its possibilities than most of the military leaders.
So, too, in Vietnam President Johnson and Secretary of Defense McNamara assumed an active role in the direction of military operations from the very beginning, establishing military priorities and approving or disapproving specific targets and operations. Certainly, it is the prerogative of the political leaders in a democratic country to do this, but it usually occurs because the political leaders have not been able to provide their military leaders with firm political objectives and guidance. The result is the kind of playing by ear that occurred at Suez and in Vietnam.

5. The aeropsychological phases of the two conflicts were strikingly similar. Operating from Cyprus, Malta, and aircraft carriers, British and French planes conducted a bombing and leaflet-dropping campaign against Egypt for five days before the landing took place. The political leaders hoped that this aerial assault, accompanied by ferocious warnings and threats in broadcasts and leaflets, would suffice to convince Nasser and the Egyptian people of the hopelessness of resistance and induce them to submit to the big powers. Similarly, in Vietnam, the initial U.S. air attacks against North Vietnam, beginning in February 1965, seemed to be aimed chiefly at the will of the North Vietnamese leaders rather than at the country's military capability, although the latter was not spared. There is evidence that the U.S. government leaders hoped and perhaps believed, at least for a while, that the earnest of the air campaign and the threat of still more severe action would convince the North Vietnamese of the resolve of the Americans and induce them to stop their support of the Viet Cong. The effectiveness and the "success" of the air campaign have been the subject of much debate and analysis.

6. In both Britain and the United States the military ventures—Suez and Vietnam—caused deep division among the people and seriously compromised the ability of the government to act effectively. The decision to go ahead with the Suez operation was made by a small group in the British Cabinet—it was not considered or debated by the Cabinet as such or by the House of Commons. Accordingly, the country was politically unprepared for the way the invasion occurred (there had, of course, been rumors and speculation for a long time before the event), and the government found that it had a divided rather than a united country behind it when it had to face up to the powerful political pressures exerted by the United States, the Soviet Union, and the United Nations. The effects of the internal opposition on Eden would be difficult to exaggerate: it contributed much to his emotional and physical decline during the crisis.

The war in Vietnam, like the Suez campaign, was undeclared—there seem to have been no declared wars since World War II—and the U.S. decisions to intervene in successive phases during 1965 were taken by the President and a small group of intimate advisers. The U.S. Congress was not formally consulted in the course of the crisis. Opposition to the escalating war developed immediately in 1965 and became increasingly vociferous. The split in public reaction to the war led to much disillusionment with, and loss of trust in, the U.S. government by large numbers of Americans. As Eden had been forced out of office after Suez, so Lyndon Johnson became a victim of the unpopular war in Vietnam.

Général d'Armée André Beaufre, commander of the French land forces in the Suez expedition, has addressed himself with strong feeling and the assurance of first-hand experience to most of the issues mentioned above.† There were, to be sure, other factors that affected the planning and execution of the operation: for instance, the language barrier, remarkable as that may seem after the Anglo-French experience in two great coalition wars in this century. The original name given to the expedition was Hamilcar, but the British did not realize until much later that the French spelling was Amilcar. Only when French vehicles intended for use in the landings appeared with

As rather than *Hs* on them did the British realize the error. The allies hastily changed the code name to Musketeer. In Vietnam, the language barrier between the Americans and the Vietnamese has undoubtedly had a significant effect on the conduct of the war.

Beaufre, one of the more respected of recent writers on strategy,\(^2\) drew very positive and characteristically Gallic and Gaullist conclusions from his frustrating experience. While the lessons he seeks to draw from Suez are expressed polemically and he seeks to establish their universal validity (a most difficult thing to do), they are nonetheless deserving of attention and consideration by those who are concerned with the great problems of war and peace in our time.

Beaufre faults the command organization for Musketeer with the heartfelt passion of one who was an intense participant in the intricate, uncertain, and unsettling preparations for the operation. He blames most of the difficulties of the military leaders and planners squarely on the political leaders, and it would be difficult to take serious issue with him on this. It seems clear that the British and French interests and objectives were too divergent in 1956 to permit the effective working of a unified command structure. The basic Gaullist mistrust of the Anglo-Saxons and animosity toward an integrated multinational command structure are implicit in his view of the Musketeer command organization. The influence that Suez had on later French decisions about NATO and the formation of the *force de frappe* should not be underestimated. Charles de Gaulle learned and applied lessons from Suez.

