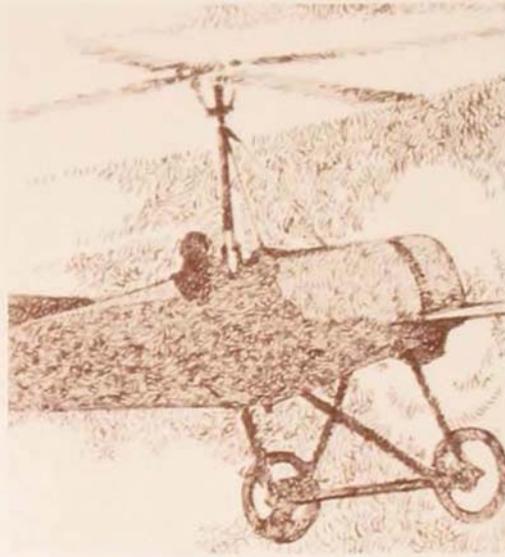AIR
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The Professional Journal of the United States Air Force

Are we ready for "dirty little wars"? for
terrorism? What changes must we make?—
page 4

Guerrilla warfare and air support—where
we have been and where we are heading—
page 17

China's defense policy. Has Ci
abandoned people's war conc
—*page 56*

Attention

The *Air University Review* is the professional journal of the United States Air Force and serves as an
open forum for exploratory discussion. Its purpose is to present innovative thinking concerning Air
Force doctrine, strategy, tactics, and related national defense matters. The *Review* should not be
construed as representing policies of the Department of Defense, the Air Force, or Air University.
Rather, the contents reflect the authors' ideas and do not necessarily bear official sanction. Thought-
ful and informed contributions are always welcomed.

Air power in the Falklands Malvinas—
page 78 and page 88

MODERN WARFARE: PARADIGM CRISIS?

The Commission concludes that state-sponsored terrorism is an important part of the spectrum of warfare and that adequate response to this increasing threat requires an active national policy which seeks to deter attack or reduce its effectiveness.

Long Commission Report,
Part Nine, Section III. C
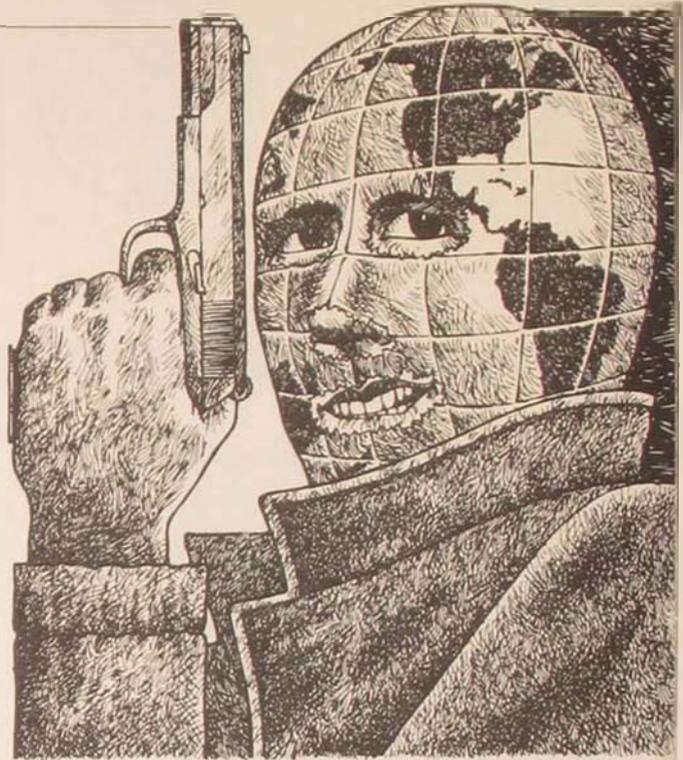
IN *The Structure of Scientific Revolutions*, Thomas S. Kuhn argued that the day-to-day developments of a science are governed largely by its paradigm, an intellectual framework that includes such things as the body of knowledge comprising the science and the rules governing the conduct of research. The paradigm in large measure shapes the scientist's world view and dictates the research questions he will ask, thus determining the direction in which the science will develop. At times in the development of a science, explanations of phenomena provided within the paradigm become esthetically displeasing to the practitioners. All the phenomena can still be explained within the paradigm; but, because the explanations are so complex, they are no longer convincing. At this point a paradigm crisis exists and the science is ready for a revolutionary change that will send it in a new (revolutionary) direction. Today, a similar situation seems to prevail with regard to the paradigm of warfare that is accepted in the Western world.

For some time now, Western states have tended to view war within a Clausewitzian framework in which violence is considered legitimate only when it occurs in the course of the relations between recognized, established states; war is an extension of the relations between states by violent means. Within this paradigm, it has been possible to differ-

entiate clearly between war and peace, between combatants and noncombatants. War existed when two or more states "agreed" to fight by declaring war on one another; otherwise, nations were at peace. Combatants were those who served in the armed forces of a nation and were the only legitimate human targets in war.

As the limits of warfare expanded in the twentieth century, we began to speak of a spectrum of war with guerrilla war on one extreme and nuclear war on the other. Still, all of this could be made to fit within the confines of the Clausewitzian paradigm. Clausewitz had recognized that war at least tended toward absolute violence. Furthermore, he had commented on an example of guerrilla war which he said was "a broadening and intensification of the fermentation process known as war." (Book VI, Chapter 26)

But while these developments still fit within the established framework of war, things were becoming crowded and intellectually uncomfortable. For one thing, the advent of long-range bombing made it increasingly difficult to separate combatants from noncombatants as nations sought to use air power to win wars by destroying resources and undermining a people's support for a war effort.

With the appearance of nuclear weapons and intercontinental missile systems, this development seems to have reached some sort of illogical conclu-

sion where nuclear war would result in mutual annihilation of the adversaries and thus serve no rational end of policy. This was why Bernard Brodie declared in 1946 that armed forces can no longer have a rational reason for existence other than to deter war. Here seemed to be a basic break in the continuity between politics and war that is fundamental to the Clausewitzian view of war.

Nevertheless, in the real world of international relations, conventional wars are still fought in support of national policies. However, in the interest of controlling popular passions and for other reasons, nations have taken to fighting without declaring wars. Increasingly, states engage in political, economic, and technological conflicts that blur into warfare through a host of half-tones that obscure the traditionally sharp focus of war.

At the low end of the warfare spectrum, terrorism (state-sponsored or otherwise) poses an equally perplexing challenge to the Clausewitzian paradigm. Terrorists, however well trained, are not soldiers in the usual sense of the word; they present no military structure for conventional armed forces to attack. The target of terrorism can be anyone, regardless of nationality, political views, and affiliation with the military. Terrorists' goals can vary from securing publicity for their organization and gaining freedom for "political prisoners" to eliminating an effective leader and toppling an established government.

These and other developments seem to have increased the complexity of military phenomena to the point where they no longer fit into the procrustean bed of Western, Clausewitzian thinking. The time would seem ripe for the appearance of a new unifying synthesis of modern military thought, a new paradigm of war, that can accommodate twentieth-century trends in war.

A start in that direction may already be under way if Alexander Atkinson's *Social Order and the General Theory of Strategy* is any indication. This difficult but richly suggestive book argues that the Western approach to war involves an unspoken agreement to respect the basic social order of an enemy state while attacking the enemy's armed forces which are seen as his center of power. More modern forms of warfare, such as Mao's people's war, involve what Atkinson refers to as an armed invasion of the social order that has as its goal a basic reordering of the social structure. Since the social structure is the real base of a nation's power, this is a more fundamental approach to war that cuts the ground from under the Western approach. In Atkinson's view, a force using armed invasion of the social order would defeat an enemy that employs the Western approach to war.

Atkinson's ideas cast a new light on Brodie's 1946 observations concerning the use of armed forces. Perhaps Brodie was right, but for the wrong reasons. In today's state of "peaceful coexistence," armies may merely prevent or limit open warfare, while at the more fundamental level of the social order, nations compete and evolve in a gigantic, Darwinian-like struggle for survival. In such a competition between a wide-open, liberal Western society and a rigid, closed society, blue jeans and rock music might prove more powerful than tanks and airplanes, although tanks and airplanes are no less necessary.

In a science, a faulty paradigm can lead practitioners to overlook or misinterpret key phenomena. Similar oversights can occur in the case of a faulty military paradigm, as this passage from the Long Commission Report suggests: "From a terrorist perspective, the true genius of this attack [on the Marine barracks] is that the objective and means of attack were beyond the imagination of those responsible for Marine security." (Part Nine, Section I.C.)

This issue of the *Review* examines some of the changes that are afoot in international conflict. We hope that it will contribute to the rethinking of the Western military paradigm.

D.R.B.

FIGHTING TERRORISM AND "DIRTY LITTLE WARS"

Dr. Neil C. Livingstone

WE have embarked upon one of the most difficult and complex periods of change the world has ever witnessed. In the space of a generation, science and technology are reshaping our lives, our work, our leisure time, and perhaps the very nature of societal organization and human values. Whereas the television revolution of the 1950s brought instantaneous information and experience to the American public, the computers of today permit us to collect, collate, and process that information with blinding speed, increasing the base of human knowledge at an exponential rate and expanding the boundaries of our consciousness. The science of robotics, once relegated to the pages of science fiction, holds out the promise of freeing mankind from the drudgery of physical labor. Instantaneous communications and jet travel have compressed time and space in

a way unimaginable only a few years ago. Satellites are probing the heavens, and for the first time in human history, man has burst free from the parochialism of this planet.

But while we marvel at the rapidity of this change and revel in the satisfaction of new discoveries, they also carry a price. The satellites spinning overhead look down on a troubled world overflowing with conflict: Lebanon, Afghanistan, El Salvador, Nicaragua, Chad, Iran-Iraq, Namibia, Northern Ireland, Guatemala, Peru, Ethiopia, Kampuchea, and Mozambique impose reality on our new vision of the future. "Political violence is spreading around the globe as seldom before," writes Flora Lewis.[1] Simply put, our ability to produce change has outrun our ability to control it. Change has been accompanied by dislocation and upheaval. Old tensions have been exacerbated and new resentments created. The bleak winds of conflict are blowing across the political landscape, fanned by a prolonged global recession, which has brought progress in much of the developing world to a standstill, and the inexorable pressures of population growth, which have consumed new wealth as rapidly as it has been created. In the opinion of Charles William Maynes, the

Third World is being "demodernized." "Investment projects are lying idle, children are not being taught, disease is spreading, beggars are filling the streets from which they have been absent for decades, people are looting food shops, and the middle class is being destroyed by bankruptcy and high interest rates."[2] According to some estimates, excluding China, there are more than one-half billion unemployed or underemployed people in the developing world.

The Third World faces a debt crisis so severe that it could conceivably spawn dozens of revolutions and even topple the financial structure of the Western world. And if unfulfilled expectations and economic mismanagement have turned much of the developing world into a "hothouse of conflict" capable of spilling over and engulfing the industrial West, the West is plagued by its own sources of potential conflict. The changes being wrought by technology and the shift from industrial to information economies in many Western nations are producing disillusionment, alienation, and resentment among those left behind during the transformation. Urban nomads and squatters battle police in Berlin and other European cities; crime is turning whole sectors of some major cities into wastelands; and unemployed college graduates have sought to strike back at the societies they blame for their condition by joining terrorist groups in Germany, Japan, France, Italy, and other Western countries. Separatist movements in the United States (Puerto Rico), France, Yugoslavia, Spain, and the United Kingdom attempt to win converts by blaming economic and other inequities on the tyranny of the majority population and asserting that all will be better if only the minority controls its own destiny.

While the growth of new sources of conflict represents a serious and rising challenge to the West, the Soviet Union, beset by a ponderous and inefficient economy, sees in this discord an opportunity to redress the enormous economic disadvantage it labors under vis-à-vis the West. Indeed, in nearly every respect but its military technology, the Soviet Union is, for all practical

purposes, a developing country. Using terrorism and guerrilla insurgencies increasingly as a form of surrogate or proxy warfare, the Soviet Union and its allies have found a means of undermining the West, wearing it down, nibbling away at its peripheries, denying it the strategic materials and vital straits critical to its commerce. "The USSR," writes Ray S. Cline, "is still trying to see that the regions of the world where the international trading states get their resources continue to shrink as a result of the spread of Soviet control or influence."[3] The West is on the defensive and its response cannot be halfhearted or indecisive without running grave risks. Yet there is a serious and growing gulf between the wars this nation is prepared to fight and those it is most likely to fight during the coming decades (or those that the American public and its politicians are likely to sanction).

The prospective battlefield of the next twenty years is more likely to be an urban wilderness of concrete and buildings, the tarmac of an international airport, or the swamps, jungles, and deserts of the Third World than the valleys and sweeping alluvial plains of Europe. And the threat of nuclear war, while always there, is still remote. The most plausible conflict scenario for the future is that of a continuous succession of hostage crises, peacekeeping actions, rescue missions, and counterinsurgency efforts, or what some have called the "low frontier" of warfare. Other names for it include subnational conflict, low-intensity warfare, and low-level violence. Much of it will have more in common with a "rumble" in an alley than with the clash of two armies on a battlefield. As Richard Clutterbuck has observed, old-style wars between conventional armies like the Iran-Iraq War, the 1967 and 1973 Middle East wars, and the India-Pakistan conflict will still occur, but less frequently. In many respects, the recent Israeli invasion of Lebanon may be a harbinger of things to come. The Israelis fought two enemies in Lebanon—the PLO and the Syrians—and each required a different strategy and a different type of warfare. The result was a war without

form or shape, of shifting fronts and tactics, an improvised war that was half counterinsurgency and half conventional.

In the predominantly rural nations of the developing world, governments will be challenged by guerrilla insurgencies, and in the more urbanized industrialized nations, by terrorism. The spectrum of conflict is expanding, and those who do not understand this fact do not understand their time. And just as our expansive technology has created new sources of potential conflict, so too has it made the complex, interdependent, industrialized nations of the West more vulnerable to the emerging new conflict patterns of the modern age.

Ironically, our technology has made conventional warfare, not to mention nuclear war, too costly, too impractical, too destructive. Should a conventional conflict break out in Europe between NATO and the Warsaw Pact nations, there is no assurance that it could be contained; the fear has always been that the side which is losing will ultimately feel compelled to escalate the conflict into a nuclear confrontation. Terrorism and guerrilla warfare, on the other hand, possess none of these disadvantages. They tend to be cheap modes of conflict, easily contained in most circumstances and requiring neither a high degree of sophistication nor extensive training. And should the patron nation decide that a particular conflict no longer serves its purposes, it can—with relative ease in most situations—simply cut its losses and get out.

In years past, terrorism and guerrilla warfare tended to be characteristic of the early stages of any conflict; the ability to engage in guerrilla warfare usually meant the abandonment of most acts of terrorism, just as the ability to field a conventional army generally witnessed the abandonment of guerrilla warfare. However, today terrorism and guerrilla warfare increasingly are becoming effective forms of combat themselves, and conflicts often never graduate to more conventional stages. During the Vietnam conflict, for example, the North Vietnamese, reacting to the growing capability of the ARVN to wage

conventional war, placed new emphasis on guerrilla warfare.[4] Certainly, for the purposes of the Soviet Union and its allies, terrorism and guerrilla warfare represent an effective, low-cost strategy for challenging the West and scoring gains in the Third World.

Terrorism, as we all know, does not involve traditional armies and tactics. The terrorist wears no standard uniform and often is organized without regard to military rank, although the terrorists' organizational structure may be quite rigid. The West Points and Sandhursts of terrorism are the streets of Beirut, the university campuses of Europe, and the training camps in Libya, the Soviet Union, South Yemen, the East bloc countries, and Cuba. The textbooks used by terrorists are Soviet and American field manuals, plus underground "bibles" like Carlos Marighella's "Minimanual of the Urban Guerrilla" and the Red Brigades handbook, which are xeroxed and reproduced in dozens of variations and passed from group to group.

Terrorism differs significantly from other forms of warfare in some notable respects. The most obvious difference is that, whereas traditional warfare is most often institutionalized violence, perpetrated by state upon state, and therefore has a badge of legitimacy attached, terrorism is nonstate violence, committed by nonstate actors making war on the state or upon other nonstate groups, and, as such, is usually regarded as illegitimate violence. Evidence of this distinction can be found in the U.S. legal system. U.S. statutes do not identify "terrorism" as either a crime or an act of war. Rather, acts of terrorism are punished under existing statutes dealing with murder, arson, bombings, extortion, air piracy, and so on. In recent years, Puerto Rican FALN and Black Liberation Army terrorists have proclaimed themselves as "political prisoners" and demanded to be treated as "prisoners of war," with international supervision of their trials and incarceration and special prisons, but to date their demands have fallen on deaf ears.

Secondly, according to Mao Tse-tung, the essence of war is to preserve oneself and annihilate the enemy. Terrorism, by contrast, is above all else a political act designed not necessarily to destroy the enemy but to demoralize him or to force him to overreact and thus create the conditions for a general revolt or revolution. Often the goal of terrorism is not to overthrow a particular state or political system, even if that were possible, but rather to intimidate the enemy, to make a political statement, or to call attention to a particular problem or cause. And unlike conventional warfare, where self-preservation is essential to success, the terrorist may achieve his purpose most effectively through his willingness to give up his own life for the cause, although the number of terrorists actually willing to undertake a suicide mission is still relatively small.

Another characteristic that sets terrorism apart from other forms of warfare is that traditional warfare is far more destructive than terrorism, consistent with the aim of the terrorist not necessarily to destroy but to communicate. Relatively few lives have been lost to terrorism in the twentieth century—only a few thousand during the last decade—whereas conventional warfare has claimed millions of victims during the same time frame. It is this lack of destructiveness and expense that accounts for some of the growth of terrorism. It is easier to mount a terrorist attack on an unsuspecting business or an unguarded aircraft than to engage in conventional warfare. The equipment of terrorism is very inexpensive compared to the hardware and materiel needed to engage in conventional warfare (or even guerrilla warfare). As Brian Jenkins has observed, terrorism is warfare "without territory, waged without armies as we know them. It is warfare that is not territorially limited; sporadic 'battles' may take place worldwide. It is warfare without neutrals, and with few or no civilian innocent bystanders."[5]

Guerrilla warfare, by contrast, generally attracts far less publicity than terrorism, largely because its battles are not waged in the media capitals of the West but in the countrysides of the

In 1964, Congolese rebels slaughtered native and foreign civilians in a rampage of unconventional warfare and terrorism. When the rebels threatened to kill civilian hostages in Stanleyville, the U.S. Air Force airlifted Belgian paratroopers to the Congo in Operation Dragon Rouge. Having successfully restored order in the city and liberated some 270 refugee-hostages, these Belgian troops (above) relax while awaiting their transport home. . . . At about the same time, half a world away, U.S. Army advisors trained Montagnard tribesmen to fight Vietcong guerrillas in the highlands and jungles of South Vietnam.

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chiefly rural nations of the developing world, far from the prying eye of the television camera. And while guerrilla warfare certainly incorporates various elements of terrorism, it also embodies features of conventional warfare: most often its targets have military value, it is generally waged on a larger scale than terrorism, and many of its tactics have much in common with traditional concepts of warfare. Guerrilla warfare perhaps differs most from terrorism in the fact that guerrillas, to be at all successful, must have a reasonable level of support from the people, "the sea in which they swim." Terrorists, on the other hand, need not have any public support whatsoever: they can melt back into the population of a large city without anyone being the wiser.

A New Policy for the 1980s and 1990s

Neither our political nor our military establishments are properly attuned to these new realities of conflict. We have not responded to the changing spectrum of war as rapidly or as thoroughly as the gravity of the threat demands. Instead, the U.S. low-level or unconventional war capability has always been regarded as something like a stepchild within the defense structure, involving more improvisation than science. Our war-making capability is still designed primarily to fight general wars in Europe rather than to engage successfully in counterinsurgency and counterterrorism. As a result of this preoccupation with conventional warfare, the United States has enjoyed few military successes in the postwar period in the area of low-intensity or unconventional warfare. Past failures of U.S. hostage rescue attempts, in contrast to the successes enjoyed by Israel, Great Britain, and West Germany, are symptomatic of this deficiency. As Harvey J. McGeorge has noted:

In the past four decades the United States has mounted several large-scale attempts to rescue hostages. During these attempts scores of American lives were lost and tens of millions of dollars worth of equipment expended. Yet not a single hostage was returned to friendly hands as a result of these rescue efforts.[6]

McGeorge reviews the failures of intelligence, organization, command decisions, and preparation during the Iran rescue attempt, the Son Tay raid, the *Mayaguez* incident, and the abortive Task Force Baum, which sought to liberate 1500 POWs in German-held territory near the end of the Second World War. All 1500 POWs who were freed, plus 293 members of the 294-man rescue unit, were killed or captured as they tried to reach Allied lines.[7] While information concerning the more recent Grenada rescue operation seems encouraging, it is doubtful that this episode marks the beginning of a new emphasis in U.S. defense policy.

This criticism of the U.S. special operations record is not to suggest that the military is entirely to blame for these failures or for the lack of U.S. success in Vietnam. Quite the contrary. Indeed, the real sources of the problem are probably both the U.S. political establishment, which defines the missions for our armed forces, and the American public, which is inherently fickle in its support and backing of anything less than a so-called popular war.

"After the disasters of the loss of Vietnam and the collapse of the Nixon presidency," writes Ray S. Cline, "the U.S. began to drift almost aimlessly in its strategic thinking."[8] Today we need to rethink our military and intelligence needs from the standpoint of the historic changes that are occurring in the nature and shape of contemporary conflict. The security of the United States and the rest of the Western world requires a restructuring of our war-making capability that will place new emphasis on our ability to fight a succession of limited wars and to project power into the Third World.

But before this shifting of emphasis can occur, there needs to be a change in the world view of U.S. policymakers and the American public, along with their recognition that what is at stake is nothing less than the survival of the

nation and our American way of life. To sustain our nation over time, we must exploit the vulnerabilities of those who would destroy it; and our doing so may require efforts to influence the internal events of other countries. However, without strong policy direction from Washington and requisite public support, based on a clear perception of the costs associated both with involvement and uninvolvement, it will be impossible for the United States to adapt successfully to the changing conflict environment.

Indeed, there is an inevitable political dimension to limited warfare, which shapes both the nature of the conflict and the response. The scale of a nation's response to any challenge is an inherently political decision, and a democracy like the United States ultimately requires the acquiescence, if not the approval, of the people.[9]

Yet the American people are confused by Central America and Lebanon. They are not sure why we are there and what we hope to accomplish by our involvement. Recent polls on American attitudes toward U.S. involvement in Central America found that while 64 percent of those polled felt that the situation in Central America is a threat to the security of the United States,[10] only 24 percent favored the introduction of more advisors and only 21 percent believed those advisors should be permitted to enter combat areas.[11] Such results demonstrate the confusion characterizing U.S. public perceptions where global events are concerned and are indicative of a loss of our national will to act even when our own security is threatened. This phenomenon of ambiguity is perhaps the most damaging legacy of Vietnam.

As Clausewitz observed, warfare is, in its most elemental sense, nothing but a trial of strength.[12] As a rule, conflicts will be won by the side with superior resources. Superior strategy and tactics will delay an inevitable conclusion, but only temporarily. However, the side possessing superior resources must be prepared to apply them from the onset of the conflict until victory has been secured.

Unfortunately, the post-World War II history of low-level conflicts reveals that in nearly every instance there was a prolonged, incremental buildup, followed by a long war of stalemate and attrition. Ultimately the side that was prepared to hold on the longest, that had the most clearly defined sense of purpose, prevailed. As evidence of this national purpose, one need only recall Ho Chi Minh's boast that they would fight ten years, twenty years, thirty years or more, whatever it took, to prevail in Vietnam. Today, by contrast, the American public and U.S. policymakers will not accept wars of attrition; they will tolerate only short wars, and then only if there are no heavy combat losses. Colonel Harry G. Summers, Jr., USA, has written of the "repugnance of the American people toward a war of attrition," noting that "all of America's previous wars were fought in the heat of passion." In his view, "Vietnam was fought in cold blood, and that was intolerable to the American people."[13]

There seems to be a lack of recognition in this country that police actions, peacekeeping missions, and counterinsurgency and counterterrorism operations are all part of the same long, continuous war, a war composed of many small, often nameless battles of varying duration in dozens of different venues against an unchanging enemy and its proxies and surrogates. Today the death of more than 250 Marines in Lebanon—while a tragedy—produces a firestorm of controversy and ultimately the withdrawal of all U.S. peacekeeping forces. Similarly, the introduction of 55 U.S. military advisors in El Salvador provokes a great outcry in the Congress and the media; yet there may be as many as 3000 Eastern bloc military advisors in Nicaragua, a fact that is largely ignored. The Soviet Union pours ten times as much military aid into Nicaragua and Cuba as the United States provides to all Latin America, yet it is our country and not the Soviet Union that is accused repeatedly of "propping up unpopular military regimes" in the region. In contrast, the French sent 500 "crack troops" labeled "advisors" to Chad and then moved them to the front and hardly elicited

a yawn. Within days, the force was greatly expanded and all pretense dropped that the men were advisors. In the political environment of the United States today, such an action would be virtually impossible.

The obvious question that must be asked is whether the United States is capable of fighting and winning limited wars and of engaging successfully in low-level military operations. The answer is clear. The United States will never win a war fought daily in the U.S. media or on the floor of Congress, where members attempt to micromanage conflicts and second-guess administrative policymakers rather than making overall, broad policy and leaving the implementation of that policy to the executive branch. The conflict in Southeast Asia serves as clear indication of the hazards associated with too much publicity, as does the current U.S. involvement in Central America and Lebanon. In some respects, the success of the U.S. intervention in Grenada may be attributable to the fact that the media were excluded until the operation was all but complete.

The "dirty little conflicts" of our time are not pretty, but they are critical to Western security, and if we abrogate our ability to engage in low-level conflict, we lose our capability to check Soviet expansion and maintain a world order compatible with our national interests and security.

Unlike Henry Kissinger, who has maintained that limited war admits of no purely military solutions but instead is part of a test of wills designed ultimately to forge a political outcome,[14] I hold that not only can limited wars and other low-level conflicts be won but that by winning such conflicts over time we can prevail in our strategic competition with the U.S.S.R. Indeed, the loss of one country to communism should serve as an impetus for us to take back another country. The main elements of such a policy are as follows:

● Support any force around the globe that is resisting the Soviet Union, its allies, and ideological fellow-travelers. We should provide training, arms, and materiel to resistance forces in such places as Afghanistan, Vietnam, Kampuchea, and Nicaragua; and we should design psychological operations to buttress that resistance. If such support is right and in our national interest, we should undertake the obligations and commitments openly and whenever feasible, avoiding the stigma attached to covert operations.

● The United States should come to the aid of governments resisting Soviet- or proxy-backed insurgents or terrorists. This support should take the form of economic, police, and military aid, including supplying training to counterinsurgency and counterterrorist forces, the introduction of U.S. military advisors, and—where feasible—the interdiction of arms and supplies to the hostile forces and the destruction of safe havens and external bases.

● In the words of Daniel Arnold, "covert support of coups and countercoups must be justified both pragmatically and morally as a tool of foreign policy."[15] In this connection, the United States should not be afraid to use its power to shape and configure a global order which is not hostile to U.S. security interests.

Within the framework of these policy elements, a number of specific observations and recommendations can be advanced with respect to intelligence, elite units, national policies, and allocation of defense resources for counterinsurgency.

intelligence

Good intelligence provides the first line of defense against terrorism and is perhaps the most critical tool in successful counterinsurgency operations. It was, after all, good intelligence that permitted authorities to apprehend the terrorists in both Rome and Kenya who were preparing to shoot down jetliners with Soviet-made heat-seeking missiles. The terrorist or guerrilla has the advantage of being able to choose the time and the place of his attack from an almost infinite universe of options, together

Insurrections have plagued developing countries since the Second World War. Curbing them and achieving political stability are great challenges for new nations and emerging democracies. Ultimately, guerrillas must be rejected by the people as well as defeated by the military in their respective countries. U.S. advisors are working in Honduras today to train Salvadoran troops for combat against the insurgents in El Salvador. Practice with M-16 rifles (above) and recoilless rifles (below) is an essential part of the training.

with the mode of attack; it is almost impossible for those on the defensive to secure every potential target, to anticipate every weapon and set of tactics, and to be prepared 24 hours a day for an attack that may never come. While static defense is critical to any counterinsurgency operation, those who try to protect every asset and every potential target are likely to spread their forces too thin, consistent with the old adage that "he who is everywhere is nowhere." Good intelligence will go a long way toward eliminating the inherent advantage possessed by terrorists and guerrillas.

Thus, the work going on to rebuild this nation's intelligence establishment after the trauma of Vietnam and congressional inquiries into the conduct of intelligence activities must be encouraged. The paramilitary capability of the Central Intelligence Agency must be restored. Congress must reform its oversight procedures to narrow the consultation requirements imposed on the intelligence establishment.

elite units

Elite military units have always provoked a fair amount of controversy. Some opponents argue that such units tend to be romanticized and are antithetical to democratic traditions and notions of a citizen army. Other grievances include the problem of controlling elite units, in view of the fact that the existence of elite units often circumvents the normal chain of command.[16] Objectors also point out, for example, that the Marine Corps has no elite units (although it could be argued that the Marine Corps is itself an elite unit) because such units have a tendency to siphon off the best men, to the detriment of the Marine Corps in general. Nevertheless, elite

Rifles, mortars, and grenade launchers, like the M-79 being demonstrated below, are the standard weapons of U.S.-backed troops in Central America. Small arms generally are preferred as weapons, since heavy artillery and an overabundance of aerial firepower can be both indiscriminate and ineffective.

units are useful when it comes to fighting terrorism. Such units can undertake extremely hazardous missions that require a high degree of skill, training, and possibly even government disavowal. They also serve as laboratories for new weapons and tactics, a useful function in the constantly changing terrorist environment. But most importantly, they act as counterweights against the complacency that often overtakes many military organizations and produces paralysis when action is most needed. Indeed, the hallmark of successful counterterrorist and counterinsurgency operations is flexibility.

In this connection, more emphasis needs to be placed on developing and honing U.S. counterterrorist forces, such as those first deployed by the Delta team in Iran. The mission, however, of elite multipurpose Delta-type units needs to be narrowed and made more explicit. Today such units are supposed to carry out antiterrorist operations, such as rescuing hostages, and to

engage in conventional military operations including intervention in foreign conflicts, the protection of critical assets anywhere in the world, and rapid deployment to repel aggression. The sole function of such units, however, should be to combat terrorism, and to this end they should be trained and equipped far differently than more conventional forces.

The vast majority of U.S. military equipment is still designed for the rigors and requirements of conventional warfare and often must be modified for use in counterterrorist and counterinsurgency operations. "Fifty percent of all the equipment used in Vietnam by the Special Forces," observed one former Green Beret, "was civilian equipment." West Germany's GSG9 *(Grenzschutzgruppe 9)* uses the most advanced antiterrorist equipment in the world, including special communications and tracking equipment, lightweight state-of-the-art body armor, specially prepared Mercedes Benz and Porsche pursuit automobiles, custom-built French helicopters, and advanced weaponry, such as the MP5K submachine gun and the Mauser 66 sniper rifle. Attention to detail extends even to the unit's clothing and shoes, which are designed not to have any zippers, buttons, or other hard surfaces that might reveal a unit member's presence (crawling along the fuselage of a hostage aircraft, for example). The unit's computers contain the interior configurations of almost any aircraft that might be seized by terrorists, as well as blueprints of major buildings and other facilities that might come under attack. The unit trains on full-scale mockups of potential targets, and as many redundancies as possible are built into each operation. When the GSG9 retook a captured Lufthansa jetliner from terrorists at Mogadishu, Somalia, in 1977, *two* simultaneous distractions were used to gain a momentary advantage over the terrorists. Three British thunderflash grenades were set off near the plane, and a bonfire was lit behind a sand dune in the distance. It turned out that the bonfire was the superior tactic, since the thunderflash grenades generated too much smoke.

Fighting terrorism requires units characterized by leanness, mobility, and tactics that emphasize subtlety and surgical precision. Foreign language skills and cultural knowledge are needed so that antiterrorist units can operate undercover on foreign territory and design operations fully consistent with local habits, conditions, and dialects.

U.S. national policies

U.S. indecision in fighting terrorism, to some extent, results from concern that U.S. allies may find positive action offensive. War is the one activity where moderation is no virtue, yet many of our nation's leaders often seem more upset by abuses of human rights on the part of nations combating terrorist outbreaks than by the original terrorist outrages that precipitated the embattled government's reaction. I am not suggesting that the United States should prop up corrupt dictatorships, but I would argue for balance and objectivity in assessing conflict situations. Moreover, when the Congress, in 1975, curtailed U.S. training of foreign police forces, it set in motion a new wave of torture and human rights abuses. Any knowledgeable police or military official knows that torture is not an effective interrogation technique; more sophisticated methods exist today—methods not involving barbarity or defilement of human beings. But if foreign police and military units are denied knowledge of sophisticated techniques, inevitably they will resort to medieval cruelty and thus fuel the vicious cycle of human rights abuses.

The United States must help those confronting terrorist and insurgent assaults with proper training and equipment so as not to undermine popular support for legitimate governments. The 1983 Foreign Assistance Act contains general authority for the President to furnish "assistance to foreign countries in order to enhance the ability of their law enforcement personnel to deter terrorists and terrorist groups from engaging in international terrorist acts such as bombing, kidnapping, assassination,

hostage taking, and hijacking."[17] Provision is made in the program to ensure that the equipment and training are not used in ways detrimental to the advancement of human rights.

In keeping with this more enlightened attitude, it is time to correct such travesties as the refusal in early 1981 of an export license that would have permitted the shipment to Great Britain of twenty-five custom-made silencers for M-16s. In this case, "human rights advocates" at the Department of State demonstrated a profound ignorance of modern combat when they argued that such devices were solely assassination tools and would probably be "misused" by the British in Northern Ireland. As it turned out, when the Falklands crisis erupted, the British were compelled to use a pirated IRA silencer for their weapons, a wholly inferior product to the American-made silencer.

allocation of defense resources

By far the overwhelming share of the U.S. defense budget goes to sustain our nuclear deterrent and conventional war-making forces, despite the fact that low-intensity warfare is likely to dominate the future conflict landscape. A built-in bias exists within the military establishment and in the substructure of defense contractors against any substantial shift of resources away from traditional procurement patterns. Such a shift would disrupt established careers and institutions based on a mastery of traditional warfare strategy, tactics, and logistics. This reluctance flies in the face of recent studies indicating that "brush-fire wars" are depleting America's military strength and that low-intensity conflicts, running the gamut from psychological warfare to countering Soviet-backed insurgencies and engaging in hi-tech antiterrorist activities, "will constitute the greatest challenge to the Army."[18] Since low-intensity wars are likely to remain the chief wars of our time, the United States should allocate much more of its defense resources to developing a better capability in the area of counterinsurgency.

Central America: Observations and Suggestions

In Central America today, according to some reports, we are repeating many of the mistakes of Vietnam. I shall mention only a short litany of the deficiencies of our current policies and offer a few suggestions on how to correct them.

• We have far too few advisors, and they are rotated too often instead of staying put for the "long haul." Many of our advisors lack combat experience, and few speak Spanish well. Instead of captains five years out of West Point, senior NCOs and officers with Vietnam experience are needed.

• Many of the troops that we are supporting lack basic military training and equipment. We are constructing obstacle and confidence courses instead of offering instruction on patrol formations and tactics. Also, more emphasis should be placed on techniques to demoralize and destroy the enemy, such as sniping, raids, ambushes, and sabotage.

• Failure to carry the war to the enemy will result in another Vietnam. Even at the risk of widening the conflict, we must hit the enemy's sources of supply and sanctuaries. In Vietnam, only 60 tons of supplies a day were needed to sustain the guerrilla war in the south; if any significant part of those supplies could have been denied the enemy, his ability to wage war would have been severely undermined. The same is true in Central America.

• Incrementalism is a formula for disaster. Congress and an impatient American public are unlikely to support a long and drawn-out conflict. While it runs many risks, we should seek a "quick kill," escalating the conflict as rapidly as feasible.

• We should not attempt to "reform" the government of El Salvador at the same time that it is waging a war. Doing so runs the risk of depleting valuable resources and undercutting its natural constituency. The time for reform is prior to the outbreak of hostilities or after the situation has been stabilized.

MANY, both in this country and abroad, believe that the United States has lost what T. S. Eliot once called "the motive of action," which in the context of the modern world might be interpreted as the ability to perceive clearly our national interest and the will to take whatever steps are necessary to pursue it. Today, it is vital that the American public and our policymakers be educated about the realities of contemporary conflict and the need to fight little wars successfully in the hope that we can avoid big wars in the future. Only when all of us comprehend what is at stake will we as a nation be able to develop and maintain the clarity of vision and national consensus needed to underwrite a new policy that supports the application of force in low-level conflict situations. In this connection, we need to show the world that we can still win

limited wars, and there is no better place to begin than in Central America.

Similarly, terrorists must be made to realize that they cannot strike at the United States and its citizens with impunity. While Soviet embassies and legations have escaped all but incidental violence in recent years, U.S. embassies have been attacked in dozens of countries, the most serious incidents involving the seizure of the U.S. embassy in Tehran, the sacking and burning of our embassies in Libya and Pakistan, and the bombing of the U.S. embassy in Beirut. It is time to adopt policies that ensure swift and sure retribution against those who attack our citizens and property. If it is our destiny as a nation not to be loved, then surely it behooves us to be feared, at least by the purveyors of violence and chaos.

Washington, D.C.

Notes

1. Flora Lewis, "The Habit of War," *New York Times*, 13 September 1983.
2. Charles William Maynes, "If the Poor Countries Go Under, We'll Sink with Them," *The Washington Post*, 18 September 1983.
3. Ray S. Cline, *World Power Trends and U.S. Foreign Policy for the 1980s* (Boulder, Colorado: Westview Press, 1980), p. 150.
4. Harry G. Summers, *On Strategy* (Novato, California: Presidio Press, 1983), p. 172.
5. Brian Jenkins, "International Terrorism: A Balance Sheet," *Survival*, July-August 1975, p. 160.
6. Harvey J. McGeorge II, "Plan Carefully, Rehearse Thoroughly, Execute Violently," *World Affairs*, Summer 1983, pp. 1-2 (draft).
7. Ibid.
8. Cline, p. 199.
9. See Carl von Clausewitz, *On War*, Michael Howard and Peter Paret, editors, Book 8, Chapter 3 (Princeton: Princeton University Press, 1976), pp. 585-94.
10. ABC News-Washington Post poll, reprinted in *National Journal*, 10 September 1983, p. 1862.

11. Gallup Organization poll, reprinted in *National Journal*, 10 September 1983, p. 1862.
12. Clausewitz, p. 96.
13. Summers, p. 37.
14. Henry Kissinger, "The Problems of Limited War," in *The Use of Force*, Robert J. Art and Kenneth N. Waltz, editors (Boston: Little, Brown and Company, 1971).
15. Daniel Arnold, discussion in conjunction with a paper presented by Theodore G. Shackley entitled, "The Uses of Paramilitary Covert Action in the 1980's," reprinted in *Intelligence Requirements for the 1980's: Covert Action*, Roy Godson, editor (Washington: National Strategy Information Center, 1981), p. 160.
16. Eliot A. Cohen, *Commandos and Politicians: Elite Military Units in Modern Democracies* (Cambridge, Massachusetts: Center for International Affairs, Harvard University, 1978), p. 70.
17. U.S. Congress, Senate, 1983 Foreign Assistance Act, Chapter 8, p. 161.
18. Bob Dart, "Proxy Wars to be Challenge to U.S. Military Might, Study Says," *Atlanta Journal*, 20 April 1983.

As a nation we don't understand it and as a government we are not prepared to deal with it. . . . I believe that low-intensity conflict is the most important strategic issue facing the U.S. If we don't learn to deal with it we risk being isolated in an increasingly competitive world.[1]

PERSPECTIVES ON AIR POWER AT THE LOW END OF THE CONFLICT SPECTRUM

COLONEL KENNETH J. ALNWICK

PRESS reports of the duel between U.S. Air Commando AC-130 gunships and Cuban-manned antiaircraft guns at Point Salines, Grenada, demonstrate that the USAF Special Operations Force (SOF) has successfully weathered its transition from Tactical Air Command (TAC) to the Military Airlift Command (MAC) without losing its traditional zest for action and adventure. The use of special operations forces in Grenada was a manifestation of the resurgence of the U.S. defense establishment's interest in a class of military operations that many saw as another casualty of the Vietnam War. Spurred, in part, by our anguish over the abortive Iranian rescue operation and a growing awareness of the utility of special oper-

ations forces as exemplified by the British Special Air Service operations in the Falklands, some major reorganizations have taken place in both the U.S. Army and U.S. Air Force to redress years of benign neglect of our nation's special operations capability.
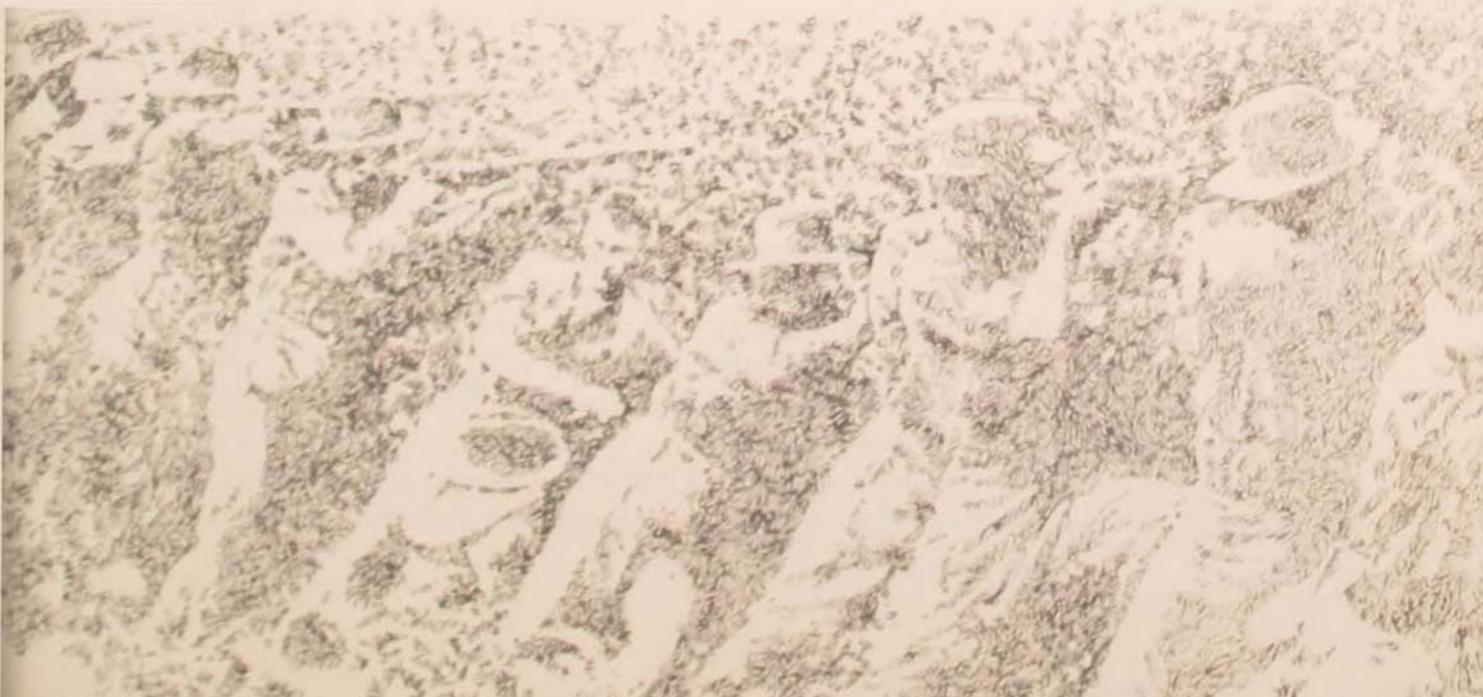
Within the Air Force, the First Special Operations Wing has shed its status as a stepchild of TAC and has become an air division within MAC's 23d Air Force on a coequal and cooperative basis with the Aerospace Rescue and Recovery Service. While this reorganization conveys many tangible and intangible benefits to Air Force special operations forces worldwide, it raises several questions about the future ability of the SOF to execute successfully some of its time-honored missions at the low end of the conflict spectrum.

Press reports from Grenada notwithstanding, a major shift in emphasis has been moving the Air Force SOF community away from traditional SOF missions in counterinsurgency, nation-building, and psychological warfare toward special operations behind enemy lines—more reminiscent of the World War II experience than the experiences of the last two decades. These two approaches to the employment of air power in other-than-conventional operations are the focus of this article, which emphasizes the importance of maintaining the USAF Special Operations Force with a capability to work hand in hand with local forces so that the inherent advantages of air power to counterinsurgent guerrilla tactics can be exploited as fully as possible.

Beginnings

The history of the use of air power against irregulars is as old as the history of military aviation. On 9 March 1916, Francisco "Pancho" Villa raided Columbus, New Mexico, and killed 17 Americans. The U.S. government ordered General John "Black Jack" Pershing to organize a force of 15,000 troops to pursue Villa into Mexico and "take him dead or alive." Six days

later, the 1st Aero Squadron, commanded by Captain Benjamin Foulois, arrived in Columbus. The force consisted of 8 Curtiss JN-3s, 11 officers, 85 enlisted men, 10 trucks, and 1 "tech rep." The most important role of the squadron was to help General Pershing keep track of his dispersed forces and deliver messages. Thus, the first combat missions ever flown by U.S. military aviators were communications and visual reconnaissance missions for the Army.

The aircraft were ill-equipped for the rigors of combat in hostile terrain. Propellers cracked and flew apart in the dry heat of the desert. The airmen had to set up their own machine shops and build new props and test new designs—with the help of the tech rep. Nevertheless, despite the limitations of its equipment, the 1st Aero Squadron proved the utility of aircraft in support of combat operations. Through their experiments with aerial photography, mounted machine guns, and bombing, the Army gained its first glimpse of the vast potential of this new weapon.

Given that the war in Europe had been under way for two years, the Mexican expedition revealed, to all who cared to notice, the deplorable state of American military aviation. Nevertheless, some of the traditional features of unconventional warfare were evident in the fledgling airmen, who demonstrated flexibility and willingness to experiment. Logging more than 700 sorties in their "modified" aircraft, they even scored the first recorded American kill from the air against a guerrilla leader. Although General Pershing never caught Pancho Villa, the unique attributes of aircraft (elevation, range, speed) made visual reconnaissance and communication the most significant contributions to the punitive expedition, and human ingenuity was essential to what limited success the campaign did achieve.

British Air Control

While the bulk of aviation activities in World War I supported the "conventional" aspects of the war, one little-known aspect of the war was

the use of aircraft to support Colonel T. E. Lawrence in his Palestine campaign. Lawrence is generally viewed as riding across the desert wastes on a camel; but during the latter stages of his warfare against the Turks, he exploited the mobility provided by both armored cars and aircraft. He used aircraft to maintain contact with his far-flung groups, provide visual reconnaissance, haul men and supplies, and attack Turkish communications. Basically, aircraft provided Lawrence with mobility to match the vastness of the desert. This unconventional use of aircraft helped set the stage for Britain's most innovative use of air power—a concept called "Air Control," which emerged shortly after World War I. Some authorities claim that this concept preserved for the Royal Air Force (RAF) its right to an independent existence.

In the spring of 1920, an uprising in Iraq caught fire and began to spread. The British attempted to control the rebellion and protect friendly tribes but found that their efforts cost them more than 38 million pounds annually and accomplished little in the process. Sixty thousand British troops used age-old techniques of garrisons and fortified strong points complemented by flying columns to administer discipline, exact tribute, and then retreat to barbed-wire enclaves. Critics viewed these activities as "butcher and bolt" tactics.

The Royal Air Force proposed to replace ground power with air power. Essentially, Sir Hugh Trenchard, with Winston Churchill's backing in the colonial office, was advocating gunboat diplomacy from the air. Both men felt that colonial forces could react more swiftly, attain superior firepower and mobility, and coerce far more humanely and cheaply by operating from the air. Their basic operational concept was "to interrupt the normal life of the dissidents to such an extent that continuance of hostilities becomes intolerable." The evolving doctrine of air control contained several distinct steps or phases:

• The first step was to develop a clear statement of what was expected of a target tribe or village.

• Next, the terms would be conveyed to the target population through intermediaries, political agents, or leaflet drops.

• If the tribe remained recalcitrant, heavy pressure would be applied through airborne attack—usually after a few days' warning, but not always.

• The pressure would continue until the harassed tribe recognized the reasonableness of British demands and the benign nature of British colonial administration.

Supported by effective intelligence and innate good sense, the British made great strides with air control. The cost-conscious British government, recognizing air control as an effective and relatively inexpensive technique, extended the idea to cover the northwest frontier of India, Trans-Jordan, the Aden Protectorate, and Palestine. It continued to use these techniques in Aden until the early 1960s. Critics were correct in claiming that use of air control techniques was the practice of colonialism on the cheap and that nothing could really be *controlled* from the air, but the techniques did furnish the necessary sanction of force behind civil authorities. Again, the essential characteristics of air power (elevation, speed, range flexibility, and destructive power) provided a strategic foil against the nomadic warrior's tactics.

Marines in Nicaragua

While the British were achieving modest successes against the tribesmen of the Arabian Peninsula, U.S. Marines were confronting a far more difficult task in the jungles of Nicaragua. Between 1927 and 1933, General Augusto Cezar Sandino and his followers fought and eluded the Marines who had intervened to resolve political strife in the country. The airplane, armored car, and machine gun had mastered the desert and the plains; but the new guerrillas avoided the open, operated in small groups always

under cover, and massed for attack only when
the odds were clearly in their favor.

The airplane quickly proved its value in the
early U.S. counterinsurgency effort. In 1927,
Sandino attacked a Marine garrison in Ocotal
and was defeated decisively when five Marine de
Havillands launched a timely aerial assault that
thoroughly demoralized the inexperienced San-
dinistas. This early defeat at the hands of Marine
aviators and ground forces—the original air-
ground team—convinced Sandino that his only
hope lay in the now-classic techniques of the
rural insurgent—hit, run, and hide.

For the next five years, Marines, such as Cap-
tain Lewis "Chesty" Puller, played a dangerous
game of cat and mouse in the hills and moun-
tains of northern Nicaragua as they sought to
bring about a decisive engagement with the
Sandinistas. In this effort, aircraft provided vital
communications between far-flung remote out-
posts. Marine aviators also flew air cap for foot
and mule patrols and attacked Sandinista bases,
but they soon learned the limitations of conven-
tional ordnance in thick jungles and the elu-

*Often our perception of air power in a support role is limited
to "putting bombs and fire on targets," but there are many
dimensions to air power, particularly in an unconventional
war. Dropping propaganda leaflets (above) is a vital part of
psychological warfare, which was one aspect of special
operations during the Vietnam War. . . . AC-47 Dragonships
(below) provided flarelight and firepower to besieged spe-
cial forces camps in the early years of the U.S. involve-
ment in Vietnam. These fighting versions of the venerable
Douglas transport could deliver a tremendous amount of
firepower in a few short bursts of their Gatling guns.*
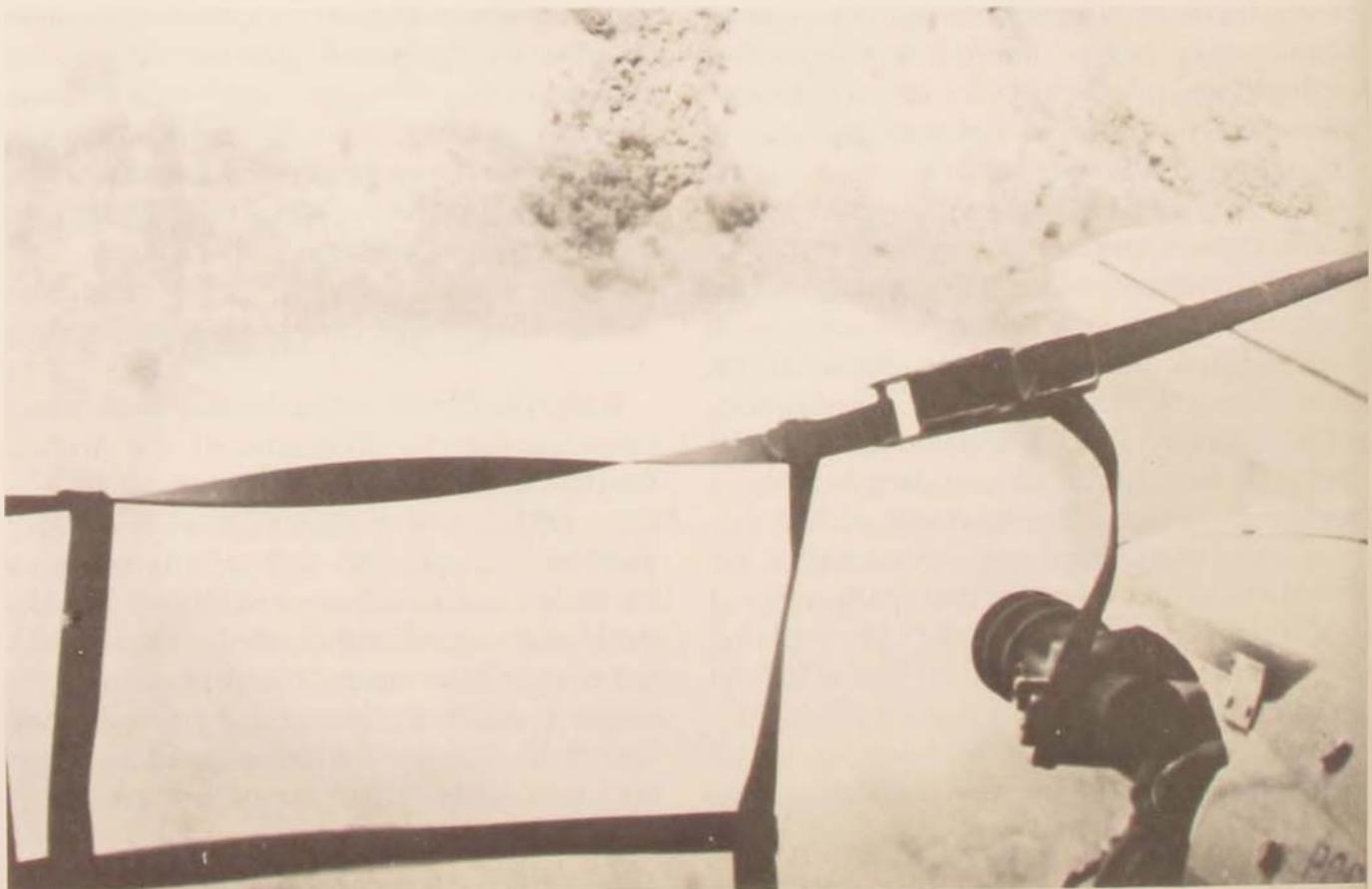
siveness of small, lightly armed guerrilla formations. Thus, Marine fliers never again achieved the spectacular successes they had scored in the early days of the fighting. Nevertheless, air power did help the Marines offset the worst effects of too few men attempting to control too much territory.

As U.S. involvement in Nicaragua dragged on, sentiment at home forced the Marines to conclude the police action, and Washington's primary concern became how to find a way to engineer a graceful withdrawal. Eventually, all Marine units withdrew to the cities as the Nicaraguan National Guard, officered by Americans and supported by Marine air, took the offensive. On 16 February 1934, the United States arranged a truce between Anastasio Somoza of the National Guard and Sandino. Four days later, Sandino was betrayed by Somoza and shot. Lacking San-

dino's leadership and exhausted by years of fighting, the insurgent movement withered to a point where Somoza's National Guard forces were able to contain any remaining resistance, thus ending the need for active U.S. Marine involvement in Nicaraguan affairs.

Yet the legacy of this early episode in air power history is still with us. Many of the principles of air-ground cooperation hammered out by trial and error in Nicaragua are ingrained in Marine Corps doctrine. Furthermore, the patterns of conflict discernible in the Nicaraguan experience may still be found in the guerrilla wars of the post-World War II period.

Special Operations in World War II

The name *special operations* comes to us from one of the first organizations established to operate behind enemy lines in World War II. This was the British government's Special Operations Executive. The primary missions of this "department of dirty tricks" were to drop highly trained secret agents and their equipment into

Special operations played an important role in the Second World War. At dusk, B-24s loaded with supplies or carrying agents would take off for nighttime missions over the Balkans. Flights lasted up to ten hours and often involved low-level flying through the mountains of Albania and Yugoslavia.

enemy-held territory and to resupply resistance groups and paramilitary forces in France, Italy, and the Balkans. The U.S. Army Air Forces joined the operation in March 1944, using B-24s and B-17s with special modifications, such as camouflage paint and covered stacks. Aircrews were specially trained in night operations; low-level, long-range navigation; and precision air drops of men and materiel. Their ten-hour missions were usually flown on moonless nights, frequently in bad weather.

On the Eastern Front, the Soviets relied heavily on aircraft to resupply partisan bands and to retain political and military control of these essentially autonomous operations. Of course, weather and mountains were the worst enemies of these operations. For example, of seventeen aircraft lost in one area of operation, only one was lost to enemy action. Thus, special operations in the European Theater were primarily specialized airlift functions.

On the other side of the globe in the China-Burma-India Theater, two units engaged in special operations are of particular note: General Claire Chennault's Flying Tigers and General John Alison's Number One Air Commando Group. Chennault's unit is noteworthy because his crews, in some respects, performed like flying guerrillas. The Flying Tigers, originally civilian volunteers, operated from remote, roughly prepared airstrips. They tied up large Japanese air assets and, at times, attained 10-to-1 kill ratios. The Flying Tigers were teachers and fighters who accomplished seemingly impossible feats. On the other hand, General Alison's Number One Air Commando Group provided support for ground troops, specifically, Wingate's Chindit troops who operated behind Japanese lines in Burma. Alison's force consisted of 300 aircraft of various types, including gliders and experimental helicopters; the support element for this force consisted of 600 airmen. This ratio of maintenance men to aircraft is unheard of in most modern air forces; the difference was due to the careful selection of personnel from among highly talented volunteers. Furthermore,

in Alison's units, there was great flexibility where aircrew training and checkouts were concerned. Pilots flew every type of aircraft: fighters, bombers, transports, liaison planes, gliders, and helicopters.

The specific mission of Number One Air Commando Group was to establish a landing zone or airhead deep in Japanese-held territory, build and operate an airfield, transport General Wingate's troops into the area, supply the operation, and provide the required close air support. There was nothing special about the aircraft used to support Wingate's operation, but General Henry "Hap" Arnold's parting instructions to these early air commandos ("to hell with administration and paperwork; go out and fight") gave them a license to steal. Throwing the rule book aside, they improvised tactics and modified aircraft on the spot, relying on their hand-picked, highly trained, and motivated personnel to overcome difficulties. The group gave Wingate the necessary mobility and provided support at the times and places he specified. The cooperative efforts between Alison's air units and Wingate's ground forces constituted combined operations in every sense of the term. Lessons learned from Alison's experience include: the importance of good delivery techniques, the need to know both the capabilities and the limitations of air power, and the need for dedicated units that can react more quickly than units controlled by remote higher headquarters.

Thus, the two classic roles of air power in unconventional operations were revealed. Before World War II, with the notable exception of Lawrence in Palestine, the preponderant role of aircraft in unconventional warfare operations was to support counterguerrilla operations. Gathering intelligence and providing mobility, presence, and firepower were primary functions (although the threat of firepower was often more potent than its actual application). During World War II, a new role for air power emerged—supporting the operations of partisans and small conventional units behind enemy lines. In this context, airlift, communications,

and medical evacuation provided by air assets were paramount. Delivery of firepower played only a minor role.