Beaufre emphasizes the national differences within the high command, contrasting the swift bold stroke constantly urged by the French with the massive preparations and forces insisted on by the British. The British chiefs are reputed to have considered the buildup for Musketeer as harder than the planning for *overlord*, which, indeed, was the model. This is not as farfetched as it may seem, since the transit time for the amphibious forces from Malta to Suez was six days as contrasted with little more than a like number of hours across the English Channel in June 1944. The French were more realistic and decisive in their appraisal of how to do it, but the British, as the senior partner, called the tune and refused to take a chance with smaller forces and less extensive preparations.

As for the Israeli campaign against the Egyptians in the Sinai Peninsula, Beaufre regarded it as a strategic and psychological error from the Anglo-French standpoint. The Israeli attack—eight days before the Suez landings—united the Arab countries and bolstered Nasser’s position and prestige within Egypt. Strategically, according to Beaufre, Musketeer would have been better served had the Israelis merely taken up a threatening position against the Egyptian forces in Sinai instead of attacking them. The Egyptians would have thus remained east of the Canal and could have been taken from the rear as the Anglo-French forces drove down the Canal on the west bank. As it turned out, the Egyptian forces that retreated from Sinai became available for defense of Suez against the allied forces.

Finally, Beaufre places the major blame for the failure to secure the military objectives on the political maze from which the military leaders could find no exit. The failure to secure American sanction of the attack or at least a hands-off attitude made it imperative to bring it off as a swift *fait accompli*. But the political
leaders (chiefly the British—the French would have gone through with it) vacillated almost continuously both before and after the decision to go ahead; accordingly they fell between two stools, achieving a limited military success and a great political disaster for their countries. Nasser suffered a military defeat and enjoyed a great political victory. From the Suez experience, Beaufre draws these major lessons:

1. Political action must be designed to ensure the success of military action.
2. Military action must be planned so that it meets the political requirements (in this case, a rapid *fait accompli*).
3. The military command must be responsible, centralized, and in close touch with the top political level.

While these propositions seem admirably apropos and logically sound, they cannot be accepted as universally valid—which is what Beaufre intends them to be. Their validity can be determined only within the specific context in which they may be invoked. Even at Suez, it is possible to argue that there was an attempt at a rapid *fait accompli*—namely, the aero-psychological campaign preceding the airborne and amphibious landings. It did not work, but there is evidence that the British political leaders, conditioned by the major role played by air power in World War II, believed that they might be able to carry off a near-bloodless victory which would be supportable in the face of British and world opinion. With reference to Beaufre’s third lesson, it can be argued, not entirely facetiously, that less communication between the military commanders and the political leaders in Paris and London might have had more salutary military effects. Certainly, the frequent and disruptive changes in plans and preparations derived mainly from changes in directions from the political leadership. As one British admiral put it, “Nelson would never have won a single victory if there’d been a telex.”

Is it any longer possible in the kinds of wars we have been witnessing or fighting since World War II to have clear, unswerving political objectives that can serve as a homing beacon for military commanders and guide them unerringly to their military objectives? The competition between the superpowers, the capacity for independent action and mischief by smaller countries, and the force of world opinion create a complex and, in many ways, unstable world environment. Political objectives in a crisis are apt to be affected and shaped by the events of that crisis so that they may change significantly or be altered a number of times, as occurred in Korea and in Vietnam. The search for political and military principles and lessons having broad application is useful and should go on, but it is important to recognize the inadmissibility of mistaking the particular for the whole. Suez was an important event in modern world history—perhaps more important than most people today are aware—but the lessons derived from it are chiefly applicable to Suez. It will be necessary to examine many more crises and conflicts before it is possible to have the assurance about the meaning of Suez that Beaufre has.

*Arlington, Virginia*

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**Notes**

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The Air University Review Awards Committee has selected “Soviet Strategy for the Seventies” by Lieutenant Colonel Donald L. Clark, USAF, as the outstanding article in the January-February 1971 issue of the Review.
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