After World War II, the pendulum swung back again to the counterguerrilla mission for air power. Its concomitant emphasis on nonlethal aspects continued and would not change until the beginning of full-scale U.S. air operations in Vietnam (1966). The Philippine struggle against the Huks and the French ordeal in Algeria illustrate air power used with good effect to counter guerrilla tactics. The British in Malaya and other contested areas used many of these same tactics effectively also.

The Campaign against the Huks (1946-54)

During World War II, the Huks, a Communist organization, operated as the "People's Anti-Japanese Army." Following the war, the Huks attempted to overthrow the newly formed Philippine government. At that time, the combination of rural dissatisfactions, government inefficiency and corruption, and skillful Huk propaganda that drew on old anti-establishment themes had brought many areas of the Philippines to a state of near anarchy.

In 1950, Ramon Magsaysay was appointed Secretary of National Defense. With the help of U.S. advisors, such as Lieutenant Colonel Edward Lansdale, he removed many ineffective officials and reorganized both the military and the constabulary. This approach helped him win popular support, and the armed forces and police began building a system for collecting intelligence on which to base operational and political decisions. Liaison aircraft of the Philippine Air Force (PAF) commenced day-to-day visual reconnaissance flights over areas where the Huks were known to operate.

A system of informers was developed to work in conjunction with the reconnaissance flights. To keep the Huks from discovering the informers and intercepting the informers' information, special signals were developed. For example, the

positions of haystacks, farm animals, plows, and other objects flagged the size and location of Huk units to PAF liaison aircraft flying overhead. Also, defectors were carried aloft to help locate Huk camps. Once a camp was pinpointed, leaflets and crude loudspeaker systems were used to wage psychological warfare against the camp's inhabitants. At other times, solid information on camp locations was used by government forces to mount concentrated air and ground operations against the camps. The net effect of these varied uses of air power was to confine the Huks to small-unit operations and deny them the use of fixed bases.

To support its operations against the Huks, the Philippine Air Force used a squadron of C-47s, a mixed squadron of liaison aircraft, and some P-51s and AT-6s. Most of the targets were such that the aircraft either made their strikes with 100-pound bombs or strafed with .50-caliber machine guns. Air attack and bombing were very carefully controlled. Attacks with heavy bombs were limited to large base camps located in the mountains, and these attacks were made only after commanders were sure that no government supporters lived in the area.

The air operations and tactics of the Philippine Air Force were not in themselves decisive factors in the Huk campaign, but they were vital elements of Magsaysay's integrated use of all the elements of national power to defeat the Huk insurgency.

The Algerian Rebellion

As the Huk campaign wound down in the Philippines, the French were facing their own unique problems against rebels in Algeria. Several features of the French counterinsurgency effort distinguish it from other special operations. For example, although extensive fence systems or "barrages" were quite effective in sealing off Algeria's borders, they were difficult to maintain and patrol. Air power was a central element of French strategy to handle the problem: aircraft supported ground patrols, pro-

T-28s—trainers with souped-up engines and weapon points for bombs, rockets, and machine guns—have proved their worth in counterinsurgency operations from Vietnam and Laos to Latin America. Thai, Philippine, and several South American air forces still fly these rugged planes. T-6 Texans were used to train fliers for the Army Air Forces before and during World War II. AT-6s (below) served in the Korean War and in the air forces of Laos, South Vietnam, and Thailand in the late 1950s and early 1960s. A few are still flying in South America and Africa.

vided supplies to outposts, and flew strike missions against insurgents when they threatened sectors of the fences.

For internal defense, the French used a system called "quadrallage." They divided Algeria into areas of operation and then subdivided the areas into small sectors. Air units assigned to special operations maintained almost constant surveillance of the sectors and played a vital role in other intelligence-gathering schemes. Centralized control of air assets ensured that they would be employed in sectors where they were most needed.

A favorite French tactic was "netting." This involved locating an enemy force by aerial reconnoitering, identifying all access routes to the enemy's location, and selecting the best landing zone (LZ) near the enemy's headquarters. Having taken care of these preliminaries, the French launched a coordinated air-mobile attack, placing troops in the LZ immediately after preparatory fire. The air-mobile troops were deployed to confuse, disrupt, and demoralize the enemy headquarters and command structure while, simultaneously, more powerful ground forces closed in from all sides. In this

way, the rebels were trapped like fish in a net. The keys to success in these operations were excellent intelligence and the ability to react quickly and effectively when the situation warranted—both of which relied heavily on air support.

Two pertinent conclusions can be drawn from the Algerian experience: Coordinated small-unit actions supported by air were the most effective operations in this theater; and the most valuable assets that air power contributed to these operations were aircraft mobility and flexibility. But French political and military goals were not in harmony. Thus, despite their military success, the French found their efforts ultimately to be in vain.

This, then, was the body of knowledge and experience available when the U.S. Air Force began developing its own counterinsurgency capability in the early 1960s. In retrospect, we can see that it included these major tenets:

• Special operations were joint operations that required close and continuous liaison with the ground force.

• The most vital function was tactical support, including airlift and reconnaissance. Air strikes offered only a small payoff for the effort expended, but, at times, they could be absolutely essential.

• The intelligence function was the most difficult to perform well, but it was vital.

• Aircraft could do well in the psychological operations role, although success was difficult to measure.

USAF Special Operations Force: Origins and Evolution

Shortly after President Kennedy took office, he confronted a challenge from peripheral or "brush fire" wars that could not be met adequately by the Eisenhower strategy of massive

Douglas B-26s served in World War II, the Korean War, and the French Indochina War before being recalled to duty in Vietnam. From 1962 through the early 1970s, B-26s served in counterinsurgency missions and were used to blast trucks moving along the Ho Chi Minh Trail during Commando Hunt.

A-37s, despite their high rate of fuel consumption and relatively small weapons load, have superseded T-28s as the primary counterinsurgency aircraft. These planes served with the Vietnamese Air Force before the fall of Vietnam. Thailand and several Central and South American air forces are using this plane in current counterguerrilla operations.

retaliation. Speaking to the graduating class of West Point in 1962, he said:

> This is another type of war, new in its intensity, ancient in its origin.... It requires ... a whole new kind of strategy, a wholly different kind of force, and therefore a new and wholly different kind of military training.[2]

It was in the context of Kennedy's quest for a counterguerrilla warfare capability that contemporary USAF special operations came into existence. The first air commando units were formed in April 1961. These forces were deployed to Vietnam by November of the same year under the code name "Jungle Jim." Their specific mission included airstrikes, airlift, reconnaissance, and training of indigenous forces in unconventional warfare and counterinsurgency operations.

The aircraft assigned to the units were not the most advanced or sophisticated in the inventory, but they did have characteristics needed for special air operations. The old reliable C-47 was pressed into service in the airlift/troop delivery role, while T-28s and modified B-26s handled strike and reconnaissance missions. These latter two aircraft were selected because they were simple systems that could be maintained in an austere environment, they had the ruggedness and capabilities to operate from unimproved airstrips, and they were already in the inventories of many countries likely to experience guerrilla warfare and within the technological reach of other developing air forces.

From its activation strength of one composite squadron under the Jungle Jim concept, the force grew rapidly to meet the demands of Southeast Asian and other contingencies. Its designation changed as it evolved, becoming eventually the USAF Special Operations Force. At its peak, the force consisted of more than 500 aircraft of some 50 different types and configurations, together with more than 10,000 people. Major force components included the Combined Air Warfare Center (headquartered at Eglin Air Force Base, Florida) and three subordinate units: the 1st Special Operations Wing (at Hurlburt Field), the 4410th Special Operations Training Group, and the Special Operations School.

This structure enabled the Special Operations Force to provide more than 100 specially configured mobile assistance teams to 28 different countries. Mobile training teams supported military assistance advisory groups and missions by providing expertise and instruction in air-ground operations and combat training. The SOF provided training to foreign aircrews in the continental United States and overseas, making a major contribution to the effectiveness of Third World air forces.

Mobile assistance teams were deployed to conduct civic-action programs also. These teams often played a major role in a nation's internal development because only the military possessed the organization, manpower, technical skills, and resources needed to accomplish various development projects. The teams helped developing nations by providing transport/utility aircraft to carry medical teams and supplies to remote areas, deliver supplies and equipment for disaster relief, and spray areas to rid them of disease-bearing pests. These projects were designed to improve the living conditions of the people, gain popular support for the government, and reduce the appeal of insurgents.

In November 1961, the first TDY element of the air commandos arrived in Bien Hoa with four B-26s, four C-47s, and eight T-28s—thus beginning a monthly TDY rotation of support personnel and crews that continued until 1964, when the units in South Vietnam were placed under Pacific Air Forces and given PCS status. Each month, until the changeover in 1964, a C-135 would land at Hurlburt Field, Florida, discharge 179-day veterans, and pick up a fresh contingent. In these early years, the air commandos were relatively carefree, naïve "soldiers of fortune" who were looking for a piece of the action. They were advisors, but their clients were often Vietnamese aviation cadets ready to die with the Americans if luck ran out. And it ran out more often than most crew members

cared to think about. During some of the rotations, as many as one-third of the crews were lost. The following excerpt from one airman's diary reflects some of the frustrations felt by these Air Force crews during that period:

> The other day we lost another B-26 and reports are that the wing fell off during the pull up off the target. We expected all aircraft to be grounded but 2ADVON says "Keep flying" . . . We wouldn't think of giving India or Pakistan equipment in this poor shape. . . . Skimping on the facilities is bad enough and stupid regulations are bad too . . . but the loss of life is inexcusable when it is the result of improper planning.[5]

Operation Waterpump

In 1964, the air commandos from Hurlburt Field turned their attention to Laos and Thailand when TDY rotations to Vietnam were no longer required. Commando forces operating in these areas followed procedures much more closely related to the original concept (espoused by President Kennedy) than did their SOF-designated counterparts in South Vietnam, whose work was becoming more conventional. From a corner of a rice warehouse in Vientiane, Laos, a few American airmen operated behind the scenes to keep Laotian and Thai T-28s flying and to provide a link between the U.S. embassy and the combat forces of the Seventh Air Force. At Wattay Airport in Vientiane, for example, U.S. crews turned as many as five sorties per day per aircraft. Combat weathermen established a string of remote weather-reporting posts, supporting air operations over the north while controlling local air strikes on the side. Other commandos resumed their advisory role, helping Laotians master the use of the T-28 to conduct air strikes and mark targets for jet fighter-bombers.

As the war in Laos seesawed, air power was used extensively to prevent disintegration of Lao/Meo forces. Meo soldiers supported by airdrops and tactical air strikes held key hilltops against Pathet Lao forces.

Although our nation's efforts could save neither Laos nor South Vietnam from defeat,

one should not conclude that nothing the Air Force tried to accomplish in Southeast Asia was effective. Today, the Air Force must come to grips with a legacy of that experience—the Vietnamese syndrome—and recognize the positive lessons learned as we now assess the role of air power in the "small wars" of the future. The recent trend in special operations activities, as illustrated by the Entebbe rescue, Desert One, the Falklands, and Grenada, is more toward single-event types of operations than toward the classic protracted campaigns of the past. This trend tends to confuse the distinctions among military operations at the low end of the conflict spectrum, the portion of the spectrum that is theoretically the responsibility of our special operations forces. Additionally, more recent special operations show an increasing reliance on sophisticated technology. These and other trends are summarized in Table I.

Table I. Special Operations

Classic	Contemporary
•Closely tied to political objectives	•Closely tied to political objectives
•Integrates many elements of national power	•Tailored force
•Protracted guerrilla and counterguerrilla warfare	•Short duration
•Limited reliance on specialized equipment	•Takes advantage of sophisticated technology
•Limited connections between guerrilla forces in different countries	•Worldwide connections among insurgent movements

HOW are these basic tendencies in special operations reflected in USAF doctrine? Official USAF doctrine on special operations has been nearly static since the late 1960s. It states that special operations involves three interrelated missions: unconventional warfare, foreign internal defense (counterinsurgency by another name), and psychological operations.

The USAF Special Operations Force has had almost no experience in the latter two aspects of its stated mission in recent times and has concentrated almost exclusively on unconventional warfare.

AFM 1-1 (1979) defines unconventional operations as activities "conducted in enemy held or politically sensitive territory"—activities which include, but are not limited to, "evasion and escape, guerrilla warfare, sabotage, direct action missions, and other covert or clandestine operations."[4] However, in the 1984 version of AFM 1-1 (to be published soon), the term *direct action* has been dropped. The draft now states that: "Special operations forces may conduct and/or support unconventional warfare, counterterrorist operations, collective security, psychological operations, certain rescue operations, and other mission areas such as interdiction or offensive counterair operations."[5]

Despite this somewhat broader charter, in practice, there has been a clear shift in Air Force thinking away from classic special operations of the past and toward a special operations force with a much more narrow focus. Thus, either by accident or design, a worldwide force of only some 60 aircraft means that the U.S. Air Force no longer possesses a strong institutional capability to conduct effective counterinsurgency or psychological warfare campaigns.

But in places like the remote reaches of the Arabian Peninsula, beleaguered Latin America, or the arid deserts and jungles of Africa, active guerrilla movements offer numerous opportunities for classic special operations under modern conditions. In deciding how the USAF might respond to these events, if called upon to do so, it is essential that we understand the traditional patterns of guerrilla activities, as well as the new conditions that prevail today. The USAF has a rich experiential base on which to draw in charting its future course of action, a base that extends back to 1916. While surface-to-air missiles (SAMs), helicopters, and modern communications and electronics have added new dimensions to the problems and solutions, the need for traditional commando skills and attitudes that have proved valuable over the years has not diminished. In many ways, the next shooting war involving the U.S. Air Force will probably bear a close resemblance to the guerrilla wars of the past. If the USAF is to live up to the old commando adage "Any Time, Any Place," we must study carefully the history of special operations and use the knowledge so gained to guide us in the application of the new technology available today.

Washington, D.C.

Notes

1. Lieutenant General [now General] Wallace H. Nutting, USA, "Nutting: Stand Fast," *Newsweek*, 6 June 1983, p. 24.
2. John F. Kennedy, *Public Papers of the President, John F. Kennedy, 1962* (Washington: U.S. Government Printing Office, 1963), pp. 453-54.
3. An airman's personal diary, which I have been shown.
4. Air Force Manual 1-1, *Functions and Basic Doctrine of the United States Air Force* (Washington, 1979), pp. 2-19, 2-20.
5. Draft of Air Force Manual 1-1, *Basic Aerospace Doctrine of United States Air Force* (Washington, 1984), p. 3-5.
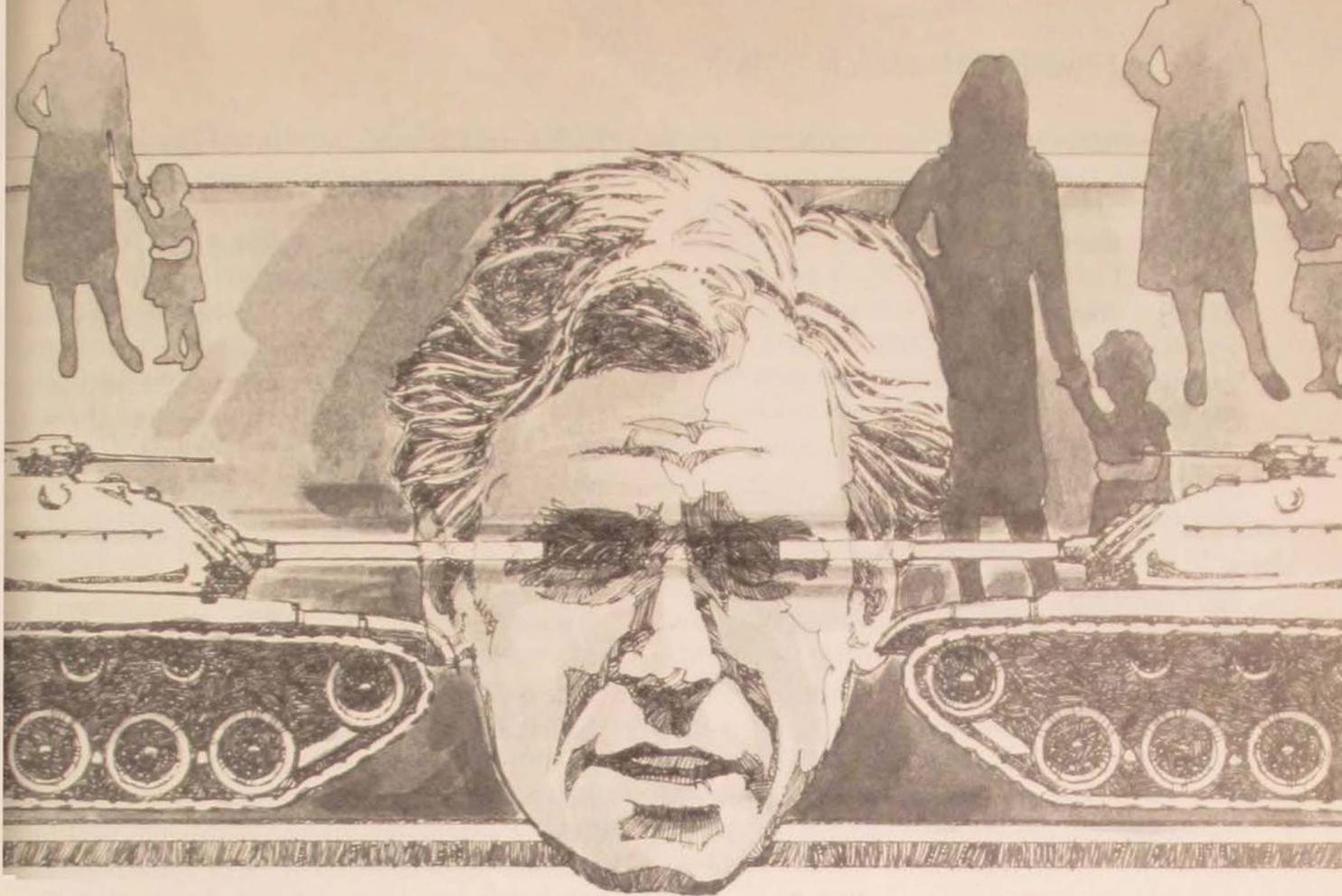
CIVILIANS IN CONTEMPORARY WARS
a *problem in ethics, law, and fact**

Dr. Geoffrey Best

THE concept of "the civilian" as someone essentially other than the combatant, invented by the European founders of the international law of war in the course of the seventeenth and eighteenth centuries, has ever since then held a fixed lodging in all thought and writing about war, especially in what is thought and written about the ethics and the international law of war. But times change, and the meanings of words change with them. We go on using the same words, but they may not mean what they once did. They can even be made to mean whatever designing parties want them to mean. Consider *peace*, for instance, a word from the same family as *civilians*. What peace means in Washington or London now is not at all what it means in Moscow; yet London's and Washington's meaning has more in common with Moscow's than either has with what peace meant in Hitler's Germany and George Orwell's Oceania, where, it may be recalled, one of the three slogans of The Party was: "War Is Peace."

Our concept of the civilian cannot be said to have gone as far across the spectrum as that, but it has certainly moved a long way from where it began. Limited warfare allowed the civilian a good deal of immunity in the eighteenth and nineteenth centuries, and it can still do so. The South Atlantic war of 1982 offers a striking example: only three civilians lost their lives in the Falklands. The civilian does not normally escape so lightly. Indeed, it is a notorious fact about twentieth-century war that civilians suffer very badly in them. The contemporary civilian goes under the same name as the person for whose partial benefit the men who forged our international law of war proclaimed that war—if it was to be a political instrument which ethical-minded men could handle without shame—must control its violence and set itself limits. It was he, the civilian, and all he stood for, that chiefly gave men heart to grapple with the paradox of preserving standards of common humanity in circumstances of war. However, the application of that principle to those we still call civilians has become problematical, and that paradox twice as paradoxical. The purpose of this article is to display the extent of those problems and consider what can be done—and, indeed, what is being done—to resolve them.

The civilian became the living reminder to our Western heritage on its bellicose side that war was *not* the main purpose for which men were born and brought together; he was not so from the start. The heroes, warriors, and righteous rulers who figure so prominently in our collective early years did not normally know any principle of respect for what we would call a civilian, anymore than they could have understood a scale of values placing peace above war. But the men of war did not have it all their own way. They learned early to coexist with the men of peace, to exchange roles with them, and to pay homage to the idea of peace, recognizing that peace, not war, was the professed ideal of their society, their culture, and their church. Christian charity joined Roman jurisprudence to proclaim that the maintenance of peace was a

higher achievement, all human things considered, than the waging of war and that the latter was to be done only in pursuit of the former. In this long process of moderating wars, the civilian emerged as the embodiment of the values of peace, and the field of civilianness became understood by the juridical expositors, the Publicists of the eighteenth and nineteenth centuries, to cover not only those whose nature was noncombatant and those whose function was noncombatant but also those who were de facto noncombatant at any particular wartime moment even though their normal nature and function were otherwise.

While the interests of the civilian were being thus served by this pleasing movement that optimistic contemporaries liked to describe as the civilizing and even humanizing of war, other things were happening that would pull in the opposite direction; and the civilian himself, oddly enough, was helping with the pulling. Another dimension was thus added to the paradox noted earlier. The civilian could be perceived as adding to the difficulties of upholding the protections patiently erected on his behalf; how serious was he about peace and protection? To preserve some values of common humanity in warfare was difficult enough, but to preserve it without the wholehearted support of the class of persons on whose particular behalf the endeavor was launched has proved very difficult indeed and still proves so.

The difficulty can be elucidated under three categories. The first is simply that of industrial growth. The making of war, like the making of everything else, was to be revolutionized by industrial growth. What it did to the civilian in relation to war was to make him more integrally involved in war and more essential to it than had ever seemed possible before. As the technical requirements of war multiplied and the proportion of a national economy necessary for the waging of industrially backed war increased, the civilians who met those requirements and sustained that economy were also bound to become involved in what our century has come to call

"the national war effort." Neither principle nor practice but simply scale was new here. Aside from attempts by Germany and the United Kingdom to starve each other out, the First World War saw unprecedentedly earnest endeavors by one belligerent to bring the other's industrial economy to collapse. The Second World War saw, besides renewed readiness to use the weapon of starvation, a more nearly successful endeavor to wreck the enemy's industrial economy, not by blockade from the sea but by bombing from the air. The civilian, needless to say, suffered much from both experiences. But concern and compassion for civilian sufferings were now to some extent lessened by the drawing of parallels between fighting front and home front, front line and production line. Some jurists between the wars accordingly invented a new legal person, the quasicombatant, away from whom some proportion of legal protection was thought fit to be taken. Defining that proportion, however, proved difficult, and the blurring of the clear old distinction seemed to most jurists and war moralists self-destructive.[1] That such an awkward hybrid should have been proposed at all was the significant thing. The civilian, by no will of his own, had got into a position where his inviolability in wartime was with some show of reason questionable.

The second category of new civilian violability could more plausibly be laid at the civilian's door, inasmuch as it was part and parcel of democratic politics. The replacement of more or less unrepresentative old regimes by apparently more representative new ones was accompanied on the military sides by direct involvement of the people at large in national war efforts under the banner of "The Nation in Arms." The particular significance of this for our civilian was not that he was now more likely to be conscripted for military service (though he was); rather, it was that he was affirmed to have as much of a moral commitment to war as the military, that the will to fight was attributed to the whole political nation, and that at least some part of the exhilaration proper to a happy warrior was

made available to the people at large. To proclaim "The Nation in Arms" was in effect to assert as a political reality that general civilian involvement which was in due course to become an economic reality as well. These two streams of civilian involvement, of course, merged easily enough once the social and economic circumstances were right, and it is worth observing that the political, the avowedly democratic, stream did not run through liberal parliamentary channels alone. "The Nation in Arms" was equally attractive to those who preferred a more forcible word—to national leaderships we have learned to label as plebiscitary dictatorships and totalitarian democracies. "Total war" became the description most often given to the kind of war now envisaged, and there was really not much practical difference between the degrees of civilian participation in it claimed by liberal democrats and by totalitarian ones. On both sides, national spirit or will power was presented as the dynamo of belligerent capability and the breaking of it became a primary military objective. Thus was the civilian willy-nilly hauled into the front line with this embarrassing suspicion now hanging over him, that in many respects he seemed to have gone there voluntarily.

The third heading under which erosion of the inviolability of the civilian is to be found is that of civil and revolutionary war. This compounds the ethical problems already present in all questions of war and peace because obedience to governments has for centuries been an ethical norm in European political philosophy. Political philosophy took governments no less seriously on the international side of their existence. International law recognized governments and no other persons (that was precisely the term used: "legal persons") because nothing else was imaginable in their absence but international anarchy. The international law of war was made for them and for the fighting men organized beneath their banners. Its purpose was to regulate their conflicts with one another, to turning them into ethically and legally moderated wars that self-respecting, decent men could engage in

without remorse. No international jurist before the twentieth century dreamed of extending that regime of moderation into the realm of civil war, because to do so was felt to be a contradiction in terms. Law was something that civilized states existed to enforce within their own frontiers and to observe in their own dealings with one another, but not something that subjects in armed revolt against their normal lawgiver could claim the benefit of. Two exceptions were admitted to this general rule. Belligerents in civil wars might agree among themselves to observe the rules of international wars, and what began as a rebellion and continued as a civil war could become recognized by everyone else as, for all practical and legal purposes, an international war. But such exceptions were not felt, before the turn of this century, to pose any threat to the all-important rule, that the law of war was international law, that government was government, rebels were traitors, and civilians had to be extra careful if they did not wish to have their status misunderstood.

But what was their status? And who were they anyway? This brings us to the problem of fact which was, and always has been, so awkward in respect of revolutionary/counterinsurgency war: it offers the civilian none of the relatively easy means of identifying himself that he could hope for in straight international war. Active insurgents have often resembled the noninsurgent civil population from which they arise and in whose name they insurge. Whether insurgents are concerned about the consequences of this for civilians or not, the consequences usually turn out to be disagreeable. The civilian or the would-be civilian finds himself preyed on, suspected, and victimized by both sides, pushed and pulled between them until he is driven to take one side or the other; after which, he takes the consequences. Modern revolutionary warfare has proved very difficult to keep out of. International law took it for granted that civilians espoused a side to the dispute—how could they not, when their governments were belligerent?—but difficulties were not thereby placed in the

path of sparing them. The case of civil and revolutionary war was and is quite otherwise. Most civilians in such wars do not enter the war with their allegiance determined; they have to decide which side to be on—or have the decision made for them. Driven by the political logic of their situations to claim that they have the bulk of the people behind them, both sides are driven by military logic to make sure that they really do. Dispassionate observers and historians of such wars are often driven to wonder to what extent their followers are willing or forced. The fact is that in revolutionary war the civilian, as I have noted, can hardly be said to exist, and most international lawyers of the nineteenth or early twentieth centuries would not have been willing to waste time looking for him. But most of them now are willing to do that.

B Y the end of the Second World War, humankind had supped full of horrors, and its spokesmen were demanding that nothing of the sort should happen again. The governments of the victorious coalition were ready enough to undertake such unprecedented acts of legislation and judgment as should meet the demand. A common and dominant element throughout was redress of wrongs perceived to have been done to civilians. Military personnel had suffered badly enough during the war but more from neglect or perversion of existing international law than from the lack of it. For the wretched civilian, there simply was very little in existence to which he could appeal in wartime, and none at all out of it. To protect the civilian in peacetime, a new international regime of human rights was promulgated, to which optimists hoped individual states and regional organizations would in due course commit themselves. To protect the civilian better in time of war, certain relevant elements of preexistent law were clarified and confirmed in the so-called Nuremberg Principles, while the Geneva branch of that law, already quite extensive in the Conventions of 1929, sprouted a new Convention expressly

designed for the protection of the civilian alone.

The international law of war as affirmed and developed during the five years immediately following the Second World War is, strictly speaking, the international law of war under which we live still; and scrutiny of the giant problems that the civilian nevertheless still faces could now begin, were it not necessary to make one significant proviso. This body of law is likely soon to be developed again by certain Additional Protocols formulated in 1977 by a diplomatic conference in Geneva and presently awaiting legislative attention in the United Kingdom and the United States.[2] These Protocols by no means replace or supersede the 1949 Conventions; they are additional to those Conventions. They clarify and amplify items contained therein, and they add things that are not. But they do contain and share a feature that dramatically distinguishes them from the earlier phases of the law of war. They mention "war" as little as possible, referring instead to "armed conflict." In the Protocols, indeed, the word *war* occurs only as an inseparable part of the technical term *prisoners of war.* This process of substitution of "armed conflict" for war was begun and carried far already in 1949 because it was then felt desirable, by the great majority of states represented at the Convention-making conference, to make the protections operational whenever a war was going on in all but name. The British government of the later 1940s did not like this change and sought to thwart it, believing that it introduced uncertainties where previously all had been clear. But the United Kingdom, arguing thus, found itself the odd man out at Geneva. The continental European countries had burned into their collective consciousness all too clear a memory of how the Axis powers so recently in military occupation of their lands had strictly and narrowly construed their legal obligations with a view to evading any that could not be said to arise from international war and nothing else; and the United States and the Soviet Union, for quite separate reasons, sided with them. The old law

of war thus became our contemporary law of armed conflict, and the civilian especially was expected to benefit.

Has the civilian in fact benefited? Let us examine the facts of his most difficult situations in contemporary warfare: first, when he finds himself caught up in fighting on land. Everything seems to have been done that can be done to maximize the civilian's chances of survival while battle in the old classic sense is going on in his vicinity—battle between so-called conventional armed forces. The law of war has never been able to offer much besides commiseration to civilians who happened to be in the wrong place at the wrong time. Civilian immunity from attack has as its ideal corollary civilian immunity from the necessary effects and accompaniments of attack, which always include accidents and errors. Ideally this requires civilian separateness from the battlefield. The idea is not as simple-minded as it may sound. Every commander of a besieged place who has ever tried to negotiate safe passage for his civilians through enemy lines has sought to implement this idea. So has every country that has taken the precaution of evacuating parts of the civilian population from close proximity to military targets inviting bombardment. If civilians cannot be protected in one place, and if that place cannot be convincingly demilitarized, then they should be moved to another place where they can be protected.

The logic of this argument has always appealed particularly to the body internationally accepted as having a special role respecting the law of armed conflicts, that unique nongovernmental organization, the International Committee of the Red Cross. Entrusted with the working and upkeep of the Geneva Conventions, it has sought through the past half-century to incorporate in Geneva law provision for the establishment, preferably well in advance of hostilities, of civilian safety zones and has striven during hostilities to set them up ad hoc.[3] Provisions for such zones under one name or another are contained in the Conventions of

1949 and the Protocols of 1977, and it is possible that in certain circumstances more might be done with them than so far has been done.[4] Otherwise, the law offers the civilian in the midst or wake of battle only improved definitions of the rules whose observance should help him, and palliatives for his plight in case they do not. The civilian stands defined as never before, and his immunity from attack (so long, of course, as he remains perceptibly noncombatant) is reaffirmed.[5] Attackers—whether would-be or might-be—are for the first time in international instruments of this supreme status provided with terse reminders of the precautions they must take and the sense of proportion they must keep in order to minimize risk to civilians when legitimate military attacks are being made—precautions and proportions which, being no more than what decent and law-minded commanders bear in mind anyway, are naturally assimilable into military training and are, in fact, already systematically worked into that of British and American armed forces.[6]

After the battle is over and one side victorious, it is time to consider the aftermath as it takes shape for the civilians of the side so far defeated. Military occupation is its likeliest name. Civilians suffered terribly from the military occupation of their countries during the Second World War, and even worse things have happened to them in some of the wars that have taken place since then. The Conventions and the Protocols are therefore replete with provisions for the protection of the civilian once his own government is no longer able to provide that protection and for the security of his means of survival, the maintenance of essential services, and the protection of the medical, civil defense, and emergency-relief personnel who should be there to look after him. If his lot is to share with persons caught at the outbreak of hostilities as aliens in enemy territory the more confined condition of internment, then a full regime for the decent conduct of internment camps is prescribed, exactly analogous to that already achieved for camps of prisoners of war. My

studies to date of the history of the civilian convention have revealed no dissent from the view which certainly prevailed at Geneva in 1949, that if something like it had already been enacted before the 1939-45 war began, much of the wartime suffering experienced by civilians would have been avoided.

In this scenario so far, the civilian we have been imagining has been entirely passive under military occupation. He has presented the occupier no difficulties, no problems; and the occupier, we assume, has for his part been entirely benevolent, even anxiously law-abiding. Let us now change the scene to what corresponds more closely to facts on the ground and consider the case of an occupied country by no means passive under the yoke and an occupier consequently less benevolent than he might have been. The problem that remains to be considered can be divided into two branches: First, can the civilian put up any sort of resistance at all without forfeiting his protected status? And second, how much is his actual situation likely to be jeopardized by the violent resistance of others on his behalf?

The first question is a good deal more comfortable to answer than the second, although the status of civilian resisters did not acquire any sort of clarity until after the Second World War, and, indeed, it still has something of the Cheshire cat about it. The fact is that until the First World War and its revelations of how much civilians could suffer under unregulated military occupation, the international law of war was frozen into an assumption of civilians' duty of passive acquiescence. It was on the side of the occupier to the extent of branding departures from that duty by such memorable and tremendous terms as *war treason* and *war rebellion*. Reflection on the grim experience of 1914-18 worked on the iceberg between the wars but had thawed no part of it before the grimmer experiences of 1939-45 immolated a much larger number of civilian war victims. Both case law and conventional law in the later 1940s did much to vindicate such civilian resistance as had then

been made to the occupier. Some of it had claimed to be lawful according to the Hague regulations. Courageous officials of certain occupied countries, for instance, had dared to challenge the legality of certain of the occupier's laws and orders. The Norwegian teachers' organization and similar well-prepared bodies actually achieved some success in persuading the occupier to modify his demands into greater conformity to what international law allowed. This was admittedly an extreme and unrepresentative case, there being no country in Nazi-occupied Europe where the Nazis were more ready to go softly-softly with a restive population. Something of the same sort happened in the Israeli-occupied West Bank in 1967, which again— at *that* date, anyway—may be discounted by the skeptic as peculiar. No doubt civil resistance against occupiers is a ticklish business, and civilians who "push their luck" against any but the mildest of occupiers are asking for trouble.

But the trouble they can encounter at the hands of a power that cares anything at all about its international legal obligations is by now quite well defined. The means that may be used to punish resisting civilians are no more unlimited than the means that may be used to injure enemy combatants. We may look forward to clarifying our perceptions of them with the aid of a text soon to appear in book form from the hand of Adam Roberts, Reader in International Relations at Oxford, a scholar who is making this field of the international law on military occupations and resistance all his own. Civil resistance, he plainly shows, can no longer be considered as it once was, an offense against international law, nor dare a law-regarding occupier any longer dismiss it as if it were. Civil resisters by disobedience and noncooperation necessarily invite punishment, but what the occupier may lawfully do is determined quite precisely by the protections given to the civilian by the Fourth Geneva Convention (and by Article 75 of the First Additional Protocol). The death penalty is not to be inflicted on civilians except for violent offenses, spying, or serious and death-causing sabotage. Civilians, individually or collectively, may not be the subject of reprisals or be taken as hostage. If arrested, they must not be maltreated in any of the ways (torture, corporal punishment, mutilation, etc.) listed in those treaties. They must not be punished except after fair trial. None of this is to deny the military occupier's belligerent right to ensure his security or decent means of maintaining it. Roberts's summary of this difficult and dilemma-fraught subject does it admirable justice:

> For better or worse, the rules of international law relating to occupations are not just rules for military occupation, but also rules for alleviating the effects of such friction and conflict as almost inevitably occurs between occupation forces on the one hand and participants in resistance, including civil resistance, on the other.

The words *friction* or *conflict* clearly suggest some difference on the scale of intensity, but conflict on its own seems hardly enough to characterize what may be found at the other pole of the genuine civilians' experience of military occupation: the kind of armed conflict that develops when an occupying or would-be occupying army meets resistance from guerrilla fighters. The terrible facts about this kind of warfare have become sufficiently familiar to our generation to need no further comment. What is surely by no means so well known is the extent to which international law has quite recently been developed with a view to making such facts less so.

The old law of war was, for mixed reasons, slow to recognize the guerrilla. The guerrilla tended to make himself indistinguishable from the civilian, and the respectable soldier ran into difficulties when he attempted to distinguish between the two. There was also the unmistakable tendency of guerrilla warfare to partake of the character of banditry, rebellion, and general intranational mayhem. What soldiers could do to one another was nothing compared to what civilians could do to one another, and self-respecting military men could be forgiven for noting the contrast with some complacency.

More self-serving was the moral superiority implicitly claimed by governments and their armies, as if their own uses of force for the alleged good of the people placed in their charge were above criticism. Nasty truths about the actual performance of most governments and armies were well enough known in most parts of the world before their moral bluff was called by the Second World War's display of the atrocious propensities of certain supposedly exemplary armed forces. No one in even the most "advanced" countries of the world could henceforth allege that guerrillas and rebels had a monopoly of atrocity; neither has anything that has happened in the world since then made that allegation more plausible. Contemporary development of international law, therefore, has included various levels of recognition of the legitimacy of causes for which guerrilla fighting may be undertaken and has taken the guerrilla himself into its ample bosom.

But into that bosom the civilian has also been taken. How can the two proceed together? May those giant changes that have been made in the law since 1945 be expected to moderate the normal rages of guerrilla warfare—especially when it is also civil and revolutionary?

The rules of conduct and combat laid down in the Protocol for the guerrilla who seeks to maintain the status of a lawful combatant (and thus to benefit from the protections of the Geneva Conventions) allow him to behave and look more like a civilian than ever before.[7] The great majority of governments participating in the diplomatic conference that produced the Protocol agreed that the well-meaning guerrilla fighting in a good cause did not stand a fair chance unless the law was thus extended toward him. At the same time, the distinction between civilian and combatant was carefully preserved. Nothing has been put into the Protocol that could jeopardize the civilian's protected status. On the contrary, the classic rules are stoutly restated. The civilian must not be made the object of attack by either side.[8] The terrorizing of civilians is particularly condemned, no matter

who does it.[9] Civilian presence must not be used to cover military purposes.[10] It is declared to be perfidious (the law of war's ultimate sin) for a combatant to "feign civilian, non-combatant status."[11] And yet guerrillas are expressly required to distinguish themselves from the civilian population only when "engaged in an attack or in a military operation preparatory to an attack."[12] This is to put the law of guerrilla warfare onto a knife-edge of delicacy. Given the legitimacy that guerrilla operations undoubtedly have, the law has had to give them fair recognition. But the civilian's margin of safety in such circumstances has shrunk a good deal. More than usual goodwill and unusual degrees of political prudence seem required on both sides if the civilian's last state is not to be worse than his first.

Exactly how nations will incorporate these changes in the international law of armed conflicts into their own programs of military and civic instruction remains to be seen. Subscription to the Geneva Conventions and the Protocols includes various undertakings to make them widely known.[13] To what extent governments have so far taken those undertakings seriously is a matter into which we need not inquire now. But it is clearly a matter of plain self-interest for prospective civilians to understand well in advance what their legal status will be in any international armed conflict that may engulf them and what protections the law offers them if they observe that protection. Such clarity of understanding is all the more important in an age of national wars and people's wars. Countries that have always allowed for some amount of guerrilla fighting in their defense plans will approach these problems with clearer minds than those to whose military cultures guerrilla operations seem a malodorous exotic. For example, the proportion of civilians as we have been conceiving of them will be relatively reduced in Yugoslavia and Romania where highly visible preparations are made for massive popular resistance; all such resisters are constitutionally proclaimed members of the official

armed forces and thus, presumably, privileged combatants according to the Geneva Conventions. That is one method, short and easy, to solve the problem of the civilian. But for other countries where the civilian may not wish such rhetoric to be taken so literally, his safer way appears to be perfect knowledge of and punctilious observance of the law. He may patriotically preach "victory or death," but he would be ill-advised, in the presence of the foreign enemy, to practice it.

Such are the hopes and fears that may be expressed about the survivability of the civilian in international war on land. Hopes rest on the supposition that he is willing to be and physically can be distinguished from the armed forces. Fears enter in the event that he cannot. The borderlands of fact and law, so far only intermittently obscured by patches of mist, now become subject to thick and lasting fog. Separability of civilian from combatant can prove physically almost impossible. It approaches being so wherever total national defense preparations fail to provide for the protection of such civilians as must be quite beyond combatant participation: those nursing mothers and young children, cripples and greybeards who regularly form the irreducible residue of, so to speak, arch-civilians whenever the civilian category comes under critical scrutiny. Separability becomes wholly impossible when pressure of circumstances produces as military-ridden a national community as, for instance, the Palestinians turned out to be in some of those parts of Lebanon which Israel's armed forces invaded in 1982, or when government's response to widespread popular insurgence is to compel the militarization in one way or another of all the subjects it means to hold in its grasp. Exceptional circumstances can create exceptional communities within which the word *civilian*, though, of course, it continues to be used, must mean something very different from whatever it can mean among peoples less unhappily situated.

To mention Lebanon is to enter an area strewn with legal as well as material mines and booby traps. Within its last ten dreadful years every species of armed conflict from whose unregulated conduct the wretched civilian can suffer has been identifiable in Lebanon, the international species being only one of them. Everything said so far has been about the civilian in international armed conflict, to which the First Protocol of 1977 and all but one article of the 1949 Geneva Conventions apply. The noninternational species are much more lightly provided for by the much shorter Second Protocol and by an article common to all four Conventions, Article 3. Those provisions claim for the person taking no active part in hostilities and, for civilians generally, elementary humanitarian protections. They also (through Article 3) invite the parties to the conflict to conduct it by Geneva rules even though they are not legally bound to do so. Their success in moderating internal conflicts has been limited partly by the fact that parties to civil and revolutionary war generally find it more difficult to recognize the civilian than international parties do, often because they refuse on principle to believe that there is any such person. It needs a resolutely humane revolutionary or counterrevolutionary to feel obliged to jeopardize the success of his cause in order not to hurt civilians perceived as being on the enemy side. More familiar is the sort of revolutionary or counterinsurgent who has no perception at all (except for propaganda purposes) of the civilian in such a struggle. Prudence may incline him to hold his violent hand, but principle will not. If that enemy civilian holds any place at all in his side's power structure, the contemporary conductor of revolutionary or counterinsurgency conflict is likely to regard him simply as an enemy and to do him violence accordingly. Only where civil/revolutionary war is an incident of an otherwise unmistakable international war can the whole weight of international law be brought to bear.

When that clear and dominant international character is not present, the law has no louder voice than common Article 3 gives it and the ever-resourceful International Committee of the

Red Cross can amplify it. Revolutionary and counterinsurgency parties therefore find themselves in a vicious bind, whether they like it or not; and the civilian suffers most from it. Each belligerent party is likely to find it difficult to translate the idea of the civilian into acceptably recognizable terms, and if one of them is nevertheless so decent as to try to do so while the other does not, he may complain that the other is using a double standard. This makes a peculiar difficulty, perhaps not wholly foreseen by the humanitarians who pressed so hard for the law's extension into international wars. Revolutionaries and the regimes they are fighting are not accustomed to accept what belligerents under the classic law of war have long learned to accept, that the classic rules and principles have a chance to work only when detached from the rights and wrongs of the struggle, whatever they may be. A writer who has recently paid meticulous attention to this problem, Professor William V. O'Brien of Georgetown University, admits in his important recent book *The Conduct of Just and Limited War* (1981) that he finds the double standard hard to stomach. He complains of it as "a kind of revolutionary 'wild card' that runs throughout the intersections of the international system."[14] But why does he write as if only revolutionaries played it? Don't counterrevolutionaries play it, too?

Not so insuperable but more enormous is the other great field of civilian risk: risk from the air. In this respect international legislation has recently caught up on a lot of lost time. Air power developed so quickly after 1907 that the law had great difficulty in keeping up with it. It therefore remained in the relatively undeveloped form of general principles, while the laws of land and sea war progressed from the same basic principles into specific prohibitions and restraints.[15] World War II opened with some such rules in draft form only;[16] it ended with such neglect of prohibitions and restraints by the victorious powers that further work on them was delayed by a generation. Nothing of any importance in the legislation of the later 1940s

bears on how aerial bombardment may be conducted; however, a great deal of the 1977 Protocol does. It has, of course, no retrospective effect, as some "Nuremberg law" had to have, but it does confirm what much juridical opinion had always maintained: that indiscriminate and terror bombing are unlawful and that civilian deaths and damage, so far as they are unavoidable as corollaries to attacks on military targets, can be justified only by the rule of proportionality and after the taking of such precautions as will minimize civilian risk.[17] Military targets are realistically defined;[18] proportionality and precautions are simply spelled out. Nothing here inhibits the use of bombing to achieve real military advantage. Much, however, reminds us how many civilians have died in the wars of our century because of bombings done for no real or proportionate military advantage.

The plain purpose of this definition in this Protocol must be to protect civilians by reminding combatants that the only enemies they need attack are each other and, by logical extension, each other's means of fighting back. To eliminate enemy combatants and deprive them of the means of eliminating you is to gain military advantage in its most definite and pure form. But military advantage is capable of more political construction. Is it not gaining a definite military advantage, for example, to hasten a militarily defeated enemy's progress to the negotiating table—even, supposing him to be given to duplicity and prevarication, to keep him there and concentrate his mind to the point of signing on the dotted line? Many readers will recognize the historical instances I have in mind: the 1945 bombings of Japan and the 1972 Linebacker bombings of North Vietnam. Neither of them did significant damage to material war-making capacity, which in both cases had already been brought as low as aerial and maritime superiority could batter and blockade it. Instead, these bombings had purposes that can certainly be called political but which were military too, if an earlier instead of a later end to slaughter and conclusion of a cease-fire may be so understood.

It seems difficult to deny that, although the termination of a war may have a definite political purpose, it can also be called a definite military advantage.

This point has been insistently argued with reference to the 1972 bombings by W. Hays Parks, Chief, International Law Branch, International Affairs Division, in the Office of the Judge Advocate General of the Army, Washington, D.C.[19] Those bombings were not like the bombings of the Japanese cities in 1945, which were either indiscriminate or "area" in character. Rather, they were carefully planned and meticulously carried out as circumstances permitted. The United States by this stage of its Vietnam agony had long gotten over its early cavalier approach to the law of war. The Air Force was used in a strictly law-abiding manner. There was nothing indiscriminate or "area" about these raids. If death and destruction occurred beyond and besides the military targets actually aimed at, that is bound to happen in war. The targets were bona fide military ones, and they were attacked with singular intensity. Over twelve successive days, the B-52s reminded the North Vietnamese government of what Washington thought it was forgetting: that although the United States wished to withdraw from the conflict, it nevertheless had enormous firepower at its disposal and was willing to use it. North Vietnam, it is argued, got the message. A legitimate politico-military purpose was achieved in the most lawful possible way, even as it might be under the First Protocol of 1977. The targets aimed at were not all of the first importance—how could they be, when most military targets of the first importance had been bombed to bits already?—but "in the circumstances ruling at the time" (i.e., North Vietnam's dragging its negotiating feet) "their destruction. . . offered a definite military advantage."[20]

The matter can, however, be looked at differently. George Quester, for instance, has suggested that it was not so much the military destruction that reconcentrated the minds of Hanoi as the awesome display of military might

that produced it,[21] and by implication the questions follow: What if there should be not even the most trifling of military objectives left to bomb, and still the enemy government refused to come to terms? Is there any point down this strictly law-regarding road at which the civilian himself could become, for political reasons, a military objective?

THIS article has sought to sketch the law's provisions for the protection of the civilian in time of war. They are copious and detailed and go as far, one might think, as law can go. Perhaps they go even further. In some of the more extreme situations in which the civilian may find himself, the law on the conduct of war may become unable to help him or may even, strictly construed, become an additional instrument of his torment. It is therefore wise to recall in conclusion that these parts of international law are only half of the whole. Besides the law regarding the conduct of war, the classic *jus in bello*, there is also the *jus ad bellum*, the law about going to war in the first place or continuing in it once it has, perhaps, gone wrong. Ethics marches through both halves of the law of war and has as much to say about the one as the other. What it keeps saying, to my ear anyway, is: Discriminate. Cling to the principle of discrimination. It is precious and crucial. Its latest legal form, the 1977 Protocol, has had to recognize that a bit of it has gone.[22] One can understand why. The circumstances of twentieth-century warfare have driven the law formally to concede that discrimination may have to be relative and proportionate. But from an ethical point of view, that concession must be regarded as reluctant and mistrustful. The means of achieving even apparently good ends can be so beastly as to spoil the end itself. The principles of discrimination between the real civilian and the real combatant remain crucial to a morally acceptable law of war. If war became morally bearable only because it could at least be discriminating, does it remain morally bearable past the point where it cannot be? And with an

eye particularly to the civilian, whom the law knows by only the simplest test, should ethics complement it by inviting distinction between civilians who may with some truth be said to

have brought war upon themselves and civilians upon whom war comes more like a hurricane from afar?

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Notes

1. This episode, which merits further inquiry, is covered by William O'Brien in *The Conduct of Just and Limited War* (New York, 1981), pp. 46-49.

2. They are given with appropriate commentary in Adam Roberts and Richard Guelff, *Documents on the Laws of War* (Oxford, 1982), items 26 and 27, pp. 387-461; also in Dietrich Schindler and Jiri Toman, *The Laws of Armed Conflicts*, Second Edition (Alphen and Rockville, Maryland, 1981), items 48 and 49, pp. 551-629.

3. Sydney D. Bailey, "Nonmilitary Areas in U.N. Practice" in 74 *American Journal of International Law*, 1980, pp. 499-529, offers a convenient summary.

4. First Geneva Convention of 1949, Article 23; Fourth Convention, Articles 14 and 15; First Additional Protocol of 1977, Articles 59 and 60.

5. First Additional Protocol, Articles 50 and 51.

6. The fourth chapter of the First Additional Protocol is devoted to "Precautions in Attack" (Article 57) and "Precautions against the Effects of Attacks" (Article 58).

7. Third Convention, Article 4. The extensions in the First Protocol, not so obvious, but nonetheless momentous, will be apparent to any careful reader of Article 1 (4) and Articles 43 and 44.

8. Article 51 (2), "The civilian population as such, as well as individual civilians, shall not be the object of attack." Also Article 57 (5).

9. Article 51 (2), "Acts or threats of violence the primary purpose of which is to spread terror among the civilian population are prohibited."

10. Article 51 (7) and by obvious implication, Article 58.

11. Article 37 (1) (c).

12. Article 44 (3).

13. The Four Conventions, respectively Article 47, 48, 127, and 144; First Protocol, Article 83.

14. O'Brien, p. 336.

15. The reference in particular is to the Hague Land Warfare Regulations, annexed to the Fourth Hague Convention of 1907, and to the similarly well-developed body of customary rules for naval warfare, which nearly acquired conventional status in 1909. A historical sketch of these matters is given in Geoffrey Best, *Humanity in Warfare* (London and New York, 1980), chapter 3.

16. The Hague Draft Rules of Aerial Warfare, 1923 (in Roberts and Guelff, item 13; Schindler and Toman, item 19).

17. Indiscriminate attacks of every kind are prohibited in Article 51 (4,5). For the prohibition of terror attacks, see note 9; and for precautions and proportionality, Article 57, read together with Article 51 (5).

18. The definition of military objectives in Article 52 (2) demands quotation in full: "Insofar as objects are concerned, military objectives are limited to those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage."

19. W. Hays Parks, "Linebacker and the Law of War," in *Air University Review* (January-February 1983), pp. 2-30. See also, for the same argument in long-term perspective, Parks's article "Conventional Aerial Bombardment and the Law of War," United States Naval Institute *Proceedings*, May 1982, pp. 98-117.

20. Expressions from the definition are reproduced in full in note 18.

21. George H. Quester, "The Impact of Strategic Air Warfare," *Armed Forces and Society*, Winter 1978, pp. 179-206 at 190-91, 197-98.

22. Simply in its formalization of a rule of proportionality to permit "incidental loss of human life, injury to civilians, damage to civilian objects, or a combination thereof" which is not "excessive in relation to the concrete and direct military advantage anticipated." Article 2 (2) generally.

Any notion that "war in the nuclear age has become a political absurdity" is a nonsense of all reason which cannot pass inspection. The reality of the matter is that armed conflict may be drifting towards a rather new or *revisionist* form in which the Clausewitzian conception of war as "a real political instrument, a continuation of political commerce, a carrying out of the same by other means" is completely reformulated into a new life, the basis of which is an upheaval in the theory of strategy. The struggle for power, that is, the pursuit by real violence of an order in relationships through which power is always remitted, being endemic in international and social relations, if stalled on some avenues of expression (the nuclear and conventional paths), unerringly finds others.

Alexander Atkinson, *Social Order and the
General Theory of Strategy*, p. 74

AIRBORNE RAIDS

a potent weapon in countering transnational terrorism

COLONEL JOSHUA SHANI, ISRAELI AIR FORCE

I believe, with absolute faith, in our ability to carry out any military task entrusted to us. I believe in Israel and in the general sense of responsibility that must accompany every man who fights for the future of his homeland.

Lieutenant Colonel Jonathan Netaniahu
Quoted in Ben-Porat, *Entebbe Rescue*

THE spirit embodied in these words of Lieutenant Colonel Jonathan Netaniahu is a fundamental prerequisite for successfully performing an airborne raid. Colonel Netaniahu can speak with authority, having led the special force into the Old Terminal at Entebbe to free hostages held by Palestinian terrorists on 3 July 1976.

A *raid* is an operation, usually small scale, involving swift penetration of hostile territory to secure information, confuse the enemy, or destroy his installations. It ends with a planned withdrawal upon completion of the assigned mission.[1] In the context of this article, I would add "to save hostages and prisoners of war."

Most antiterrorist raids are against small terrorist groups or even, on occasion, against state-sponsored terrorism. International terrorism has affected many countries in recent decades. Perhaps a better term for this social cancer is *transnational terrorism*, since *international* has a false ring of legitimacy. Regardless of semantics, transnational terrorism could not survive without sponsors. The Soviet Union is by far the largest sponsor, but Cuba, Libya, South Yemen, and certain other countries have contributed their share as well.

Diplomatic efforts to solve this world problem continue, and every transnational terrorist incident begins with an attempt to resolve the situation by diplomacy without resorting to force. But national hypocrisy on this topic is so pervasive that it is almost impossible to counter terrorism quietly. The first to scream are the Communist bloc countries which, in many cases, prompt other nonaligned and, more significantly, more moderate countries to join the chorus. I personally subscribe to an attitude expressed in a letter of advice to Washington in the 1963 Congo crisis:

> If we are going to be damned anyway, because we dare to rescue a group of people threatened with death and mutilation, we should have done this firmly, openly, with dignity and, if you wish, defiantly.[2]

People holding innocent hostages to achieve some end, whether it be monetary or political, deserve payment in their own coin but at higher interest.

As an aviator, I have chosen six well-known airborne raids to analyze, compare, critique, and evaluate. I shall briefly recount some details of each, establishing a common frame of reference for the reader.

The first raid to be considered is Dragon Rouge (1963), an operation involving a combined force of American C-130s and Belgian paratroopers. They freed a group of hostages held by Simba rebels in Stanleyville, the Congo. The paratroopers were transported by C-130s from Belgium to Ascension Island, in the South Atlantic, with refueling stops in Spain and later at Kamina, 550 miles from Stanleyville. From there to the drop zone near Stanleyville, the C-130s had an escort of B-26s of the Congolese Air Force. After the drop, the Belgians took the airfield, landing their jeeps and supplies. The Belgian paratroopers stormed the city and freed the hostages. Casualties included 3 soldiers dead and 7 wounded, as well as 27 dead among the hostages, but 2000 hostages were saved (later, hundreds more were executed in vengeance).

The next of the raids, chronologically, was the Son Tay prison camp raid in Vietnam on 21 November 1970. After several months of preparation, a very well-trained force flew from Thailand with HH-53 and HH-3 helicopters to rescue prisoners of war from the Son Tay prison near Hanoi. After air refueling and with a large-scale diversionary action staged by the U.S. Navy, the force landed to find the prison empty. Although the force met 200 enemy soldiers by mistake because of a helicopter's landing in the wrong compound, total casualties for the entire operation were one minor wound among the force members and a broken ankle suffered by a crew member during the planned crash-landing into Son Tay.

In the *Mayaguez* incident on 12 May 1975, the Cambodians captured an American merchant ship on the high seas, taking the crew to the mainland and leaving the ship at Tang Island,

35 miles from the mainland. Intensive U.S. Air Force activity did not prevent the Cambodians from taking the crew ashore, but the Air Force sank three gunboats and frightened them so that they freed the crew. Meanwhile, a strong U.S. Navy force of two destroyers and an aircraft carrier approached the area, and 1100 Marines advanced to Thailand. After four days, and while the Cambodians took the crew back to their ship, a strong attack was launched on targets on the mainland and on the island, with bombing by the Air Force, assisted by Navy planes and the landing of Marines by Air Force helicopters. Another group of Marines secured the *Mayaguez*. Casualties on the island were 18 killed and 50 wounded; the 39 civilian crew members survived.

In contrast, during the Entebbe raid on 3 July 1976, four Israeli C-130s flew to Entebbe to rescue 105 hostages held in the Old Terminal of the airport. One C-130 landed there, and after a few minutes the hostages were freed and the terrorists dead. The other three C-130s landed after a few minutes to secure the area and support the evacuation. The flight to Entebbe was nonstop from Israel, and on the return flight, there was a landing in Nairobi, Kenya. Casualties included 3 dead civilians and 5 wounded, 1 dead officer, and 4 wounded soldiers.

Another incident occurred in October 1977 when the West Germans pursued a hijacked Lufthansa airliner with two Boeing 707s carrying GSG9 commandos and a diplomat. On 17 October, the Lufthansa airliner landed at Mogadishu, Somalia, and after a few hours of preparation, a group of 28 GSG9 commandos stormed the hijacked craft. In the brief exchange, 3 terrorists (Arabs and a German) were killed and 1 wounded; 1 commando, 1 stewardess, and 4 passengers were slightly wounded.

On 24 April 1980, a force was launched to save American hostages being held in the U.S. embassy in Tehran, Iran. The first part of the mission was a flight of C-130 tankers from a site, probably in Egypt, to a rendezvous point with 8 RH-53s at a site designated Desert One in Iran. The C-130s were to refuel the helicopters on the ground for the continuation of the mission. Because of bad weather and technical problems, 5 helicopters were left at Desert One, and the mission was aborted. During the evacuation, there was a collision between an airborne RH-53 and a C-130 on the ground. In the ensuing fire, 8 crew members lost their lives. It was decided to leave the helicopters and evacuate the rest of the force in the remaining 4 C-130s.

(My sources for the backgrounds of these airborne rescue operations are limited, for the most part, to published accounts of the raids in the media. I do not have access to the classified documents that go into great depth about the raids. Still, from my own personal experience in such operations, I believe that I can shed enough light on certain points about these raids concerning planning, command and control, preparations, political attempts, and the execution itself to support some conclusions and recommendations. Because I shall discuss these aspects as they are illustrated by the various raids, I shall not necessarily adhere to the same chronological order used earlier. Certain raids are classic in their handling of certain concepts and deserve to be highlighted. In other cases, the raid is not particularly relevant to the concept, so it may be downplayed.)

The importance of airborne raids in support of hostage rescues from transnational terrorists cannot be underestimated. Transnational terrorists are choosing hostage holding as their mode of action with increasing frequency. Because airborne raids have had relatively great success in freeing hostages with minimal loss of life to the rescuers or to the hostages themselves, governments facing such situations in the future can gain some clear advantages if they understand and refine this option for action. Their ability to respond effectively may well depend on their familiarity with the composite lessons learned, for such raids may become increasingly difficult to execute successfully as the terrorist learning curve also goes up.

Let us now turn our attention to the first steps

in a rescue attempt. In a typical hostage situation where terrorists are holding a nation's citizens for whatever reason, the government almost always tries to play its diplomatic card.

Political Attempts

Political initiatives are usually put into effect before or during the military planning stage. Sometimes these initiatives are just to gain time for planning and assessing the situation, but usually they are an effort to resolve the situation without resorting to force. Unfortunately, the brief history of special risk operations shows that political attempts have not been particularly effective in crisis resolution. Their major value has been to buy valuable time, which in some cases has made the difference between rescue and disaster. In the *Mayaguez* incident, the U.S. President instructed Secretary of State Henry Kissinger to seek diplomatic assistance from China in an effort to persuade the Cambodians to release the crew and the ship. However, at the same time, he said:

> Again, I wanted to be hopeful, but I also knew we had to make contingency plans in case the diplomatic initiatives were unsuccessful. At that meeting I told the Defense Department to start the movement of ships, to undertake the aerial surveillance, and to find out whether the crew was on the ship.[3]

Parallel to that, so it would be "perfectly clear" to the Cambodians, White House Press Secretary Ron Nessen made a brief statement:

> We have been informed that a Cambodian naval vessel had seized an American merchant ship on the high seas. . . . The President . . . considers the seizure an act of piracy. He has instructed the State Department to demand the immediate release of the ship. Failure to do so would have the most serious consequences.[4]

Thus diplomatic effort, military preparation, and a direct threat to the other side were all taking place at about the same time. In other instances, it has not always been so. During the Entebbe operation, there were many diplomatic efforts, mainly through the French government,

as well as direct calls to General Idi Amin by representatives of the Israeli government. The military option was not openly mentioned to anyone, and no threats were directed against Idi Amin. The North Vietnamese treated the American prisoners of war (POWs) in a terribly inhumane way in order to influence American public opinion against the war and frighten the American pilots who flew the missions over hostile territory. In a very real way, the POWs were treated as hostages. The U.S. administration tried all kinds of diplomatic efforts to improve the conditions of the POWs, but nothing changed. The North Vietnamese recognized the POWs as a card in their hand to be played for all it was worth.

During the hijacking of the Lufthansa jet on 13 October 1977, a military option was developed to counter a diplomatic failure. After the German government received the demands from the terrorists, its spokesman, Klaus Bolling, said that the ultimatum was being taken very seriously.[5] However, the Germans did not waste any time. They sent their chief troubleshooter, State Secretary Hans Jurgen Wischnewski, to negotiate with the terrorists, but 31 additional troops from GSG9 accompanied him, along with another Boeing 707 and a GSG9 special force sent to Cyprus to intercept the route of the hijacked Lufthansa. Was it a diplomatic effort? No. First, there was no one with whom to talk (except to negotiate with the terrorists to buy time), and, second, leaders in the Schmidt government were so thoroughly angered by the Schleyer case (the West German industrialist who was kidnapped and subsequently murdered) that they were ready for immediate military action.

In the Iranian rescue attempt, the political consideration was the main issue for some time.

> Washington, November 9: President Carter today asked Americans to suppress their outrage, anger, and frustration about the events in Iran and to support Washington's efforts through quiet diplomacy to win the release of the Americans held hostage in Tehran.[6]

At the same time, military planning was being conducted in Washington. The diplomatic efforts continued, including high pressure and political and economic sanctions, together with the military preparations. However, for the most part, the Carter administration seemed to think it could resolve the crisis without resorting to force.

In the rescue of the hostages in the Congo (Operation Dragon Rouge), all political attempts involving Belgium, the United States, the Congo, Kenya, and others failed, and hundreds of hostages continued to be held in Stanleyville. The problem there was that the United States was greatly concerned about world opinion:

> If we went in late, while both Dragon Rouge and Van de Waele were by "coincidence" assaulting Stanleyville at the same time, our hopes for understanding and acceptance might be hard to fulfill.[7]

Most of these special operations are conducted without the permission of the country involved. Sometimes they are contrary to that country's expressed wishes. Should these facts be a political consideration? Some operations may be condemned later in the U.N. Security Council or General Assembly. Is this to be a consideration? I believe transnational terrorism must be fought with force—sharp and immediate. Political attempts are acceptable for a limited time, but a government must never surrender to blackmail. Use of the diplomatic option to gain time is perfectly all right, but the responsibility of a country to save her own people is over and above the importance of world opinion or a U.N. resolution that is passed by hypocritic, narrow interests. So, from my perspective as a military aviator, strategists should begin to plan for a special rescue operation the moment a crisis situation arises, realizing that diplomatic efforts will probably not produce the desired release of hostages. In any event, even if the planning for the exercise of a military is not put into play, it serves a valuable purpose and trains the forces involved to be better prepared for times when they are actually called into action.

It also makes those involved in negotiations on both sides aware that the aggrieved nation is not without recourse.

Planning

The military planning stage began at the onset of all the crises in question. In the *Mayaguez* incident, time was a critical factor. The main concern was that the Cambodians would take the crew to the mainland, making the rescue operation that much more difficult. For those in authority to make an educated decision, it was necessary that more than one plan be available. According to then-Chief of Staff General David C. Jones, five plans were prepared. The plan to use the twin-pronged Marine assault coupled with the bombing of selected targets—the plan that President Gerald Ford selected—was, in reality, option four.[8] I believe that this number of options is excessive. The military echelon should eliminate a few options and let the President decide from two or three. In this incident, the plan decided on was a maximalist plan. Using 2 destroyers, 1 aircraft carrier, 2 Marine units with 12 helicopters, and numerous Air Force fighters and bombers, as well as reconnaissance aircraft, President Ford felt "a strong personal desire not to err on the side of using too little force."[9] This type of decision is acceptable as long as time is not lost in gathering adequate forces. Later on in the execution phase, it becomes increasingly difficult to control and coordinate such a force to prevent it from overreacting, as happened in this case.

On the other hand, the Germans did not have sufficient planning time. The planning, in effect, was carried out simultaneously with the execution, which is possible only if a special force is ready for such a mission at all times. I am reasonably sure in the *Mayaguez* incident that if a special force such as this had flown from the United States (and there was time for this), the outcome would have been better.

In situations such as hostage rescue attempts, planning is usually based on assumptions or

speculations, especially during the first hours or days of the crisis. In the Entebbe operation, the first plan was rehearsed but then canceled for many reasons, allowing only a little less than two days to conceive and rehearse the final plan. There was no way to make a detailed plan, so many points uncovered were left to the discretion of the command post and the military commanders upon execution of the operation.

During the Congo rescue mission, time was running out also, but the most complicated aspect was to make a quick plan involving American air crew members and Belgian paratroopers and coordinate it with France and Spain. In the plan, there was a stage of deception, and "the move to Ascension was to be described as a 'joint US-Belgian long-range airborne training exercise'."[10] Who would have bought it? Hundreds of hostages are being held in the Congo and by sheer chance 12 C-130s are landing paratroopers on an island not far from the Congo coast. It is better not to mention something unwise and attract unwanted attention, as happened in this operation. The plan to drop the paratroopers near the Stanleyville airport to capture the airfield so as to let the rest of the C-130s land was too time-consuming and complicated. In such operations involving hostages, time is of the essence. Instead of waiting for the C-130s with the jeeps to land, it was determined that jeeps would be airdropped with the troops so that the vanguard of the assault force would be able to continue immediately to the city while the rest of the force organized and followed the assault team.

In the Iranian rescue mission attempt, there was possibly too much time. As stated in the Holloway Report:

> Planning was adequate except for the number of backup helicopters and provisions for weather contingencies. A larger helicopter force and better provisions for weather penetration would have increased the probability of mission success.[11]

I disagree. A failure of two of eight helicopters as a planning assumption is reasonable, and the planners' counting on better serviceability with

the Marine helicopters is logical. I find the plan (up to Desert One) very good, but the fact that the planners chose (or were instructed) to let the Army, Air Force, Navy, and Marines participate in one special operation only complicated the later preparation and the command and control. An equal share of credit to all the services is not an essential element of a rescue plan—success is. Presenting the plan to the pilots only after arriving at the forward operating location (probably in Egypt) was also a flaw. One of the pilots noted in his ACSC student report: "We were all anxious to see the real plan. It turned out to be quite a surprise."[12] Despite the need for operational security (OPSEC), this failure to acquaint the pilots with the particulars of the plan beforehand was a flaw in the operation.

The planners of the Son Tay raid also had adequate planning time. They could afford to make as nearly perfect a plan as possible, and it was excellent except for the intelligence failure. However, I find the massive deception operation by the Navy after two years of no Navy strikes quite implausible, particularly since they were dropping flares instead of bombs. However, since there were many Navy fliers being held, I suppose service pride would demand that the Navy also participate. I think that the deception effort was unnecessary and possibly had the potential to alert the North Vietnamese. Overall, too many personnel were involved in the operation, and too many questions were asked later. Getting into the details of the medical evacuation of the prisoners was also unnecessary and violated the principles of OPSEC. Brigadier General Donald D. Blackburn (the father of the operation), after taking part in this section of the planning, was worried about alerting the North Vietnamese and what "could be done to prevent that system from 'going hot.' "[13] I also find that too much equipment was planned for a mission such as this when the weight of the helicopters was so critical (air refueling and the planned crashlanding into Son Tay). To quote a participant:

> It was quite an arsenal for 56 men, 111 weapons in

all . . . 11 axes, 12 pairs of wirecutters . . . 150 cans of water, 100 cans of survival food . . . and so on.[14]

Going to such great detail is obvious when there is sufficient time, but doing so may hurt the security around the operation and may create a situation where there is a problem dealing with unnecessary details. It is fair to say that this was not the issue in the Son Tay raid. In this rescue attempt, the real problem lay in the nature of the intelligence.

Intelligence

Israel collects intelligence data relating to her Arab neighbors, since she is still engaged in a hostile relationship with most of these countries. But no information was available concerning African Uganda. How can one plan without having basic knowledge of the situation? The Israeli Chief of Staff, Lieutenant General Mordechai Gur, said:

> A second point was that intelligence data was not sufficiently complete, and for an operation like this with all its possibilities, it is very important that intelligence should be as precise as possible.[15]

So, handicapped by a lack of critical intelligence data, the intelligence community started to work. Information about the airport at Entebbe was not a problem. In open publications, one can get the runways, taxiways, towers, terminals, obstacles, and all other needed information. Some information about the Ugandan forces could be gleaned from the passengers who had passed through that airport. Good information about the terrorists, their weapons, and locations was available from non-Israelis who had been released a few days before the raid. In a short time, as complete a picture as possible had been fleshed out.

In contrast, intelligence played almost no part in the Mogadishu rescue operation. The only consideration was that the Germans were determined to follow the hijacked plane until it landed in Mogadishu, Somalia, using civilian controls and commercial pilots. This particular operation was almost reflexive in nature, react-

ing to the development of events and responding appropriately.

Conversely, intelligence played a vital part from the very beginning of the *Mayaguez* incident.

> Within a few minutes Jim Larkins and his Ready Alert Bird were airborne. By 1430 Zulu, or 10:30 p.m. at Cubi Point Naval Air Station, Jim Messegee had received his first report on the *Mayaguez*. It was too dark for Larkins and his crew to eyeball the ship. But they could see the captured merchant vessel on their radar screens as a big target flanked by two little targets.[16]

From that time, the area of action was covered nonstop by reconnaissance and surveillance planes, which gave the decisionmakers a very good picture. Coverage was so good that the pilot of the P-3 reported Caucasian faces on a fishing boat, a fact that supplied a crucial bit of information about the location of the *Mayaguez*'s crew.

For the planners of Dragon Rouge, the rescue mission in the Congo, accurate and current information was not available on the situation in Stanleyville.

> They were planning in the dark without information of antiaircraft defenses, rebel strength, and location in the city, or even of the location of the 800 or so hostages they were supposed to find and evacuate.[17]

As was the case in the Entebbe raid, reconnaissance was not possible because an airplane flying over the target would risk triggering carnage among the hostages. The only intelligence available for the rescuers' use were some photographs taken far out on the outskirts of the city. Even without the intelligence, the execution phase was well executed.

In the Son Tay raid, poor intelligence proved to be the pivotal issue. The obvious material about the routing and the threat were done very carefully and over a considerable period of time, but the main question remained whether the POWs were still in Son Tay.

> Did some senior members of the intelligence community know in July or early August that the

prisoners at Son Tay had been moved? Were they moved because of a flood caused by American rainmaking operations? . . . In August of 1970, the Son Tay planners knew only of "decreased activity" at the prison compound.[18]

High-altitude air photos were made when weather permitted, but low-level photography was not performed near the time of the operation for security reasons. Last-minute problems with the SR-71 and bad weather the last days before the raid put the decisionmakers on a 50-50 chance basis. But as things turned out, Son Tay had been empty for some months. I cannot believe the U.S. intelligence community, with all its sophisticated equipment and well-trained personnel, could not find out that simple fact. It was a sad ending to an otherwise beautiful operation.

I must assume that the decision to let the rescue mission go into Tehran involved very delicate, complicated, and courageous activity on the part of intelligence personnel. But little was known about the situation in Iran at the beginning of the hostage crisis.

> There was no immediate hope of getting better information on the whereabouts of the hostages. The seizure of the embassy had left the CIA without a single agent in Iran.[19]

I do not know whether this statement is accurate, but I suspect that it is not far from the truth.

I suppose that to prepare such a complicated operation took a lot of effort and talent from numerous highly skilled personnel. I cannot comment more than that, due to a lack of inside information, but there is one question that has bothered me since I learned of it. Why was Desert One chosen, so near a major road? Were there not other places to land the aircraft in this huge desert? I know from experience that trained crew members can land C-130s on all kinds of runways, dust included, after the necessary crew preparation. I suppose these questions and others like them will eventually be answered in someone's memoirs, but possibly not for quite some time.

Preparations

The Holloway Report said:

> Preparation for the mission was adequate except for the lack of a comprehensive, full-scale training exercise. Operational readiness of the force would have benefited from a full-dress rehearsal.[20]

I find this information quite surprising. A rendezvous of eight helicopters and five C-130s in a remote desert field, at night, in enemy territory is an extremely complicated thing to do. Every crew member must necessarily know perfectly what is going on—when and where. The only way to do this is by means of comprehensive rehearsals. If there were to be an accident, by all means let it be in the desert of Nevada and not in Iran. I learned from one of the participants the unbelievable fact that "none of us had ever landed on sand before."[21]

Landing on sand creates many problems, and the last place on earth one wants to face them for the first time is on an actual operation deep in enemy territory. Although, as I learned from the ACSC student report, the participants did finally manage to accomplish some training on a dirt strip, it was, in reality, a matter of too little, too late. Crews that are candidates for these types of missions should have years of training and experience if the mission is to have any reasonable chance of success.

Another disturbing fact is that the choppers did not practice refueling on the ground with the C-130s. An unusual, extremely difficult, and complicated maneuver like this being done for the first time on the mission itself? In the words of the student report, "I couldn't believe they were having so much trouble with the refueling maneuver since I assumed they had practiced it before."[22] So, if I were responsible for preparing a report on the Iranian rescue mission, I would phrase my report differently. I would begin, "Preparation for the mission was *not* adequate because of. . . ."

In preparing for the Son Tay operation, the Army and Air Force carefully selected personnel

to participate in the raid. Brigadier General Leroy J. Manor and Colonel Arthur D. Simons, the Air Force and Army commanders of the raid, selected a training site at Eglin Air Force Base, Florida. They chose Eglin's Auxiliary Field Number 3.

> History was repeating itself: the Doolittle Raiders had trained nearby 28 years earlier . . . a mockup of the Son Tay compound [was] built so that the assault could be rehearsed under terrain conditions as close to those in North Vietnam as could be found in the United States.[23]

Since time was not a critical factor, such a plan was the best idea to ensure the best training and preparation for the mission. To avoid possible security leaks, the mockup was built so that it could be dismantled during daylight hours. And since the training took place mainly at night, it was that much more realistic. Updating the details about the Son Tay compound was possible by the photo data provided by the SR-71 flights as well as those of photo drones. However, as none of the Strategic Air Command (SAC) personnel were cleared for this operation, I fully agree with the officer from the SAC Reconnaissance Center who said, "a more intimate knowledge of the requirements would [have aided] considerably in obtaining the desired coverage."[24]

The flying part of the preparation was very intensive and dealt extensively with all kinds of required maneuvers. Again, as time was not a factor, there was nothing wrong with giving so much attention to such a wide-scale training and preparation program. But if the situation had been time-critical and the crew members had had only days, not months, to train, luxuries like basic training in night flying, refueling practice, and close-formation work would not have been available. These skills should be in the blood and marrow of crew members designated for such missions of a special nature.

The Mogadishu rescue mission was certainly an example of launching a mission without preparation at all. This kind of operation can succeed only if there is a special force available

that is not only specifically trained but maintained in readiness through continuous training. It must be stated here that the Mogadishu operation, although brilliantly executed, was relatively simpler than these other raids.

In the case of the *Mayaguez* incident, there simply was not time for the Navy, Marines, and Air Force personnel involved to prepare. They had to react in a real-time situation with what was available at hand. Parallel to reconnaissance flights of P-3 aircraft from the Philippines, "the Third Marine Division on Okinawa was alerted [with] 1,100 Marines . . . flown to Utapao Air Base in Thailand."[25] Also, Navy destroyers and an aircraft carrier were rushed to the scene. Even so powerful a nation as the United States cannot be prepared to respond globally to all terrorist situations instantaneously, but I pose the question of whether it would not have been better to have used a specially trained force to assault the island and the ship rather than relying on an incidental unit that happened to be in the proximate vicinity to do the job. There was clearly time to fly such a force from a centrally located U.S. base. In my opinion, having a number of units like this is a part of readiness and preparation. Such units could respond as a fire department extinguishing the small blazes that erupt but would leave the job of overall national defense to the regular forces.

In Dragon Rouge in the Congo, the Americans and Belgians had not rehearsed jointly before undertaking the actual operation. More than that, ". . . the Belgians and the Americans involved had never before participated in a joint airborne exercise, nor had the Belgian paratroopers ever jumped from C-130 aircraft."[26] Thus, there was more involved here than simply never having rehearsed before. Both applicable training and basic understanding between the joint forces were lacking. Even the languages were not the same, so communication was naturally difficult. I would venture to say that it took a great deal of intestinal fortitude (or irresponsibility?) to approve the execution of a mission

under such distinctly adverse operational conditions.

In Israel, under the threat of the hijackers' ultimatum, very intensive preparations for the Entebbe raid were carried out. According to the Israeli Chief of Staff:

> I flew with the squadron commander and the pathfinder navigator and posed them certain problems to see how they would be solved. After two hours of flight, I decided that the air aspect was strongly enough covered.[27]

A full rehearsal was held the night before the operation, including all Air Force and Army participants, with all the aircraft and vehicles and even a stylized mockup of the Entebbe terminal, pieced together in a few hours' time. In practice, everything went off without a hitch. Further training was unnecessary, since all those involved had a thorough grasp of the basics and knew the business at hand. All that remained now was the execution.

Execution and Command, Control, and Communications

Command, control, and communications (C^3) in the Mogadishu operation was basically an improvisation. From the beginning, the Germans tried to maintain contact with the hijacked Lufthansa airliner by asking control centers and individual pilots to provide information. The two Boeings that followed—the one with Wischnewski, the State Secretary, escorted by a group of troops from GSG9, and the other 707 with a second group of the same unit—were in constant communication with Frankfurt; the orders they were receiving were directly from the Chancellor. As it was difficult to continue giving orders in light of rapidly moving events, an urgent message came from Schmidt, "The Minister (Wischnewski) has a free hand in all . . . negotiations with the countries."[28] Certainly, this decision not to waste valuable time in lengthy communications played an important role in the success of the mission. Later in the operation, the 707 with the GSG9 group was

ordered to land in Djibouti, which was a mistake because of operational security as well as the possibility of the aircraft's developing technical trouble. As it turned out, they did not land because of probing questions originating from Djibouti. Then they were ordered to land after dark at Mogadishu and to execute the operation. Under these adverse circumstances, C^3 was the best that was possible. After their disastrous rescue attempt of the Israeli hostages at the 1972 Olympic games in Munich, the Germans had established the *Grenzschutzgruppe Neun* /GSG9, which was later commanded by Colonel Ulrich Wegener. This group performed to perfection in Mogadishu.

In reviewing the U.S. rescue mission attempted in Iran the Holloway group found:

> Command and control was excellent at upper echelons but became more tenuous and fragile at intermediate levels. Command relationships below the Commander, JTF, were not clearly emphasized in some cases and were susceptible to misunderstanding under pressure.[29]

It is true that the highly sophisticated means of communication allowed the President to command the operation from Washington. But was it necessary? Is it to the benefit of the success of an operation like this to have such a long, complicated chain of command? The President had to make the decision to execute, and this is reasonable in his role as Commander in Chief. However, I would contend that the responsible military officer on the scene of the operation should make operational decisions. Only if, in the onsite commander's opinion, the situation warrants a decision of a political nature should the marvels of high-tech communication be used to secure an answer. A decision to abort a mission because of technical problems is clearly a decision of a professional military commander. The fact that Army, Air Force, and Marine personnel were in the same spot at Desert One contributed to the "misunderstanding under pressure."

As for the performance itself, the C-130's part of the mission was faultless, the Marines' RH

53Ds were not good enough for an operation like this, and the terrible accident was the result of failure to rehearse under such conditions and sheer bad luck. Accidents can and do happen. As for the part of the mission that was never executed, I do not have the necessary details to present an informed opinion. It must, of necessity, have been an exceptionally difficult operation requiring maximum courage; and had it succeeded, it would have become the operation of the century.

In operation Thunderball to Entebbe, command and control was from military headquarters directly to the lead pilot in the first stage. Upon landing and within a half hour later, command and control was directed to the forces executing the rescue from an Israeli Air Force 707 that flew in the vicinity at the critical time with the deputy commander of the armed forces and the commander of the Air Force. During the remaining time on the ground, command was passed to Brigadier General Dan Shomron, on site at Entebbe. The ability to talk home was there, and it was used mainly as an information channel. Operational decisions were made, as they should be whenever possible, at the scene of the action.

A participant in the Iran rescue mission writes:

> The scenario for the Entebbe raid was ridiculously simple when compared to ours. Their target was a lightly defended, remote airfield. Ours was a heavily defended target in the middle of Tehran. The Israelis, by their own admission, were willing to lose hostages during their rescue. We were not. To compare the two missions was totally out of line and showed a definite lack of insight into military operation.[30]

I accept without reservation that getting into Tehran was more complicated than getting into Entebbe, but the part of the operation up to Desert One was not. I believe that the planners of the Tehran rescue mission, like the Israeli planners, assessed that they would suffer casualties in their operation. And as to the simplicity of the Entebbe operation, there was a serious effort made to keep things simple because simple plans can have fewer things to go wrong—i.e., they have a higher chance of success. In philosophy there is the test of any hypothesis, called Occam's razor, which maintains that in choosing between two similar hypotheses, the simpler is preferred. Prime Minister Yitzhak Rabin said after the Entebbe raid:

> This perfect operation was the fruit of imagination, initiative, boldness, and many years of training. It was performed by young men, both conscripts and regular army, who traveled a long way in a very short time after a minimum of preparation.[31]

As in the case of the Entebbe operation, actual military activity to free the *Mayaguez* and her crew members began immediately. Not only were reconnaissance and surveillance flights made, but USAF aircraft flew strike missions as described by one of the crew members of the *Mayaguez:* "F-4 Phantoms ... swooped down to strafe and rocket in front and back of the *Mayaguez*.[32] Later on, under direct orders from the White House, F-4s, A-7s, and F-111s sank Cambodian gunboats and tried to prevent a fishing boat carrying the captured crew from getting ashore to the mainland. "We told the aircraft," said the President, "that they should use whatever legitimate means they could to head off either the ships to the mainland or vice versa."[33]

That was an especially effective order, because without being able to control the happenings from nearby, the best means is to convey intent to the onsite commander and to allow him to improvise the means of execution. As matters turned out, this course of action was extremely effective and helped the Cambodians understand the magnitude of their act and the fact that the Americans were not bluffing.

But subsequent activity seemed to many observers an overreaction, considering the nature of the situation. Attacks on selected targets on the mainland were perceived as punishment of the Cambodians (which they deserved) rather than a necessity for the rescue operation. Certain aspects of the military execution are interesting. I am not clear as to the need to consider the use of

B-52s other than that they had previously been used to considerable effect elsewhere in Southeast Asia. The use of a C-130 to drop the 15,000-pound bomb to clear a helicopter landing zone is interesting. However, I feel that the heavy casualties sustained by the Marines and their helicopters were unjustified in an operation such as this where the preponderance of force was clearly on the side of the United States.

After the debacle in Southeast Asia, the United States needed an operation like the *Mayaguez*.

> . . . the success of the action provided more than a soothing balm to the American psyche and a lift for US allies. Most important, the incident in the Gulf of Siam was a clear statement, in this uncertain time, of the firm intention of the President of the US.[34]

Although I think that militarily the execution could have been performed more efficiently, I admire the brazen self-confidence of the U.S. administration and the bravery of the U.S. Marines in carrying out the rescue. The captain of the *Mayaguez* said later: "I cried. People were killed trying to save me."[35]

While no one was killed in the Son Tay raid, men at least risked their lives to save the unfortunate prisoners of war from their North Vietnamese captors. Brigadier General Leroy J. Manor commanded the operation from his command post near Da Nang. Possibly, this site was a bit far from the scene of the action, but it was the best available under the circumstances and was better than having the operation conducted from Washington. Unfortunately for the success of the operation, the sophisticated technology so important in a remote command like this failed to meet the needs of the situation. Consequently, "Manor [was] able to pick up only a hazy picture of what had happened at Son Tay."[36]

Actually, the real command of the operation was in the hands of the participants, namely Colonel Arthur D. "Bull" Simons. The Pentagon command center followed the actions with a few minutes' delay. Good C³ requires all three components (command, control, and com-

munications) to be effective. But in the case of Son Tay, communications failed at a crucial moment and "the commander of the raid [was left] without his eyes and ears."[37]

However, the operation itself went smoothly. Refueling at low altitude and at night is a difficult operation, particularly when there is turbulence. In this operation, it went off without a problem. The landing itself inside the prison was possibly a bit too hard, but nothing adverse happened; the mistake Simon's pilot made of landing 400 meters off target was recovered quickly and efficiently. Bull Simons said later:

> What are you telling me, Don, that we got a black eye? *I'm* not mad at anybody. I thought the thing was *great*. Okay, so we didn't get them. Christ, the thing was worth doing *without* getting them.[38]

There was doubt as to whether the POWs were there. This doubt may have been justified but too many people wanted to go anyway. Don Blackburn admitted later, "I didn't *want* to know. I wanted to *go*."[39] And go they did, outstandingly, save for the nonpresence of the POWs.

The command problem in the Congo was equally complicated. Just who was to be in command, an American officer or a Belgian?

> In the joint planning [phase] . . . [it was] agreed that the United States would have operational responsibility for the joint command right up to the assault on the drop zone, when the Belgian commander would take over.[40]

This was an admirable agreement. The question within the U.S. command structure of moving from one command to another (from USEUCOM to STRICOM) was solved by the expedient of turning command over to the Belgians on reaching Congo soil.

The use of a specially configured C-130 as "Talking Bird" for communications was a very important component in an operation in that part of the world. This is particularly true since Washington disapproved a request to use the Collins radio of the onsite U.S. Army liaison officer, Lieutenant Colonel Donald V. Rattan

to coordinate the military activity in the area and to report to Leopoldville. "This was a strange answer since Rattan was already with the column, and a classic example of a political override of sound military common sense."[41] I must agree, very strange indeed.

Performance during the execution phase was very good. The C-130s dropped the paratroopers who secured the airfield, allowing the other commandos to land with the vehicles. One C-130 with four armored jeeps was an hour late. As it turned out, the Belgian commander's decision to wait for the jeeps was a sad mistake. In an operation involving hostages, time and surprise are terribly important. The delay, in this case, cost some of the hostages their lives. In retrospect, the Belgian commander should have moved quickly without the four jeeps. Other than this mistake, Dragon Rouge was a very well-executed operation without extensive preparation and with simple C³.

TERRORISM can be stopped if the international community is willing to take up the fight. To do so will require firm stands by the heads of state because of predictable international repercussions in some quarters. For example, the Soviets considered "any move into the Congo . . . as serious interference in the internal affairs of another state."[42] Such an attitude is not conducive to saving the lives of hostages as in the Congo situation, where women and children became victims of massacre, rape, and carnage. Was there any other way to save them? I do not claim to have the answer, but what does matter is that most of them were, in fact, saved.

Hence, governments must have the will to use counterforce when fighting transnational terrorism. They must also understand that it is necessary to take this step as early as possible in such a complicated situation because waiting often provokes the inevitable with innocent people suffering needlessly. Specially trained antiterrorist units should be ready at all times to react instantly to transnational terrorist activity.

There is no time for basic training. It may be impossible to be prepared for all potential contingencies, but there are certain basic rules and procedures to follow in a hostage situation and military skills that can be sharpened. By keeping the force at a high state of readiness, much time can and will be saved, as well as many lives of both hostages and rescuers. Although planning cannot account for all future scenarios, trained planners should be constantly updated on new developments and available at any hour of the day or night. In addition, those who are to participate should be a part of the planning process. Basic knowledge about equipment needed for airborne operations should be available immediately. There is no need to think and plan some things; for example, a flyaway kit for a C-130 that is going to land in the desert could be prepositioned for immediate use. This kind of information should be ready in the form of checklists for special operations. Since one plan is not enough, there must always be an alternative. However, five plans are too many. It becomes confusing for the political decision-makers to decide from many possible alternatives. Also, it is advisable for crews to practice on the actual equipment they will use in the crisis.

Deceptions and diversionary tactics are important, even essential in some instances. But they must be scrutinized with great care. An overly elaborate ruse can cause the other party to become suspicious and can become a two-edged sword. Also, whenever possible, it is better if the participants know one another personally and have an idea of one another's capabilities. In operations requiring precision, success or failure may depend on knowing what the other members of the operation are able to do.

Still another factor is important to mission success. There is no place in a hostage rescue for service proportionality; it must not matter who is doing what or how much. The hostages, with their lives on the line, do not care whether the Air Force may be doing more than the Marines. Nor can a rescue operation be measured by a balanced budget. Whatever cost must be paid

should be paid up front. In such a situation, another spare can never be considered too many. As a general rule, terrorists are more frightened and less experienced than the troops confronting them, and this extra measure of fear and inexperience must be taken into consideration. While it may be to the advantage of the rescuers, it may drive terrorists to irrational acts, needlessly endangering the hostages. Allied to this is the nature of operational security, which is a necessary part of any mission, but the mission is paramount. Thus, OPSEC must not drive the mission.

As examination of the various operations has amply demonstrated, C³ is an essential part of any operation. Ideally, it should be kept as simple as possible. It is not necessary for everyone to know everything every minute of an operation. That the commander on the scene of action should have authority goes without saying, yet this is too often ignored, with political considerations taking priority over military necessity. The commander on the scene has the picture because he knows the objectives, and he was specially chosen for the job. He can be depended on to do it. And, in this regard, there should be a margin of tolerance for changes and improvisations by the field commander. There is no way to cover all the possibilities in planning; and even if there is time, excess information may cause confusion under the pressures of the situation.

Debriefing after the operation should be as sharp as a razor. There can be no overly polite smoothing-over of what took place. Everything must be examined in a cold light with a severely critical eye. Mistakes should be emphasized and analyzed carefully. Violations must be condemned and punished. There is no room for compromise in special airborne raids. Failure to assess an operation realistically is setting the stage for future disaster.

In special airborne raids, medals and decorations are necessary but should be awarded only for truly exceptional performance—not across the board to everyone who took part. Otherwise, the awards and decorations become valueless and lose their meaning.

Israel's late Prime Minister Yitzhah Rabin said after the Entebbe raid:

> The Entebbe hijacking was not the first terror action nor, sorrowfully, will it be the last. Events since Entebbe have confirmed that. Yet we are steadfast in our determination not to allow terror to harm us. We shall strike at them, in any place and at every opportunity.[43]

THE nations of the Free World have the capability to counter transnational terrorism; indeed, they have the right to counter it. Have they the will to counter it? Time will tell. One thing is sure: airborne raids against transnational terrorism are effective tools, as has been shown time and again.

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Notes

1. "Raids and National Command," *Military Review*, April 1980, p. 20.
2. Fred E. Wagoner, *Dragon Rouge: The Rescue of Hostages in the Congo* (Washington: National Defense University, 1980), p. 203.
3. Roy Rowan, *The Four Days of Mayaguez* (New York, 1975), p. 69.
4. Ibid., pp. 69-70.
5. "A Detour to Dubai," *Newsweek*, 24 October 1971, p. 62.
6. "The Iranian Hostage Rescue Attempt," ACSC Student Report (Maxwell AFB, Alabama, March 1982), p. 3. Hereafter referred to as ACSC Student Report.
7. Wagoner, p. 163.
8. Rowan, p. 142.

9. Ibid., p. 42.
10. Wagoner, p. 143.
11. Admiral James L. Holloway III, USN (Ret), Chairman, Special Operations Review Group. "Department of Defense Rescue Mission Report," Washington, 23 August 1980. Also referred to as the Holloway Report.
12. ACSC Student Report, p. 26.
13. Benjamin F. Schemmer, *The Raid* (New York, 1976), p. 168.
14. Ibid., pp. 193, 194.
15. Israeli Defense Force spokesperson, press conference with Israeli Chief of Staff, 8 July 1976.
16. Rowan, p. 72.
17. Wagoner, p. 132.

18. Schemmer, p. 96.
19. "Inside the Rescue Mission," *Newsweek*, 12 July 1982, p. 17.
20. Holloway Report, p. 3.
21. ACSC Student Report, p. 26.
22. Holloway Report, p. 37.
23. Schemmer, p. 91.
24. Ibid., p. 98.
25. Rowan, p. 69.
26. Wagoner, p. 133.
27. Israeli Defense Force spokesperson, press conference with Israeli Chief of Staff, 8 July 1976.
28. "Terror and Triumph at Mogadishu," *Time*, 31 October 1977, p. 43.
29. Holloway Report, p. 3.

30. ACSC Student Report, p. 50.
31. Ben-Porat, *Entebbe Rescue* (New York, 1977), Introduction.
32. Rowan, p. 83.
33. Ibid., pp. 90-91.
34. "A Strong But Risky Show of Force," *Time*, 26 May 1975, p. 18.
35. "Ford's Rescue Operation," *Newsweek*, 12 July 1982, p. 27.
36. Schemmer, p. 211.
37. Ibid., p. 212.
38. Ibid., p. 266.
39. Ibid.
40. Wagoner, p. 133.
41. Ibid., p. 162.
42. Ibid., p. 164.
43. Ben-Porat, Introduction.

Change of Managing Editors

Jack H. Mooney recently retired from his position as Managing Editor after twenty-two years with the *Review*. During these years he played an important role in shaping the tone and format of our journal. At his retirement ceremony, he was awarded the Meritorious Civilian Service Award by Lieutenant General Charles G. Cleveland, the Air University Commander. Jack and his wife Jen now reside in Fort Walton Beach, Florida.

The new Managing Editor is Ms. Janice M. Beck, who comes to the *Review* from the faculty of the Air War College, where she prepared course textbooks for the Associate Programs. Ms. Beck holds an M.A. in English from the University of Wisconsin at Madison (1971) and is an Air War College (Seminar) graduate. While we are saddened by Mr. Mooney's departure, we are happy to welcome Ms. Beck aboard.

THE INFERNO OF PEOPLE'S WAR
a historical evaluation of Chinese concepts of national defense

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MAO ZEDONG'S people's war has been a much-studied but ill-understood concept. Political scientists, journalists, and military analysts have easily revealed its strengths and readily identified its weaknesses. But few have adequately explained its military fundamentals or its surprising persistence at the center of Chinese military thought. Looking at it from a historical perspective, we see that it has evolved from a strategy of revolution, to a doctrine of national defense, and finally to a sophisticated system of nuclear and conventional deterrence. Military men in China have clashed over a wide range of issues, but they have shown a remarkable unity in their loyalty to the military principles of people's war.

Since the Korean War, commentators in the People's Republic of China repeatedly have

stressed the need to build a national defense structure based on the concept of "people's war under modern conditions." What they advocate with this expression seems clear to Western observers—keep the terminology of the outdated people's war strategy, but construct a defense force that can realistically confront a technologically and organizationally modern foe, such as the Soviet Union or the United States. The typical theme of Western analyses is that China is in mortal danger until she modernizes her military, which she cannot do before achieving full economic modernization. In the interim, China must live with operational concepts that are fundamentally unsound.[1] Obviously born of necessity, people's war remains in Western eyes the no-choice alternative that will one day be discarded in favor of a more modern, realistic approach to national defense.

A troubling dilemma for the growing battery of analysts from academic, government, and press circles, however, is that despite the logic of modernization, there is little real evidence that the Chinese intend to abandon people's war as the basis of their national defense policies. Dr. Paul H. B. Godwin calls people's war under modern conditions a "transitional defense strategy."[2] A recent CIA study speaks of "limited progress" and the conditions needed for "success" of the defense modernization program.[3] Such conclusions imply that major revisions of China's policies are around the corner. A clear understanding of the nature of such revisions, however, is lacking.

I shall not attempt here to assess the long-term goals of Chinese national defense policy. Neither shall I evaluate the current strategic capabilities of China's armed forces. Without a broader understanding of the concept of people's war, such analyses seem problematic. Instead, I shall review people's war from a historical perspective and suggest that—regardless of political trends—Chinese strategic thought has shown remarkable consistency. To do this, one must first untangle the military essentials in people's war doctrine from changes that have other, per-

haps confusing, applications. Once these essentials have been identified, the overall direction of Chinese defense modernization will be more apparent.

Pre-1949

The rather recent phrase "people's war under modern conditions" suggests consistency with past policies and concepts. Therefore, we must begin by examining the early formulation of the doctrine. That people's war was a successful basis for revolution in the forties (and was exported as such in the fifties and sixties) tends to inhibit our understanding of the military fundamentals that make it effective as a basis for national defense. To understand people's war's national defense aspects, one must separate basic doctrine from other "Maoist" concepts and restrict its scope to the principles of organization and application of military force. It may be useful also to note that the fundamental tenets of people's war have fueled many political debates in China during the past fifty years, in part because People's Liberation Army (PLA) generals and strategists often have been political actors, as well as military thinkers. Thus, while their particular policies and methods may have been attacked by critics with differing political philosophies, the military principles behind their policies caused little disagreement.

Mao Zedong, of course, espoused the essentials of the doctrine in a series of military writings produced after years of experience in a life-or-death struggle against the Kuomintang.[4] Since the birth of the PLA in 1927, Communist forces had been technologically inferior to their foes; and the first tenet of people's war recognized the relative permanence of that inferiority. Mao preached the superiority of "men over weapons," which, in a military sense, meant that any lack of firepower or technology would be compensated for in superior morale and motivation. In the Chingkang Mountains in the early 1930s, Mao first addressed the soldiers' material needs, mostly food and regular pay. By promot-

ing land redistribution, he gained the loyalty and service of the local populace. He also called for democratic relations between officers and men (or in military terms, leadership by example). Finally, he used political indoctrination to instill a sense of purpose and to provide battlefield motivation.[5]

By relying on superior morale, Mao hoped to minimize his army's technological inferiority. By relying on a superiority of numbers, the second tenet of people's war, he sought to minimize technological deficiencies further and capitalize on an obvious Chinese strength. Superiority of numbers could come either locally or theaterwide by enlisting not just regular soldiers in a campaign but also the mass of citizenry. In people's war, civilians become replacements for medics, intelligence and security personnel, supply and engineer laborers, or guerrilla fighters. Such a war environment requires a total war commitment of a supporting populace. In Mao's words, the army must "create a vast sea in which to drown the enemy."[6] In this way, the Red Army was able to outnumber the Kuomintang (KMT) army on a local level, enabling not only its survival but ultimately its triumph.

Finally, people's war embraces the principle of defense-offense. The order of this compound principle is important. Mao taught that the object of war is "to preserve oneself and destroy the enemy." Even though technologically inferior, the mobilized masses would achieve ultimate victory through a three-stage conflict. First, in the strategic defensive stage, the enemy is "lured in deep," overextended, and isolated. Then, in the strategic stalemate phase, the Chinese strength of morale and numbers is brought to bear in a guerrilla war of attrition. Finally, through a strategic offensive, enemy strength is reduced to parity and then inferiority, after which a transition to regular warfare occurs to bring about the enemy's defeat.[7] It should be noted that guerrilla warfare is but one aspect of the broader concept of people's war.

In any military contest, technological inferiority demands an "unconventional," highly flexible approach. The fluid battle lines, lack of an absolutely centralized command, and small-unit, hit-and-run tactics were answers to particular Chinese weaknesses. But even in the early days of the Communists' struggle against the KMT, Mao cautioned against excessive "guerrillaism":

> As the Red Army reaches a higher stage, we must gradually and consciously eliminate [guerrilla features] so as to make the Red Army more centralized, more unified, more disciplined and more thorough in its work—in short, more regular in character. . . . We are now on the eve of a new stage with respect to the Red Army's technical equipment and organization. We must be prepared to go over to the new stage.[8]

Thus, contrary to many Western conceptions, guerrilla war and people's war have never been synonymous.[9] Moreover, the "regular" organization of military forces and periodic improvement of its equipment do not preclude reliance on the principles of people's war.

During the Sino-Japanese War, the difference in strategies of the Chinese Communist Party (CCP) and the Kuomintang set the stage for the ultimate triumph of the Communists in the civil war that followed Japan's defeat. The KMT armies fought a "conventional" retreat against the invading Japanese, abandoning the lost territory. The CCP forces, however, absorbed the Japanese advance and gained the loyalty of the peasants of northern China by offering the only visible resistance, as well as social and political reform. At war's end, the fate of a numerically and technologically superior regular army of the Kuomintang became a textbook example of the efficacy of people's war.

Attempting to reoccupy the north, the KMT army fought an elusive foe that exploited the strategic defensive. By taking major cities of the North China plain and Manchuria, the Nationalists ignored a countryside that had been won over to the Communists. The KMT advance reached its high point in March 1947 when Nationalist troops seized an empty Yenan. The loss of 100,000 of these troops in a subsequent Communist encirclement marked the begin-

ning of the strategic stalemate phase. One by one, the Manchurian cities were surrounded by Lin Biao's 4th Field Army and their KMT garrisons captured. A combined regular and guerrilla campaign along the Peking-Hankow railroad further decimated overall KMT strength. By the summer of 1948, the PLA was ready to assume the strategic offensive against a crumbling Nationalist army.

The ultimate victory was won not by preponderant firepower or superior technology, but by a superior strategy artistically applied. The military victory gave political power to the Communists in late 1949, but it also gave them responsibility for national defense. The outbreak of war in Korea, in June 1950, left little time for a reconsideration of the relevance of people's war to the new mission of the PLA.

1950-59

Chinese units went into Korea with a tactical doctrine that they had used in a different kind of war just a year earlier. Alexander L. George suggests that people's war was a failure in this new context, due to a breakdown of Chinese morale under the punishment of superior U.N. firepower.[10] William W. Whitson suggests "disheartening lessons about the efficacy of guerrilla warfare, Mao's Thought, and 'people's war.' "[11] In reality, certain aspects of the doctrine became part of the Chinese military effort, but the Korean War was, from the perspectives of both China and the United Nations, a limited war with limited objectives. The total war environment of people's war never existed; that is, the Chinese People's Volunteers (CPV) could neither become one with the Korean masses nor attain the type of numerical superiority called for in a people's war. Neither did Chinese troops conduct a defensive-offensive campaign. Instead of luring U.N. forces in deep, CPV forces infiltrated as a regular army between the U.N. Eighth Army and the X Corps, and then went immediately on the offensive with the aim of driving U.N. forces out of Korea. The signifi-

cant point is the Chinese did not pursue a people's war strategy in Korea, and broad conclusions about its viability as a doctrine of national defense that are based on the Korean outcome are not really valid.

Any army maintains a modicum of flexibility in its strategy simply by having the ability to orchestrate resources in different ways depending on the situation. This flexibility is limited, however, by the training requirements of operational doctrine. Small-unit tactics, for example, demand intensive drill, which imparts a degree of inflexibility that forces strategy to conform in the field. Chinese units went into Korea with a tactical doctrine that they had used in a different kind of war just a year earlier. They allowed this doctrine to drive their strategy onto a track built to Western specifications. Their failure was not that they employed a strategy of people's war, but, rather, that they did not.

What then was the impact of the Korean War on Chinese strategic thinking? If the Chinese indeed judged people's war a failure, China should have moved away from "guerrillaism" toward a more conventional, modern approach to warfare. In 1955, China adopted the "Regulations on the Services of Officers of the Chinese People's Liberation Army," which classified officers by field of specialty and rank into the army, navy, and air forces.[12] That same year, China adopted universal military conscription. One need only glance at the pictures of the great Chinese "Marshals" in their bemedaled Soviet-style uniforms to be convinced that a new day of professionalism had dawned in the PLA. Strategists certainly should have been busy modernizing their thinking along with the uniforms and regulations. Yet three years later, Mao Zedong, at a Chengdu work conference, assessed the progress of defense building:

> In the period following the liberation of the whole country, dogmatism made its appearance in both cultural and educational work. A certain amount of dogmatism was imported in basic military work, but basic principles were upheld, and you could not say that our military work was dogmatic.[13]

Mao reported here that although certain dogmatic, i.e., Soviet, influences had penetrated military organization, the basic principles of China's military thinking had remained unchanged.

The issue of professionalism highlighted discussions of the late 1950s. In the famous Red vs. Expert debates and the ensuing Peng Dehuai affair, political conflicts obscured the fundamental strategic positions of the two sides.[14] Most Western analysts suggest that those favoring Maoist guerrillaism and unconventional warfare were in dispute with proponents of Peng Dehuai's Western-style professionalism.[15] Such views result from misconceptions of the military principles behind people's war, as well as from Western presuppositions of military professionalism found in such works as Samuel P. Huntington's *The Soldier and the State.* We in the West tend to apply our definitions and concepts without qualification to the Chinese scene. For example, the "efficient management of violence" called for in Western professionalism assumes the availability (or at least, the prospect) of adequate hardware. However, China has never possessed the indigenous capability to produce the required hardware to build a "professional" force; and to buy such equipment not only would be too expensive for the Chinese economy, due to the size of the Chinese forces required, but also would violate the Communist tradition of self-reliance. Additionally, Western military professionalism draws on Western (including Russian) military traditions of civil-military relations that preclude practices, such as the involvement of military men in politics, that may be fully legitimate even to the Chinese "expert."

Such an expert was Marshal Peng Dehuai, a dogmatist according to Mao and an example of the new military professional to foreign observers. A look at Peng's views on the basic tenets of people's war, however, will reveal a consistency in strategic thinking that endured the impact of the Korean War and massive doses of Soviet equipment and advice.

Peng Dehuai was criticized throughout the 1960s as one who believed that "weapons decide everything." We have no way of knowing whether this criticism was accurate or whether the attacks were politically motivated rhetoric. However, we do know Peng's views on the importance of morale in overcoming technological inferiority. Key indicators of support for the people's war approach to morale include support for party involvement in political indoctrination of troops and "democratic" relations between officers and men. A high grade on each of these indicators would mean sacrificing "professionalism" for high morale. An analysis of Peng Dehuai's speeches throughout the 1955-58 period reveals that he fully supported the men-over-weapons tenet of people's war. Typical is his 1957 Army Day speech, fully one-third of which was devoted to "the several systems essential to building up the army." He listed these as "the system of Party leadership of the army," "the system of political work in the army," and "the democratic system of the army."[16]

It is generally known that Peng's concern with the deterioration of morale in the army inspired his criticism of the Great Leap Forward at the Lushan Plenum in 1959. The gravity of his blunt, perhaps even foolhardy, political challenge to Mao reinforces our evidence that Peng believed morale to be crucial to Chinese national defense.

The second tenet of people's war, reliance on superiority of numbers, goes beyond the mere use of reserves, for which all armies have plans. People's war calls for an exploitation of the strength of the civilian populace by assigning a crucial role to nonregular forces. In China's case, the people's militia has served alongside regular forces as a vital part of national defense. Such a construction, however, makes the defense force "unprofessional" or, as Mao put it, "guerrilla in character." Observers therefore have focused on Peng's opposition to the militia as a sign of his professional orientation.[17] Overlooked is what he advocated as an alternative to the massive expansion of local militias.

In promulgating the Draft Service Law of 1955, Peng explained that the use of universal conscription would enable the army to continuously demobilize trained servicemen and build up a large reserve system.[18] In a speech to the 8th National Party Congress in September 1956, he reiterated the need for a large and capable reserve:

> In respect of manpower, we must have, besides the standing army, prepared a great number of officers and men as reserves. We have changed the volunteer service system into the compulsory military service system and have already begun to register and train officers and men for preparatory service.[19]

A year later in an Army Day speech, Peng referred to the experience and training of reserves:

> To solve the contradiction of maintaining a small force in peace while having a larger force in time of war, we have improved our military service work and are ready to put into effect the system of militiamen combined with reserve service. . . . Taking into account China's characteristically large population our country can always maintain a militia force of tens of millions.[20]

While Peng Dehuai referred to the militia as a "heap of gooseflesh" when it was untrained and ill-organized, he advocated maintaining a large force of trained reserves as militia to be relied on in time of war. It is significant that he expressed these views over a four-year period, 1955-58, a period that was considered the height of Chinese military "professionalism" and expectation of continued Soviet assistance.

Peng saw morale of soldiers as crucial to China's national defense, and he advocated a reliance on her large population to achieve overwhelming numerical superiority. Both of these aspects he viewed from a people's war perspective of "oneness with the people," that is, cooperation of regular and nonregular forces with a supporting local population. This theme was clear in the aforementioned speech to the 8th NPC:

> The People's Liberation Army of China gained victories because of the support of the broad masses and because of the close unity between the army and the people whose interests are completely identical with those of the army.[21]

He went on to list specific ways in which the PLA depended on the people: for manpower, for self-defense corps and replacements, and for supply and service by "turning every family into a factory, a depot, or a hospital."[22]

These views show that Peng promoted policies in conflict with Western conceptions of professionalism concerning army organization. In spite of his desire to modernize weaponry, he recognized China's technological inferiority. He also recognized the priority of overall economic modernization. Although he sought to bridge the technological gap as far as possible, he knew that to breach it China would have to rely on the fundamentals of the military principles of people's war.

Assessing Peng's views on the principle of defense-offense is more difficult, since we must deal with evolving dimensions of China's defense structure of the 1950s and 1960s. Naval, air, and nuclear forces seem by their very nature to professionalize people's war. These dimensions gave the Chinese offensive capabilities that offered the prospect for strategies not employed in earlier struggles. Yet China's newer dimensions of military capability remained technologically inferior to those of most potential adversaries. In addition, the PLA's mission had broadened equally as much as its capability. No longer was it concerned simply with winning a revolution, but now with preserving and defending it. In this new period of defense building, the old goal of maximizing strengths and minimizing weaknesses called for these new dimensions to be integrated into defense doctrine in order to preserve the validity of people's war's conventional concepts.

For the moment, it is sufficient for us to know that Peng Dehuai reacted quickly and vociferously against any suggestion that China was building a force with strategically offensive designs. He regarded such "imperialist" suggestions as "slanderous" and as a "cover for their own aggressive pretentions." In the speeches

that we have mentioned, he reiterated many times that ". . . we have never thought of and will never think of encroaching on other nations."[23]

In sum, Peng's desire for modern weapons, regularization of forces, and military, rather than political, training are not in themselves antithetical to the principles of people's war as the basis of national defense. Such views were used against him by his political adversaries, but in terms of military essentials of strategy, the disputes were superficial. It seems then that the impact of the Korean War on Chinese military thinking of the decade 1950-59 was less profound than is commonly assumed. The major legacy of that conflict was not an awareness that China needed a "professional" defense force, but rather a recognition that people's war had limitations, that the PLA's mission had changed, and that people's war needed to be adapted to the "modern conditions" of a changing strategic environment.

1959-71

The period that followed Peng's removal as Minister of Defense is commonly thought to have been a time of reassertion of the Red over the Expert, meaning the unconventional over the professional model of national defense organization. Observers assume that this change included a similar reversion in strategic thought. In forming such a view, however, analysts have let the character and career of Peng's successor, Lin Biao, and the rhetoric of the Cultural Revolution of the 1960s obscure the progression of strategic thought under a new leadership. The period was marked by a concentrated effort to put "politics in command" in the PLA, by a deterioration in relations with the Soviet Union, and by China's entry into the nuclear club. These developments constituted a departure from the immediate past in some respects, but on strategic thinking their impact was less profound than many contend. Although he waved the red flag of revolution and exalted the thought of Mao Zedong, Lin Biao also was a

political actor with ambitions in the political realm. In terms of national defense policy and its underlying principles, he reaffirmed the basic tenets that had guided the thinking of his predecessors.

The new chief of the largely peasant PLA found himself beset with problems of morale emanating from the chaos caused by the failure of the Great Leap Forward. One of his first campaigns was to put "politics in command." He began by sending large numbers of political workers into field units to do "extensive political and ideological work."[24] Since this program was not a rectification of the officer corps but was clearly directed at the individual soldier, it should be interpreted as an effort to raise troop morale.[25] At a staff conference in September 1960, Lin declared:

> Political work in the army is the Communist Party's mass work in the army. It is similar to the work of mobilizing the masses in all the various localities; we are mobilizing the armed, uniformed masses. There is strength when the masses are mobilized and when there is integration of ideas and people.[26]

Indeed, Lin viewed this "political work," these efforts to rebuild morale, as the key to success in all other areas of military work: rear services, military training, and educational, cultural, and headquarters work. He institutionalized this idea throughout the PLA in the "Four Good Movement": superiority of men over weapons, practical experience, the interrelationship of political work and other aspects of work, and book learning.[27]

Peng Dehuai had drawn fire from critics for promoting military training at the expense of political indoctrination. Yet when we examine Lin's views on training priorities, we see that he too demonstrated "professional" tendencies. On 30 December 1960, Military Affairs Committee member Xiao Hua transmitted "Chief Lin's" instructions on work priorities for 1960 to committee members. In military training, he recommended that eight to nine months of the year and seven to eight hours a day be spent on

exclusively military training. From his comments on a report by Deputy Chief of the General Staff Zhang Zungxun about the poor state of training, Lin revealed his overall conception of training and the "key link" of politics:

> We must stress the principle that politics comes first, and politics is the commander. But, in terms of time consumed, political education should not take the first place, and still less time should be occupied by cultural activities and physical labor, as the first place should be given to military training.[28]

Thus Lin's "politics is the commander" policy was less a return to revolutionary fundamentals than a reaffirmation that morale was crucial to China's national defense.

Ostensibly, Lin's purpose was to restore the combat power of the PLA through concepts that held men superior to weapons. In the process, however, he did not deny the importance of the acquisition of modern weaponry. In fact, Lin acknowledged (perhaps more clearly than anyone else) the dynamic flexibility expected in "people's war under modern conditions":

> In army construction on the one hand we should carry out material construction by continually improving the technical equipment of our army to strengthen its fighting power, and on the other hand carry out spiritual construction. Once a spiritual thing is turned into a conscious act of the great masses, it will become a great material force.[29]

Politics aside, then, we see a continuity between Peng and Lin on the importance and role of morale and the necessity for extensive military training and continuous weapons improvement. (Often, yet erroneously, the latter two of these continuities have been viewed as indicators of opposition to the principles of people's war.)

Peng and Lin were also closer than most believe in their views on the utility of nonregular forces. Although Lin emphasized the institution of the militia, a popular people's war linchpin, the "Everyone a Soldier" movement was begun by Peng and was well under way when Lin assumed command. We do know that

Lin, like Peng, assigned a vital role to China's masses:

> In addition to having a standing army which is politically firm and equipped with modern technical equipment, our national defense might include a militia force of several hundred million people. With such an army, it will be possible—if imperialism dares to launch an attack on our country—to sound the call of "Everyone a Soldier" and activate all the people to fight in coordination with the standing army, drawing the enemy into the inferno of all-people's war.[30]

Discussing "The Logic of Chinese Military Strategy," Jonathan Pollack asserts that people's war "has always remained an improbable sort of conflict," since it is "a form of warfare that no rational adversary would possibly want to encourage."[31] While it is logical that China's potential adversaries would avoid such an inferno and perhaps resort to other lethal strategies, the same logic confirms the value of a national *defense* strategy based on people's war. Many nations having greater economic strength, more advanced technology, and smaller and far more defendable terrain do not enjoy the security from conventional attack that China enjoys. With scarce resources and immense requirements, China has formulated perhaps the only strategy that could so effectively deny an enemy the option of a large-scale conventional assault on Chinese territory. Paradoxically, "modernization" of China's armed forces by moving away from the doctrine of people's war could be extremely dangerous, since it would undermine the basis of a strong conventional deterrence.[32] Neither Peng Dehuai nor Lin Biao sought to change these principles during their respective tenures in office. Lin faced far more profound strategic challenges, however.

The withdrawal of Soviet aid and technicians in 1960 changed the entire strategic picture in Asia. Without a nuclear umbrella, China faced a United States still angry over the Quemoy-Matsu incidents of 1958. As the 1960s wore on, the dimensions of the threat increased with a steady buildup of Soviet forces to the north and

of U.S. forces in Vietnam. In 1965, Lin made his famous speech, "Long Live the Victory of People's War," the meaning of which has been the subject of much debate. The general consensus in recent literature is that it was a statement to countries engaged in revolution, particularly Vietnam, that they would have the moral, but not material, support of China. What should not be discounted, however, is a more literal interpretation that it was a definitive statement directed toward both the United States and the Soviet Union to declare the potential of, and China's adherence to, a people's war approach to national defense. China had organized her defenses to such a degree that to conquer her by land attack would be an impossible task. Before reviewing the historical experience of the "great victory of people's war in China," Lin points out that:

> In every conceivable way U.S. imperialism and its lackeys are trying to extinguish the revolutionary flames of people's war. The Khrushchev revisionists, fearing people's war like the plague, are heaping abuse on it. The two are colluding to prevent and sabotage people's war.[33]

The "sabotage" of people's war was a real threat in the nuclear era. Although secure from major conventional attack, China was extremely vulnerable to a large-scale nuclear strike. So acute was the crisis that the effectiveness of the entire people's war foundation of defense was questionable.

It became the unfolding challenge for Chinese strategists to formulate defense policies that would restore the viability of a concept that denies technology the crucial role. The nature of the challenge is reflected in the New China News Agency announcement of China's thermonuclear test in 1967:

> The successful hydrogen bomb (test) . . . marks the entry of the development of China's national defense science into an entirely new stage. It has dealt another telling blow at the nuclear monopoly and nuclear blackmail of the two nuclear overlords—the United States and the Soviet Union.[34]

China's frantic drive to achieve at least a regional

nuclear capability and the subsequent building of her nuclear force can thus be seen as an attempt, through nuclear deterrence, to deny an enemy the nuclear strategic option—an option that would undermine the viability of China's defensive application of people's war.

The year 1965 saw drastic changes in China's military organization and leadership. The impact of these changes upon strategic thought remains obscure. On 22 May, the system of ranks which had been in effect for a decade was abolished. Associated with the Red vs. Expert debate, this event is seen as a herald of the Cultural Revolution. Many regard its opening event as the purge of PLA Chief of Staff Lo Ruiching. These events have been interpreted as a rejection of "professionalist" ideas left over from the Peng Dehuai era. Few observers, however, have paid adequate attention to the changing strategic picture in Asia and the impact that growing Chinese hostility toward the Soviet Union was having in China's domestic politics.

After the system of ranks was adopted in 1955, numerous campaigns against its harmful effects revealed its inapplicability to the Chinese scene. These effects became fully apparent after the withdrawal of Soviet advisors. The system's Soviet model failed to regard the unique relationships between Chinese officers and soldiers and the difference in roles of Chinese and Soviet political commissars. Through its association with a nation that had "betrayed" the revolution and the Chinese people, the rank system no doubt also became profoundly awkward and embarrassing. The official explanation for the system's abolition appeared in a *Jiefangjun Bao* editorial of 24 May:

> This system came into effect from 1955 onwards, after victory throughout the country. Ten years of practice has proved that it is not in conformity with our army's glorious tradition, with the close relations between officers and men, between higher and lower levels, and between the army and the people.[35]

The article further pointed out that the ". . . lower levels submit to the higher levels and the

fighters respect the cadres; this is done consciously by every soldier for the needs of the revolution and does not depend on the operation of ranks or grades."[36] The "needs of the revolution" in this regard concerned two of the fundamental principles of people's war—the superiority of men over weapons through high morale, and dependence on superiority of numbers through close relations between the army and the people. The change of regulations mirrored a rejection of Soviet methods that permeated all areas of Chinese development. It was not a return to "Redness" that was significant, but rather a return to independence in PLA organization. Similarly, a return to a system of ranks today, an event that Western professionals await eagerly as a sign of China's coming of age, would not indicate "professionalism" as we define it. Neither would it indicate a change in basic Chinese strategic thought. As we have seen, the accouterments of professionalism did not change Chinese defense concepts in the 1950s under Peng Dehuai.

Similarly, the purge of Lo Ruiching in the 1960s has been viewed as a rejection of military professionalism. Lo had been associated with the pursuit of advanced weaponry from the Soviet Union in the face of the growing U.S. threat in Vietnam. In the Cultural Revolution his "weapons decide everything" attitude was widely criticized. Reportedly, he favored an all-out thrust in nuclear weapons development. He even challenged the authority of political commissars. Like Peng, however, none of Lo's recommendations advocated the scrapping of the people's war approach to national defense. His objection to political commissars was in regard to their abuse, not their use. He saw the commissar's role as did Mao, not as a political watchdog, but as a political leader, i.e., a morale builder. Disputes over the place of nuclear weapons in Chinese strategy were common, but even the chairman himself, according to the official press in 1967, had issued a "great historic call" in 1958 to develop atom and hydrogen bombs within ten years.[37] Accordingly, the

explosion of China's nuclear bomb was announced with fanfare as a great accomplishment of Mao Zedong Thought. Lo's greatest mistake seems to have been political rather than strategic, centering around his persistent Soviet sympathies. Thus his fall should not be attributed to his objection to people's war as the basis for national defense.

There were, of course, many military issues involved in the Cultural Revolution. For the most part, however, these were internal political issues related only marginally to national defense concepts. It should not surprise us that people's war, closely associated with Mao Zedong, was exalted during the great campaign; but this exaltation was usually within a political, rather than a strategic, context. Because it is outside the scope of this article to explore the political ramifications of the doctrine, I shall mention merely that political turbulence characterized the Chinese military from 1965 to 1968. The next era of strategic development began with the dramatic escalation of the Soviet threat in 1969 and the fall of Lin Biao in 1971.

1969 to Present

Party leaders at the Third Plenary Session of the Seventh Central Committee of the CCP in 1950 laid down a fundamental principle of strategic policy of the People's Republic of China: In order to modernize the military, China must first modernize her economy. The policy was buffeted by the Korean War and the massive influence of Soviet aid and advice in the early 1950s, but it was reaffirmed in Mao's famous 1956 speech, "On the Ten Major Relationships":

> In the period of the first Five-Year Plan, military and administrative expenditures accounted for 30 percent of the total expenditures of the state budget. This proportion is much too high. In the period of the second Five-Year Plan, we must reduce it to around 20 percent, so that more funds can be released for building more factories and turning out more machines. . . . We must strengthen our national defense, and for that purpose we must first of all strengthen our work in economic construction.[38]

After Mao's death, this principle was reaffirmed again with the widespread republication of the original speech on 1 January 1977. To our knowledge, this relationship between economic development and military modernization has never been challenged by any of the major military leaders of China. It forms the backdrop for all discussions of military modernization, the theme of defense building in the period following the fall of Lin Biao.

Nevertheless, events in the 1970s demonstrated that Chinese strategists have continued their efforts to maintain the viability of people's war as the basis for national defense. This continuity in Chinese thought has been missed by many Western analysts. William Whitson describes the 1970s as "The Revolution Betrayed," citing the ascendancy of "professional" military men to Party and government positions.[39] Ellis Joffe states that after almost 20 years of wavering, "The PLA has returned to professionalism."[40] Jonathan Pollack sees in the 1970s "The Decline of People's War."[41]

In Western eyes it is logical to explain the unfolding of military thought in the terms of professionalism. China's recent emphasis on weapons procurement, modernization of defense industries, and nuclear forces seem to support this view of Chinese defense trends. It is also logical to question, as Pollack does, the rationality of a particular form of warfare. Few would argue that any major nuclear conflict is rational, yet today nuclear weapons retain a very real and vital role in the defense structures of the Soviet Union and the United States. Similarly, although the Chinese had developed the deterrent aspect of people's war to the point of confidence that it accomplished its intended purpose, it would be absurd to suggest that they would relax in that confidence and assume that a major war with the Soviet Union will never be fought. The Soviets began to deploy large forces along the Sino-Soviet border during the Cultural Revolution. By 1969 they had 21 divisions in place, 2 of which were in Mongolia. The Soviets continued their force buildup at the rate of about 5 divi-

sions per year until, at the end of 1974, they had 45 divisions deployed, 8 of them tank divisions. That was 14 divisions more than they had deployed in central Europe. In addition, one-fourth of the Soviet Air Force was deployed in the Far East—a force that included their latest, most sophisticated aircraft.[42]

The major events that shaped Chinese strategic thinking in the 1970s were this increased Soviet threat and the gradual warming of relations with the United States and the West. While the fall of Lin Biao and the death of Zhou Enlai and Chairman Mao had drastic effects on the military and its political role in the People's Republic, the effects of these internal events on strategic policy have been minimal. Even the change in threat perception has not had significant effect, for the Chinese had developed their strategy under a dual threat in the 1960s and had produced a credible regional nuclear deterrent by the 1970s—a nuclear capability that has steadily increased in range since then. As People's Republic now approaches its fourth decade, the Chinese have ranked modernization of national defense fourth among the four modernizations announced in their development program in 1975.[43] Alone, these events mean little, but combined with continued endorsement of "people's war under modern conditions," they indicate that the Chinese are satisfied that their defense strategy not only is sufficient for the moment but will suffice at least until the overall modernization of the economy is accomplished.[44] Their target for that achievement is the year 2000. However, the Chinese probably anticipate a long-term process of economic development. Thus, people's war is likely to form the heart of Chinese national defense policies for the foreseeable future.

Perhaps the most telling statement on China's continuing approach to defense strategy comes from an article published in 1979 by the National Defense Scientific and Technological Commission, the group that forms probably the strongest Chinese constituency for modernization of defense weaponry:

> In waging war, we have relied and will continue to rely on people's war. However, we must realize that any future war against aggression will be a people's war under modern conditions.[45]

The entire article attacks the "Gang of Four" notion that "when the satellite went up, the Red Flag came down." Its major assertion is that modern weapons are fully consistent with Mao's teachings and do not bear on the question of loyalty to the doctrine of people's war.

Political debate since Mao's death in 1976 has fallen clearly into distinguishable lines. The actors identify themselves with their positions on certain issues. People's war, as the concept behind national defense, has not been such an identifier. Debate on military strategy has been conspicuous by the absence of substance. While multiple approaches to modernization of agriculture, industry, science, and technology have surfaced, only minor variations have occurred in one basic military line—people's war under modern conditions. That China shops in foreign arms markets is loudly proclaimed and analyzed in Western circles. That she is *reluctant* to buy is not. What observers have not analyzed are the strategic implications of the types of weapons China currently fields, and in what new types she has shown interest. Space precludes such an analysis here. It is clear, however, that the routine organization, equipment, and deployment of Chinese defense forces have not changed radically in thirty years. Currently, China shows interest in antitank missiles more than tanks. She has considered more antiaircraft missile systems than airplanes. In short, China remains interested in defensive weapons that are cheap enough to deploy in large numbers. No support for a "modernization" of Chinese strategic thought seems apparent in these preferences.

If we look at what various Chinese leaders *say* about national defense policy, even after a skeptical analysis of the "Pekingese," we should find it difficult to deny a continuity in defense thinking. Mao's immediate successor, Hua Guofeng, not surprisingly echoed Lin Biao at a May 1978 NPC work conference:

> Politics is the commander, the soul in everything. . . . Only by closely combining men with high proletarian awareness and modern weapons and equipment will it be possible for us to demonstrate truly great fighting power.[46]

The old Marshal, Ye Jianying, stated the mission of the PLA on the 30th anniversary of the founding of the People's Republic:

> Together with the people's militia, [the PLA] should take an active part in and defend the four modernizations program and be vigilant at all times to guard the frontiers of our motherland.[47]

There is no hint that a movement toward "professionalism" will turn the Chinese away from the principles that they have reiterated over the decades.

Our spectrum of opinion would not be complete without the view of Deng Xiaoping, current chairman of the Military Affairs Committee and acknowledged regent of the PRC since the Third Plenum of the 11th Central Committee (December 1978). In an interview, the Italian journalist Oriana Fallaci asked Deng how the Chinese could possibly think to compete with the tremendous efficiency of the Soviet war machine. Deng's answer:

> (He laughs). Listen, China is poor and our military equipment is very backward, but we have our traditions. For a long time we summed up the experience for defeating enemies with advanced weapons, and this in spite of our poor equipment. Our territory is vast, our people have learned to have the endurance to carry on a long war, to defeat strength with weakness. Anyone who wants to invade China must consider this fact. . . . [48]

Ms. Fallaci pressed for clarification by stating that a Soviet war with China would mean world war, which would mean nuclear war and the end of everything. Deng's response provides a revealing picture of the Chinese attitude toward total war under "modern conditions":

> I agree on the first part. If the Soviet Union invades us, it will not just be a local war. But I don't agree with the rest. Precisely because both sides have so many nuclear weapons, the possibility exists that the third world war will be a conventional war and not a nuclear war.[49]

Believing, then, that the next war will be conventional and knowing that they remain technologically inferior, the Chinese remain loyal to the military principles that have served them well.

UTILIZING the principles of men over weapons, superiority of numbers, and defensive-offensive, the Chinese Communists overwhelmed the more powerful Guomindang armies in the 1930s and 1940s. In the 1950s they made the strategic transition to make people's war the basis of national defense under the protection of the nuclear umbrella of the Soviet Union. Losing the luxury of Soviet protection at the end of the decade, China had to rely on the deterrent value of people's war while she developed her own nuclear capability in the 1960s. While validating the effectiveness of people's war as a conventional deterrent, China conducted successful warhead and delivery system tests, which gave her a credible regional nuclear capability. Strategists believed that a regional deterrent would suffice while China continued to enhance her strategic force capabilities. Having achieved a nuclear deterrence, the Chinese have assumed that any major conflict would be on the conventional scale. It is at this juncture that people's war under modern conditions became and remains a fully developed strategy of deterrence.

Obviously, this is a strategy of total war and does not apply to limited local conflicts, such as the Korean War, the Sino-Indian Conflict of 1962, or the Sino-Vietnam Conflict of 1979.

China took her tactical doctrine and other aspects of people's war into these clashes, but the principles of people's war were not tested in them. Neither would a limited Soviet incursion be an occasion for people's war. To improve her capability to deal with limited conflicts of this nature, China must find supplementary strategies. Thus, even China's building of a rapid deployment force or several fully modernized divisions would not indicate the abandonment of people's war as her central concept of national defense.

A broader perspective on people's war indicates that many of our assumptions about Chinese military policies are ill-founded. Arms, for example, may never prove to be that elusive commodity that will open up the "China market." We should, however, understand the logic of China's shopping lists and the timing of her purchase orders. Similarly, military professionalism may not be the issue we in the West have built it up to be. People's war has been a strategic concept that has seen wide variations in its general lines of development. It remains at the center of China's national defense policy under the modern conditions of the present, and it will continue to be the focal concept of a national defense strategy of deterrence at least until China's industrial economy stands coequal with those of her potential adversaries. Although a strategy that acknowledges material weakness, it is not without teeth. Should her deterrent system fail, China's enemy might find to their professional surprise that the armed forces of China can, indeed, be both Red and Expert.

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Notes

1. Various critical weaknesses of the strategy are explored by Alexander George in *The Chinese Communist Army in Action* (New York, 1967); Harvey Nelson in *The Chinese Military System* (Boulder, Colorado, 1981); Ellis Joffe and Gerald Segal in "The Chinese Army and Professionalism," *Problems of Communism,* November-December 1978, p. 6; and Paul Godwin in *Doctrine, Strategy and Ethic: The Modernization of the Chinese People's Liberation Army* (Air University Research Division, 1978). The underlying assumption in these and many other scholarly analyses, media reports, and government studies is that people's war as a strategic concept has been in the process of decline since liberation and stands little realistic chance against the more modern concepts and technologies of China's potential adversaries. Perhaps most typical are the conclusions of Jonathan Pollack in "China as a Military Power," *Military Power and Policy in Asian States* (Boulder, Colorado, 1980) and "The Logic of Chinese Military Strategy," *Bulletin of Atomic*

Scientists, January 1979.

2. Dr. Paul H. B. Godwin, "Chinese Defense Modernization," *Air University Review*, November-December 1981, p. 17.

3. *New York Times*, 26 August 1982, p. All.

4. In particular, see "Problems of Strategy in China's Revolutionary War," "Problems of Strategy in Guerrilla War," "On Protracted War," and "Problems of War and Strategy," all in Mao Tse-tung, *Selected Military Works* (Peking, 1967).

5. Mao Tse-tung, "The Struggle in the Chingkang Mountains," *Selected Works* (hereafter referred to as *SW*), Vol. I (Peking, 1967), pp. 81-83.

6. Ibid., Vol. II, p. 154.

7. Ibid., pp. 137-40.

8. Mao Tse-tung, *Selected Military Works*, pp. 139-40.

9. As but a few examples, Alexander George's *The Chinese Communist Army in Action* (New York, 1967), William Whitson's *The Chinese High Command* (New York, 1973), and Gerald Corr's *The Chinese Red Army* (New York, 1974) demonstrate a guerrilla-war-equals-people's-war perspective.

10. Alexander George, *The Chinese Communist Army in Action* (New York, 1967), pp. VIII-IX.

11. William Whitson, *The Chinese High Command* (New York, 1973), p. 462.

12. *Current Background (CB)*, Hong Kong, No. 312, pp. 1-11.

13. Stuart Schram, editor, *Chairman Mao Talks to the People* (New York, 1974), quote from a 10 March 1958 conference at Chengdu, p. 48.

14. The Chinese after 1949 faced the problem of when to consolidate the gains of the revolution and limit mass revolutionary movement. Those who proposed continuing revolution, mass movements, and an emphasis on ideology were the "Reds." Those who looked toward ordered development and improved technology were the "Experts." The ensuing "debates" were, in fact, intense *political* conflicts among personalities. As such, they obscure many continuities in basic principles.

15. See, for example, Ellis Joffe's *Party and Army: Professionalism and Political Control in the Chinese Officer Corps, 1949-1964* (Cambridge, 1965), and Harlan W. Jencks *From Muskets to Missiles: Politics and Professionalism in the Chinese Army, 1945-81* (Boulder, 1982).

16. *CB*, No. 1584, pp. 9-10

17. John Gittings, "China's Militia," *China Quarterly (CQ)*, April-June 1964, p. 107.

18. "Reports on the Draft Service Law," 16 July 1955, *Survey of the China Mainland Press (SCMP)*, Hong Kong, No. 1090. Peng viewed conscription as a way to reduce standing army manpower levels through the buildup of reserves, thereby maintaining the capability to mobilize for a People's War while at the same time saving money that could be spent on developing an industrial economy. This summarizes the precarious position of the Chinese in the late 1950s. Although they realized the need for modern weapons, they would be unable to rely on them until the economy was sufficiently industrialized and productive to enable them to arm their forces in a manner in keeping with independence and self-reliance. We can therefore understand their lack of emphasis on weapons in the "New Training Program . . ." of 1958.

19. *CB*, No. 422, p. 7.

20. Ibid., No. 1584, pp. 9-10.

21. Ibid., No. 422, p. 4.

22. Ibid.

23. Ibid., p. 6.

24. *SCMP*, No. 2358, 14 October 1960, p. 1.

25. Ibid. This report states that from May to September 1960, "120,000 army functionaries went to work in the companies at the grassroots levels."

26. Ibid., p. 2.

27. Ibid.

28. "It Is Necessary to Understand Fully the Important Changes in the Training of our Armed Forces," *Selected Works of Lin Piao*, China Problems Research Center (Hong Kong, 1970), p. 290.

29. *SCMP*, No. 2270, p. 4.

30. "Hold High the Red Banner of Mao Tse-tung's Military Thought and Advance in Big Strides," *Hung Ch'i*, No. 19, *Selected Works of Lin Piao*, p. 204.

31. Jonathan Pollack, "The Logic of Chinese Military Strategy," *Bulletin of Atomic Scientists*, January 1979, pp. 24-25.

32. Ibid. Pollack has noted an "absence of undue anxiety on the part of defense policy makers." To him it is a "confidence which mystifies external observers." In the light of today's deterrent strategies, Chinese confidence is not at all without justification.

33. "Long Live the Victory of People's War," *Selected Works of Lin Piao*, pp. 315-16.

34. *SCMP*, No. 3964, p. 2.

35. Ibid., No. 3466, p. 2.

36. Ibid.

37. *SCMP*, No. 3965, p. 13.

38. Mao, *SW*, Vol. V, pp. 288-89.

39. Whitson, p. 535.

40. Joffe and Segal, p. 1.

41. Pollack, pp. 24-25.

42. Data from *The Military Balance* (London, 1969-74).

43. Jurgen Domes, "The Gang of Four and Hua Kuo-feng," *China Quarterly*, No. 71, September 1977.

44. See PRC Press quotes, *Foreign Broadcast Information Service—China (FBIS-CHI)*, 74-149, p. E-5, the comments of Yeh Chien-ying at the Army Day Defense Ministry Reception, *FBIS-CHI*, 75-149, or, more significantly, Su Yu's article "Great Victory for Chairman Mao's Guideline on War," *Survey of People's Republic of China Press*, No. 6406, 19 August 1977, and Xu Xiangqian's article from *Hung Ch'i*, "Strive to Achieve Modernization in National Defense," particularly pp. L15-L16, *FBIS-CHI*, 79-203.

45. *FBIS-CHI*, 79-15, p. E-4.

46. *FBIS-CHI*, 30 May 1978, p. E-2.

47. *Beijing Review*, No. 40, 5 October 1979, p. 31.

48. *Washington Post*, 1 September 1980, p. A-10.

49. Ibid.

Additional References

Books

Barnett, A. Doak. *Communist China: The Early Years, 1949-1955*. New York: Praeger, 1964.

Cheng, J. Chester. *The Politics of the Chinese Red Army*. Stanford: Hoover Institution on War, Revolution, and Peace, 1966.

Clubb, O. Edmund. *20th Century China*. 3rd Edition. New York: Columbia University Press, 1978.

de Lee, Nigel, ed. *The Chinese War Machine*. London: Salamander Books, 1979.

Ebon, Martin. *Lin Piao: The Life and Times of China's New Ruler*. New York: Stein and Day, 1970.

Esposito, Vincent J. *The West Point Atlas of American Wars*. Vol. II. New York: Praeger, 1972.

Godwin, Paul H. B. *The Chinese Tactical Air Forces and Strategic Weapons Program: Development, Doctrine, and Strategy*. Maxwell AFB, Alabama: Air University Research Division, 1978.

Hammond Ambassador World Atlas. Maplewood, New Jersey: Hammond, 1979.

Haymann, Hans. *China's Approach to Technology Acquisition*. Rand, 1975.

Hsieh, Alice Langley. *Communist China's Strategy in the Nuclear*

Era. Englewood Cliffs: Prentice-Hall, 1962.
Huck, Arthur. The Security of China. New York: Columbia University Press, 1970.
Huntington, Samuel P. The Soldier and the State. Cambridge: Harvard University Press, 1964.
Liu, F. F. A Military History of Modern China, 1924-1949. Princeton: Princeton University Press, 1956.
Lydolph, Paul E. Geography of the USSR. New York: John Wiley and Sons., 1964.
Marwah, Onkar and Jonathan D. Pollack. Military Power and Policy in Asian States: China, India, Japan. Boulder, Colorado: Westview Press, 1980.

Articles

Blake, James R. "The Production of Conventional Weapons." In The Military and Political Power in China in the 1970s, edited by William Whitson. New York: Praeger, 1972.
Dreyer, June. "The Chinese People's Militia: Transformation and Strategic Role." Paper prepared for the 32nd Annual Meeting of the Association of Asian Studies, 21 March 1980.
Fraser, Angus. "Military Modernization in China." Problems of Communism, September-December 1979.
Ford, Harold. "Modern Weapons and the Sino-Soviet Estrangement." China Quarterly, April-June 1969.
Ghosh, S. K. "China's Nuclear Weapons Programme and Strategy." In China's Nuclear and Political Strategy, edited by S. K. Ghosh and Spreedhar. New Delhi, 1975.
Godwin, Paul H. "China's Defense Dilemma: The Modernization Crisis of 1976 and 1977." Contemporary China, Fall 1978.
Hahn, Bradley. "The People's Republic of China—The Next Maritime Superpower?" In Proceedings of the First International Symposium on Asian Studies, 1979, Vol. I, China. Published by the Asian Research Service.
Hearings Before the Subcommittee on Priorities in Government of the Joint Economic Committee of the Congress of the United States. 95th Congress, 1st Session, Part 1: 23 June 1977, Part 2: 30 June 1977. Washington, D.C.: U.S. Government Printing Office, 1977.
Heaton, William R. "Professional Military Education in the People's Republic of China." Paper prepared for the Association of Asian Studies meeting, 21 March 1980.

Hinton, Harold. "China's Foreign Policy and National Interest." In The Chinese War Machine, edited by Nigel de Lee. London: Salamander Books, 1979.
Hsieh, Alice L. "China's Nuclear Missile Program: Regional or Intercontinental." China Quarterly, January-March 1971.
Jordan, James D. "The Maoist vs. the Professional Vision of a People's Army." In The Military and Political Power in the 1970s, edited by William Whitson. New York: Praeger, 1972.
Kennedy, Col. William V. "The Defense of China's Homeland," and "The Perceived Threat to China's Future," in Chinese War Machine, edited by Nigel de Lee. London: Salamander Books, 1979.
Lewis, John. External Study on Chinese Arms. Pamphlet published by Bureau of Intelligence and Research, Department of State. Washington, D.C., 1979.
Lyon, Hugh. "China's Navy: For Coastal Defense Only." In The Chinese War Machine, edited by Nigel de Lee. London: Salamander Books, 1979.
Nelson, Harvey. "The Organization of China's Ground Forces." In The Chinese War Machine, edited by Nigel de Lee. London: Salamander Books, 1979.
Pollack, Jonathan D. "Defense Modernization in the PRC." Rand Note No. N-121-1-AF, October 1979.
Romance, Francis J. "China's Military Modernization: Major Impediments." Paper prepared for the Association of Asian Studies meeting, 21 March 1980.
Ross, Edward W. "Chinese Conflict Management." Military Review, January 1980.
Shambaugh, David L. "China's Defense Industries: Indigenous Development and Foreign Procurement." Paper prepared for the Association of Asian Studies meeting, 21 March 1980.
Swanson, Bruce. "The People's Republic of China Navy—Coastal Defense or Blue Water." U.S. Naval Institute Proceedings, May 1976.
Sweetman, Bill. "The Modernization of China's Air Force." In The Chinese War Machine, edited by Nigel de Lee. London: Salamander Books, 1979.
Thatch, Joseph E. "Soviet Military Assistance to the PRC, 1950-1960." Military Review, January 1978.
Whiting, Allen S. "The Use of Force in Foreign Policy by the People's Republic of China." The Annals of American Academy of Political and Social Science, July 1972.

coming . . .

in our May-June issue

- AirLand Battle
- Women and the Air Force

IN THE CYCLOPS'S CAVE: ON HOMER, HEROES, AND THE NUCLEAR YOKE

CAPTAIN MARK S. BRALEY

Sing in me, Muse, and through me
tell the story of that man skilled
in all ways of contending, the
wanderer, harried for years on
end. . . .[1]

THE American military hero, "skilled in all ways of contending"—where has he gone? Like Odysseus of old, he seems lost on his own odyssey, borne away on waves of public mistrust cast up by the weapons of mass destruction. And like Odysseus, today's military hero will find his way back to Ithaca only by using his wits and retaining his faith in the gods.

Two recent occurrences turned my thoughts to the question of the vanishing American military hero. First was my re-reading of Homer's epic poems, *The Iliad* and *The Odyssey*. When we hear the names Hector, Achilles, and Odysseus, we identify them as men who were heroes. Their names evoke images of bloody battles and feats of physical skill and endurance. Their qualities of leadership, fortitude, and charisma serve to set them apart as giants on the battlefield. And though these mighty ancient warriors are mythological characters, the artistry of the blind poet was such that we see them as human, with human emotions and frustrations. Their human qualities, beyond their superhuman skills, are why they merit our study and serve as a fair yardstick by which to measure our own successes and failings in the art of heroism.

The second event that sparked my search for our lost heroes was my recent viewing of a film chronicling the destruction at Nagasaki and Hiroshima and discussing the effects of a thermonuclear blast. Scenes in the film depicted people with all the terrible afflictions we have come to associate with nuclear war.

The occasion for the film was my last chemical warfare refresher training, a short course designed to instruct us on the wearing of the chemical warfare ensemble, the different types of chemical agents, their effects, and how to counteract those effects. Man has created quite a smorgasbord of chemical weapons with which to incapacitate his fellow man, from mild lacrimators to blood and nerve agents. It is not

enough that one may assail his enemy with projectiles lobbed from a comfortable distance. Now one can give his opponent claustrophobia in the open plain by contaminating the air he breathes or choke him insidiously by means of a substance that creeps through his skin and grabs that space in the blood cell reserved for oxygen. Breaking down the central nervous system has also become an effective alternative. After listening to the recitation on the capabilities of Soviet chemical weapons, practicing donning my mask, and stabbing my thigh several times with a dummy antidote injector, I was in a very reflective mood.

At this point, some people may be wondering "who is this guy?" I am a United States Air Force officer thoroughly committed to supporting and defending the Constitution of the United States. I fully understand and support our U.S. policy of deterrence, the "uncomfortable paradox" as Secretary of Defense Caspar Weinberger has referred to it.[2] In becoming an Air Force officer I worked myself through the paradox, reconciling myself to the requirements of an effective deterrent posture. Having done this sets me apart from what I believe to be a majority of Americans who have not worked out in detail what the concept of deterrence requires of us.

In this article, I shall present an image of how the American public might view the military man in the context of the era of nuclear deterrence. I hope that it will provide serving military professionals with an insight into public perceptions. I believe that the better we understand how our people might perceive the military profession under modern, nuclear conditions, the better we can ensure continuing public support for policies that are essential for the security of our nation. In general, I think that the existence and nature of nuclear weapons make it difficult for today's Americans to look to the military profession as a source of heroes. This situation might be changed if certain new forms of technology fulfill their promise.

Heroes in the Nuclear Age

Before I go any further, I'd better lay down my definition of a hero. I've culled bits and pieces of my hero from the various definitions in *Webster's New World Dictionary*, so let me quote all five definitions:

1. *Myth & Legend:* a man of great strength and courage, favored by the gods and in part descended from them, often regarded as a half-god and worshipped after his death. 2. Any man admired for his courage, nobility, or exploits, especially in war. 3. Any man admired for his qualities or achievements and regarded as an ideal or model. 4. The central male character in a novel, play, poem, etc., with whom the reader or audience is supposed to sympathize; protagonist. 5. The central figure in any important event or period, honored for outstanding qualities.[3]

In characterizing my model hero let me start with Webster's fifth definition. The hero we lack today is the person of truly heroic proportions whom history, one hundred years from now, will look back upon and say: "There was a hero." I'm talking about a prominent figure, someone in the public eye. In that way, I'm eliminating all the "Real People" heroes. The guy next door who saves a child by running into a burning house or the soldier who covers a live grenade with his own body to save a friend has certainly acted heroically, but in the long run, who's going to remember Bob Smith from 403 Jackson Street or Lieutenant Joe Jones from Company C?

From definitions three and four my hero becomes a man (or woman) whom others admire and wish to emulate—the ideal. At the same time, we sympathize with that person, or rather, we empathize with him. We can project our personality into his and understand him because, like us, he is human.

Definition two: courage, nobility, exploits. The person has done something. For the military hero, that necessarily means wartime acts of greatness. The key word here, though, is *nobility.* Nobility implies integrity, honesty, and a moral and ethical purity.

Finally, the first definition, though seemingly unsuited to my purposes, rounds out the qualities envisioned in my hero. This hero is "a man of great strength"—a physical hero who loves the *feel* of the fight. And this hero, half-god, like the gods of the Greeks, is able to stand back and look at the skirmish from a distance. He is aware of the true order of things and where man's petty squabbles fit in.

With this view of heroes in mind, let us now consider two scenes. The first is an excerpt from *The Iliad*. The Akhaian forces are hemmed in against the shore, valiantly trying to stave off the Trojans led by Hector, who are making a powerful surge to reach and burn the Akhaian ships. Akhilleus, angered at the Akhaian commander, Agamémnon, has withdrawn from the battle, but now sends his close companion, Patróklos, wearing Akhilleus' armor to try to turn the tide.

> And Patróklos cried above them all:
> O Myrmidons, brothers-in-arms of Pêleus' son,
>   Akhilleus,
> fight like men, dear friends, remember courage,
> let us win honor for the son of Pêleus!
> He is the greatest captain on the beach,
> his officers and soldiers are the bravest!
> Let King Agamémnon learn his folly
> in holding cheap the best of the Akhaians!
>
> Shouting so, he stirred their hearts. They fell
> as one man on the Trojans, and the ships
> around them echoed the onrush and the cries.
> On seeing Menoitios' powerful son, and with
>   him
> Automédôn, aflash with brazen gear,
> the Trojan ranks broke, and they caught their
>   breath,
> imagining that Akhilleus the swift fighter
> had put aside his wrath for friendship's sake.
> Now each man kept an eye out for retreat
> from sudden death.[4]

Certainly, this is a scene in which any American can recognize the heroes.

Compare that scene with this admittedly unlikely scenario: Soviet officials have seen their hard-earned superiority in nuclear forces seriously threatened as the NATO alliance prepares for the deployment of advanced medium-range ballistic missiles in Western Europe. In addition, U.S. plans for deploying the MX missile in hardened Titan missile silos have been completed. The Soviets, confident of their ability to win a nuclear conflict and convinced that no time will be better, launch a preemptive nuclear strike against the United States. In response, the President orders the launching of U.S. missiles. Now there is nothing for each man to do but "keep an eye out for retreat from sudden death." But there is no retreat.

Again, this scenario is unlikely and oversimplified, but specific scenarios are beside the point. More to the point is the fact that many Americans can envision a possible nuclear war, but they probably cannot see the possibility of an American hero emerging from such a war. They cannot envision a U.S. military leader going home after it's over (provided he still has a home) and being greeted by his smiling wife with a kiss and the words, "My hero!" On the other hand, wouldn't it seem perfectly natural for Patróklos to return home to a wife proud of her man who has fought so hard for a just cause? I'm assuming, of course, that any war fought by the United States will be a just one. Would it be possible to lionize an American military leader as a hero after a nuclear exchange between the two superpowers? I think not.

From many quarters today, one hears expressions of public concern. From the no-nukes movement to the letter from the bishops of the U.S. Roman Catholic Church calling for a halt to the testing, production, and deployment of nuclear arms, more and more Americans are questioning their nation's nuclear arms stance. The fact that the issue came up for debate in Congress, even though the result was a pale shadow of the original resolution, shows that the nuclear question is a genuine concern for the U.S. public.

The belief prevalent among dissenters (whose numbers seem to be growing) is that nuclear weapons are excessively destructive. In the

minds of these dissenters, the extensive collateral destruction and death that would be associated with general nuclear war conflict with the West's basic Judeo-Christian ethic, which states "thou shalt not kill" and tells us to turn the other cheek.[5]

Casting off the Nuclear Yoke

Given this turbulence in public perceptions, the circumstances just do not seem right for a military hero to step forth and claim lasting recognition. But, just as Odysseus probably said to his companions as they huddled together in the Cyclops's cave, we can now declare: "There is a way out." As I noted at the beginning, we must use our wits and rely on our gods. The stone in front of our cave is the atomic bomb. However, we must not be so naïve as to think that we can simply dismantle our nuclear weaponry and then go marching into the arena of world conflict to snatch the victor's spoils. Unless the Soviets can be convinced to follow suit, that avenue would be not only foolhardy but probably suicidal. If we refer again to our Homeric model, unilateral disarmament would be equivalent to Odysseus' killing the Cyclops, Polyphemos, before the giant moved the stone, leaving Odysseus and his men trapped within the cave. Similarly, just as Odysseus used Polyphemos to gain freedom for himself and his men, we must maintain our nuclear deterrent and let it work for us by earning valuable research time.

As one looks back through history, the normal pattern in weapons development is readily discernible. A weapon is created by one side and copied by the other. Then follows a stage of refinement until one side, seeking to gain the advantage, develops a new weapon that renders the old weapon obsolete. The process repeats itself down through the ages. Finally, mankind has arrived at the present stop-off—the nuclear era.

Many Americans see nuclear weapons as the end of the line. They believe we have created the ultimate destructive force that negates all other weapons. We have reached the stage of final refinement. What a despairing attitude! How un-American is that defeatist attitude which says we have reached our limit! To a people who have placed a man on the moon; to a people who can hurl men and women into space as easily as David let fly his deadly stone, and then greet those space fliers exiting their craft as though they'd been on a crosstown bus trip; to a people who can build an artificial heart or defeat a cancerous growth; to a people who celebrate the words of John Paul Jones, "I have not yet begun to fight!"; to all who take pride in our country's achievements—how it must grate to hear their compatriots say: "I give up."

One person has not given up. Yet if many of today's press editorials are to be believed, he is the most unlikely of sources for a solution. President Reagan has toed the hard line on almost every nuclear weapons issue. He has pushed for higher defense spending since his first day in office. In pursuit of strategic force modernization and effective arms negotiations, he has backed the MX, the cruise missile, missile deployment in Western Europe, and the B-1B bomber; in short, he has pushed for everything that will make our country stronger and deter Soviet expansionism. He has offered realistic arms reduction proposals to the Soviets in an effort to curtail further arms buildups. The Soviets have not responded in a positive fashion. Because of this, Reagan is the name on all the signs carried by protesters marching across the United States and Western Europe. Yet he is right. Despite the public's fear of nuclear war, we must be strong or we shall see our allies fall prey to the Soviets while our own security is severely threatened. In light of this, it is ironic that this man who is so unpopular with protesters and who has led our nation in the modernization of her deterrence forces should be the first to put his shoulder to the stone; he has taken the initial steps to lead us out of the cave.

On 23 March 1983, President Reagan de-

livered a speech calling for intensified research into the development of missile defense technology. We now stand at the brink of phase three for weapons development, when a new weapon system explodes upon the scene to send an older weapon to the museum. In this case, *explodes* is the wrong term, since the next generation of weapons will serve to defuse an already explosive situation. An expanded research and development program should speed up this replacement process—a process that will be accompanied by a concomitant shift of public perceptions.

We can now look to the possibility of being able to neutralize a nuclear attack through the use of weapons employing laser and particle-beam technology. This idea is doubly thrilling. The extreme satisfaction one gets from overcoming a problem through human ingenuity is coupled with the relief and joy anticipated with the lifting of the nuclear yoke. Seemingly the trend of modern warfare will be reversed. "After all," says Michael Walzer, "it might be said, the purpose of soldiers is to escape reciprocity, to inflict more damage on the enemy than he can inflict on them."[6] In this case, we will be using our wits to "escape reciprocity" by preventing damage to ourselves. Rather than a reversal of military thought, new defensive technology will reaffirm the traditional U.S. military stance. Our weapons will be truly defensive rather than retaliatory. War will cease to present a possibility of leading to an unthinkable and unwinnable nuclear exchange but will return once more to the chess-like profession of move and countermove. When that day comes, it will be as though the umpire had shouted, "Play ball!" after watching the clouds break that threatened to rain out the game, and those of our "fans" in the American public who had left the stands will be able to return.

What does all this mean in regard to today's and tomorrow's American military hero? For one thing, it means that our military leaders must seize this opportunity to try to shed the nuclear yoke in favor of the new generation of defensive weapons. This is a great chance to get the public, whom we serve, to understand that we all abhor the possibility of nuclear war, and thus to begin a shift in public perceptions that will again lead Americans to look to the military for heroes.

Some may be tempted to say that the new technology will signal the beginning of the end to war. All true soldiers hope and pray for that result, but it is not likely. As William James once wrote, ". . . war-taxes are the only ones men never hesitate to pay, as the budgets of all nations show us."[7] Far more likely, war in the era of these new defensive weapons would be a more tempting alternative without the threat of the ultimate calamity. For this reason, the American military man, if he aspires to the title of hero, must also, as I stated metaphorically, rely on his faith in his gods. By that I mean that he must be guided by his belief in things super-human, whether the Christian God or simply a value system that says there is such a thing as an ultimate good. The risk of uncontrolled destructiveness, so great with nuclear weapons because of their potential for spilling over upon the innocents of war, will be reduced or eliminated with a return to more limited forms of warfare. The military hero will again be free to display his nobility—to choose the right path without the risk of Armageddon, to fight for the just cause, and, when the situation warrants it, to show compassion.

The removal of the nuclear risk will roll away the stone from the mouth of the cave at least temporarily and allow Odysseus his triumphant return to Ithaca. Our hero will be able to climb from his hole lined with buttons and return to the battlefield and the physical "feel" of the fight. His courageous deeds and noble leadership will again be apparent.

The way has been opened, and we must take it. Short of worldwide nuclear disarmament, the horrors of Hiroshima and Nagasaki demand it. For us in the service of our country it represents a return to the traditions that link us to the heroes of Homer.

In that vase,
Akhilleus, hero, lie your pale bones mixed
with mild Patróklos' bones, who died before
you, and nearby lie the bones of Antilokhos,
the one you cared for most of all companions
after Patróklos.

We of the Old Army,
we who were spearmen, heaped a tomb for these

upon a foreland over Hellê's waters,
to be a mark against the sky for voyagers
in this generation and those to come. . . .
You perished, but your name will never die.
It lives to keep all men in mind of honor
forever. . . .[8]

Travis AFB, California

Notes

1. Homer, *The Odyssey*, translated by Robert Fitzgerald (Garden City, New York: Doubleday and Company, 1961), p. 11.

2. Address, delivered at Fordham University, New York City, 28 April 1983.

3. David B. Guralnik, Editor in Chief, *Webster's New World Dictionary of the American Language* (Cleveland and New York: William Collins & World Publishing Company, 1974), p. 657.

4. Homer, *The Iliad*, translated by Robert Fitzgerald (Garden City, New York: Doubleday and Company, 1974), p. 385.

5. For a recent discussion of the Judeo-Christian influence on American views of nuclear deterrence and nuclear war, see: Donald L. Davidson, "Religions Strategists: The Churches and Nuclear Weapons," *Parameters*, December 1983, pp. 19-29.

6. Michael Walzer, "Moral Judgement in Time of War," in *War and Morality*, edited by Richard A. Wasserstrom (Belmont, California: Wadsworth Publishing Company, 1970), p. 56.

7. William James, "The Moral Equivalent of War," in *War and Morality*, p. 5.

8. Homer, *Odyssey*, pp. 411-12.

IRA C. EAKER ESSAY COMPETITION

Air University is pleased to announce the fourth annual Ira C. Eaker Essay Competition. Its purpose is twofold:

—First, to honor the achievement of Lieutenant General Ira C. Eaker and his colleagues, aviation pioneers whose courage and innovative spirit laid the foundation for American greatness in aerospace.

—Second, to memorialize the indomitable martial spirit of these men, a spirit that nourishes the perception of military service as a calling.

Topic areas for the essay competition are professionalism, leadership, integrity, ethics, strategy, tactics, doctrine, esprit de corps, or any combination thereof.

ENTRY RULES

—Essays must be *original* and *specifically* written for the contest. Only one entry per person may be submitted.

—Entries must be a minimum of 2000 words and a maximum of 4000 words.

—Essays must be typewritten, double-spaced, and on standard-size paper.

—The competition is open to all active (duty) members of the regular Air Force, Air Force Reserve, Air National Guard, Air Force Academy and AFROTC cadets, and Civil Air Patrol.

—A separate cover-sheet should include the essay title, author's name, rank, duty/home address and duty/home phone number. The author's name must not appear on the essay itself. The title should be at the head of the first page.

—Send entries to the Editor, *Air University Review*, Building 1211, Maxwell AFB, Alabama 36112. All essays must be received or postmarked by 1 June 1984.

—First-publication rights on all essays belong to *Air University Review*.

First, second, and third-prize medallions will be awarded as well as $2000, $1000, and $500 United States Savings Bonds. Distinguished Honorable Mention and Honorable Mention certificates will also be awarded. Winning essays will be published in the *Review*.

The Ira C. Eaker Essay Competition is funded by a permanent grant from the Arthur G. B. Metcalf Foundation through the United States Strategic Institute, Washington, D.C.

CONFLICT IN THE SOUTH ATLANTIC

the impact of air power

DR. ROBERT W. DUFFNER

AS THE second anniversary of the Argentine invasion of the Falklands/Malvinas approaches, generals on both sides of the Atlantic are still trying to sort out the lessons learned from the conflict. Disappointed Argentines no doubt search for answers to explain why their numerically superior Air Force failed to stop the British. High on the British assessment list is a reevaluation of the role and effectiveness of Harrier jets and the integration of air assets as part of an overall balanced force structure. No matter how these issues are settled finally, one point stands out: air power will continue to have a decisive impact on the outcome of limited wars of the future.

W HEN conflict broke out in April 1982, most military experts expressed a high degree of confidence in the British army and navy. Once the British task force arrived in the South Atlantic, the navy quickly demonstrated its combat effectiveness. On 2 May, its nuclear-powered submarine HMS *Conqueror* launched two Mk8 torpedoes, sending the Argentine cruiser *General Belgrano* to the bottom. A total of 360 men died. From this point

When the battle lines were drawn, the British mustered 28 Sea Harriers and 14 Royal Air Force GR3 ground-attack variants of the Harrier (left and above right) to face more than 150 Argentine combat aircraft. Neither side gained air superiority over the battle area, but the British held their own against their numerically superior opposition.

on, the Argentine Navy remained close to the Argentine mainland and for all practical purposes did not participate in the conflict.[1]

Few will dispute that the combined British ground forces, the army's crack parachute troops and the navy's Royal Marines, were more than a match for the Argentine units made up primarily of 18- and 19-year-old conscripts. The well-trained and highly disciplined British foot soldiers simply were better fighters. In every major ground operation, in spite of being outnumbered by as much as three to one, the British defeated their adversary and inflicted heavy casualties while suffering relatively few casualties of their own.

Although the British maintained the edge in terms of naval and ground resources, the lines cannot be drawn as clearly for the air war over the islands. From the onset of hostilities, both British political and military leaders were worried about the ability of Royal Air Force and Navy air power to support the task force adequately in the face of Argentine numerical superiority which, at times, was as high as five to one. The British had good reason to worry, as the Argentine Air Force turned out to be a formidable opponent. Neither side established complete air superiority. Right up until the final push on Port Stanley, Argentine fighters penetrated British airspace consistently, causing substantial damage to the fleet; five ships were sunk and at least twenty others hit. British losses numbered 255 for the entire war, but almost 80 percent of these came at the hands of Argentine air strikes on the naval task force. The majority of the 746 Argentine casualties resulted from ground actions supported by artillery and naval gun fire.[2]

The Argentines held a distinct advantage in the number of combat aircraft available for immediate use in the conflict. These included approximately 44 French-built supersonic Mirage III and Mirage V fighters, 68 American-built Skyhawk A4P fighter-bombers, 8-10 British-built Canberra bombers, and 5 French-built Super Etendard naval attack aircraft and about 60 pesky Argentine Pucará light ground-attack

aircraft. Flying against this numerically superior force were 14 Royal Air Force (RAF) Harrier GR3s and 28 Navy Sea Harriers operating off two light aircraft carriers, HMS *Hermes* (25,000 tons) and HMS *Invincible* (20,000 tons). A third vessel, the container ship *Atlantic Conveyor*, provided an alternate landing site for Harriers; but for the most part, its primary mission was to store aircraft, equipment, and supplies.[3]

What the British lacked in sheer numbers, they made up for with quality aircraft. Both RAF and Sea Harriers carried the improved version of the American-made air-to-air Sidewinder missile, the AIM-9L. The advantage of the 190-pound AIM-9L was that the attacking Harrier aircraft did not need to approach its target from behind to allow the missile to home in on the hot exhaust of the enemy plane. Instead, the AIM-9L could be launched "straight on" toward the oncoming aircraft. The missile proved to be a deadly weapon, destroying, according to British claims, five Skyhawks and nineteen Mirages.[4] It is not known how many, if any, of those were downed with head-on shots.

Harrier jump-jets performed well beyond the performance expectations of most military experts. The remarkable record of the aircraft is attributed not only to relatively sophisticated gadgetry, such as warning receivers and electronic countermeasures to confuse Argentine anti-aircraft weapons, but also to the skilled British pilots, the geographic limitations imposed by the location of the conflict area, and the older Argentine planes.[5]

Harriers were designed for vertical/short takeoff and landing (V/STOL), which allowed them to land and take off like helicopters. By rotating the jet engine nozzles downward, enough thrust was generated to lift the aircraft straight up. This built-in "jump" feature offered certain tactical advantages, mainly that the Harriers did not require long runways. During combat missions, when air traffic conditions became too congested on the *Hermes* and *Invincible*, Harriers low on fuel landed at helipads on destroyers.[6]

There was one glaring exception to the impres-

sion that the Argentine Air Force lacked a lethal punch for air operations. A few Super Etendards, carrying French-built Exocet AM39 missiles (range, 45 miles), caused devastating damage to two British ships. On 4 May an Exocet, skimming a few feet over the water at 600 mph, found its mark and, although its warhead did not explode, caused fires that sank the destroyer *Sheffield*, which had been serving as an early warning station.[7]

Three weeks later, a second Exocet slammed into the side of the *Atlantic Conveyor*, sinking the vessel, along with its extremely valuable cargo of repair parts, Chinook helicopters, tentage, and more. The Super Etendard's inertial navigation system and the curvature of the earth permitted the plane to remain undetected by British radar. Once the plane entered British radar coverage, the pilot identified the target quickly with his radar, programmed the flight of the Exocet, launched, and departed the area immediately, not waiting to observe whether the missile struck its target. Hence, the Exocet was advertised as the "fire and forget" missile.[8]

However, according to most reported accounts, the Argentines had only five of the air-launched Exocets available. Because of the embargo imposed on Argentina by the European Common Market, the French had refused to fill orders for additional missiles.[9]

In spite of its spectacular successes against British ships, Argentina lost the air-to-air war decisively. Argentine fighter aircraft failed to shoot down a single Harrier. British Harrier losses totaled nine—four to accidents and five by surface-based air defenses—surface-to-air missiles (SAMs) and antiaircraft artillery (AAA). The 400 miles from Argentina to the islands partially explained why the score was so lopsided. To make the 800-mile round trip from the Rio Gallegos Air Base on the coast severely strained the maximum operating range of the Argentine aircraft. Consequently, Argentine pilots had all they could do to reach the conflict area undetected and deliver their ordnance, "getting in and getting out" as quickly as possible.

They could not afford to stay around to recon targets or offer much opposition to the Harriers sent up to intercept them, for in doing so, they realized, they would run dangerously low on fuel and might have to ditch in the Atlantic on the return home.[10]

Because Argentine aerial-refueling capabilities were limited (two KC-130s, plus "buddy refueling" for Skyhawk and Super Etendard aircraft), the potential effect of the Argentine Air Force was reduced significantly. In contrast, the British Harriers operating off carriers did not face the fuel shortage problem and had the luxury of time on their side—factors that allowed them to perform recon and escort missions in addition to air-to-air combat.[11]

The importance of aerial refueling is perhaps one of the salient teaching points of the war. If Argentine fighters had been supported by a sizable air-refueling capability, they could have rendezvoused with air tankers near the islands. A massive, tanker-supported effort might have been able to tip the scales of the tactical air war more in their favor. On the other hand, the British were very dependent on the vital support role that aerial tankers played in logistical operations, reconnaissance/early-warning flights, and strategic bombing runs.

To sustain their task force, the British refueled tactical aircraft and transport planes (ferrying men and supplies) while in flight from England to the logistical base at Ascension Island, midway between the war zone and the home front. A few RAF Harriers flew directly from Ascension to the flight deck of the *Hermes*, refueled along the way by Victor K-2 tankers. Tankers also refueled Nimrod maritime reconnaissance aircraft on more than a hundred occasions. These latter flights lasted approximately fifteen hours each; however, they did not pick up enough intelligence to have any substantial impact on combat operations.[12]

Air tankers contributed also to three long-range bombing runs made on the Port Stanley airfield to destroy the runway, any planes parked there, and associated storage facilities. Two

Argentine turboprop Pucarás were based on the Falklands Malvinas. Many fell to British Blowpipe and Rapier surface-to-air missiles. Others, like the one pictured above, were destroyed by Special Air Service teams in hit-and-run attacks. . . . Helicopters hauled men and supplies, landed special teams, and conducted electronic countermeasure missions. One sank the Argentine submarine Sante Fe in Grytviken harbor on South Georgia Island. Bad weather and ground fire took its toll of both British and Argentine choppers.

other raids were directed at a radar site that was providing information on British air activity to the Argentine defenders. Although these attacks set a record for the longest combat missions in the history of air warfare (8000 miles—round trip from Ascension to the disputed islands), they failed to disable any of the Argentine facilities. The first flight on 1 May, for example, dropped twenty-one 1000-pound bombs, but only one of the bombs landed on the runway. This lone crater did not prevent the Pucará fighter and Hercules cargo planes from using the runway. Yet even though the Vulcans caused only minor material damage, dropping 1000-pound bombs in the early morning hours under the cover of darkness probably did have the psychological effect of lowering the morale of Argentine soldiers on the ground.[13]

Selection of the 4100-foot paved airstrip at Port Stanley as a target demonstrated the British concern for this prime piece of real estate. Once they arrived in the war zone, Harrier jets from time to time had attacked the airfield by dropping 1000-pound bombs but were unsuccessful. Antiaircraft (35-mm and 20-mm guns), plus Tigercat and Roland surface-to-air missiles positioned near the airport, posed too great a risk for the Harriers to mount an intensive campaign. Besides, as the war progressed, it became clear that British fighters could drive off most Argentine transport planes trying to land at Port Stanley, at least those attempting to fly in during daylight hours. In essence, the British had established a partially effective aerial blockade of Port Stanley, which was the logistical lifeline for ground troops on the islands.[14] More important, they almost completely halted aerial resupply from Port Stanley to troops in other isolated

The South Atlantic War yielded few new lessons in warfighting but confirmed many concepts learned during combat in the Middle East and elsewhere. Foremost among the lessons revealed is that high-tech weaponry, like the Rapier SAM system (below), gives an edge to the defense that can be overcome only through innovative and imaginative employment of reasonably sophisticated offensive weaponry.
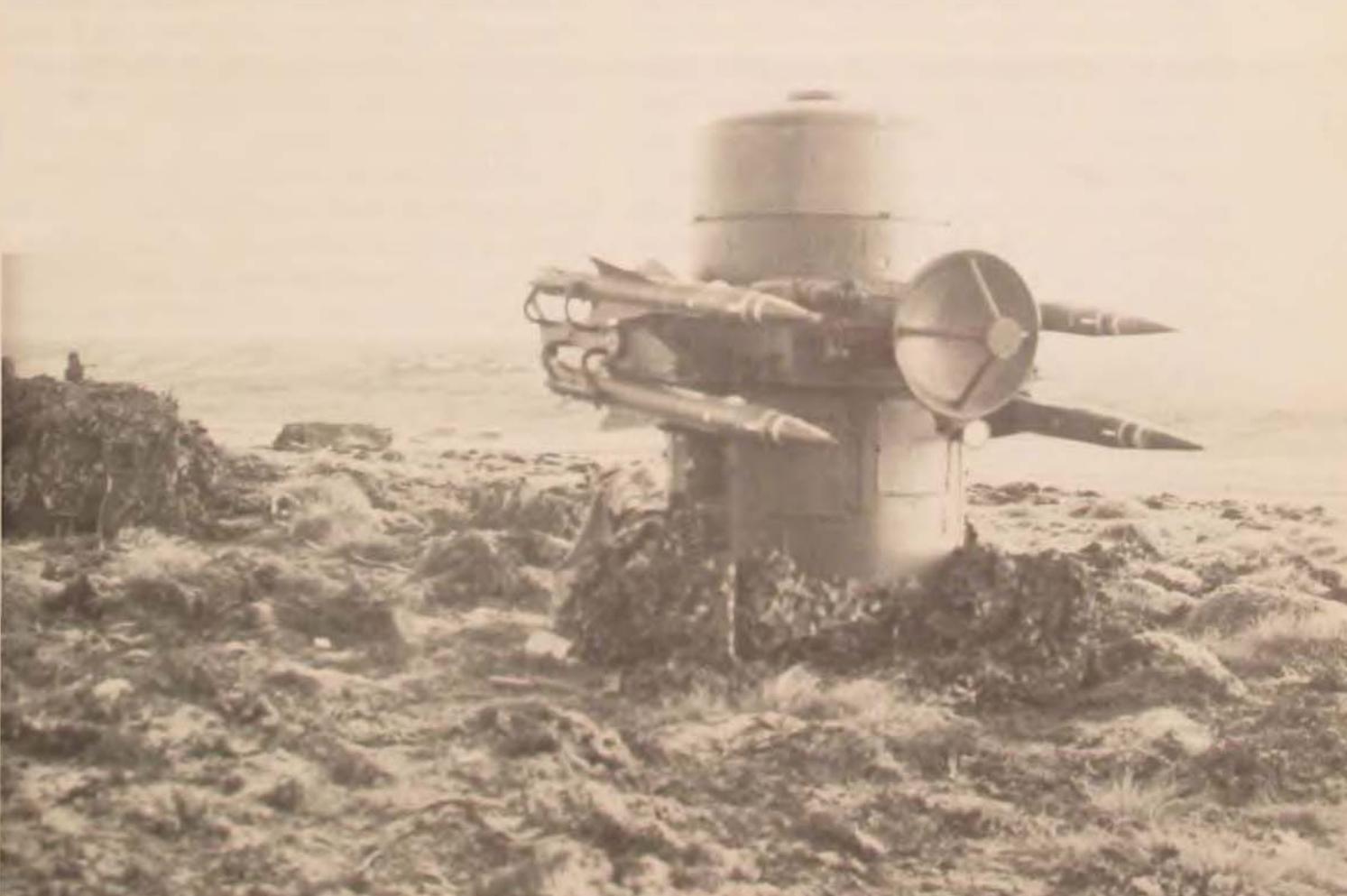
garrisons throughout the island, depriving them of even limited stocks that would have been available.

The Argentines had at least four weeks to build up supply stock levels before the British task force reached the islands. From May through the first week of June, some transports (landing at night) reached Port Stanley to bring in more supplies. If the war had lasted more than a few months, with the interruption of aerial resupply, it is doubtful that the Argentines could have held out for any length of time.

The Argentines made a serious misjudgment by not using the month of April to work on extending the Port Stanley runway. If they had accomplished this vital task, a more effective defense of Port Stanley could have been achieved. A longer runway could have accepted the much-needed Skyhawks and Mirages, allowing them to perform both counterair and close air support missions. Operating from a land base on the islands, Skyhawks and Mirages would not have been so severely restricted by the limitations of fuel and distance. By significantly increasing the time that they could spend in the air and with at least a three-to-one advantage in fighter aircraft, the Argentine pilots might have been able to overwhelm the small British air force by numbers alone. Also, with the critical element of staying power working in their favor, they could have engaged in more recon missions to collect more accurate intelligence on the kind and location of targets. Even more important, Argentine fighters flying out of Port Stanley would have had a better opportunity to locate and successfully attack the British fleet. This achievement might have altered the outcome of the conflict.

The "what if" questions of warfare abound in almost any conflict, but in this particular case the importance of maintaining a secure tactical air and logistical base is illustrated clearly. The British supply lines extended across a distance twenty times greater than that of the Argentines. Yet the British were able to support and protect their air resources much better than the nearby Argentines. British air power, including surface-based air defense, in the end proved superior.

This is not to say that the British did not pay a price. Argentine air power posed a substantial threat, as demonstrated by the major combat engagements of the war.

AFTER their initial surrender of Port Stanley on 2 April, the British came back to win their first military victory at South Georgia, a small island in the Atlantic, 800 miles east of the Falklands/Malvinas. The advanced elements of the British task force reached the Falklands/Malvinas in mid-April and were directed to recapture South Georgia held by a small contingent of Argentines. Driving the enemy off this island would serve three purposes. First, a British success early in the war would show the politicians at home that Margaret Thatcher's government was indeed pursuing the right course in dealing with outside aggression. Second, the fall of South Georgia would be a major step forward for the British military. Not only would it boost morale, but it would allow the field commanders to gauge the fighting ability of the Argentine soldiers. Finally, the fight would offer a unique "rehearsal" for the main assault on the Falklands/Malvinas.

Retaking South Georgia was risky business. The main task force was still en route, so the landing force had to go in without the benefit of close air support. However, air power did prevail to some degree with Wessex 3 helicopters from the destroyer *Antrim*, Lynx helicopters from the frigate *Brilliant*, and Wasp helicopters from the *Endurance*. On 25 April, a Wessex 3 spotted the Argentine submarine *Santa Fe* and damaged it by dropping depth charges. The Lynx and Wasp helicopters followed up by firing their SS-12 antiship missiles, causing the submarine to limp into King Edward Harbor where its crew members eventually were taken prisoner. Although the 4.5-inch naval guns of the *Antrim* and *Plymouth* contributed additional firepower to turn the tide of battle, the British developed an appreciation for the air

power contribution made by the navy helicopters.[15]

Air power was to have a much greater impact on the British landing at San Carlos, which began on 21 May. British soldiers secured the beaches unopposed on the ground, but the escort ships in Falkland Sound that supported the operation faced wave after wave of Argentine planes from two directions. The small Pucarás took off from Port Stanley and flew low to the ground, approaching the Royal Navy from the east. The first Pucarás bombed and badly damaged the frigate *Argonaut*, one of five ships that formed a forward defense line to detect aircraft coming from the Argentine mainland.[16]

The courageous Argentine pilots demonstrated their aerial skills by flying a low-altitude, terrain-hugging profile over West Falkland Island to use the rolling hills as a shield against British radar detection. Just before reaching San Carlos, they "popped up" and then executed dive-bomb maneuvers on the British ships. The first group of Mirages dropped 1000-pound bombs and succeeded in hitting the *Ardent*, ripping holes in her deck and setting off a number of uncontrollable fires. Twenty-three of the crew died and more than thirty were injured before the *Ardent* sank.[17]

On the second day at San Carlos, two 500-pound bombs landed on the *Antelope* but failed to explode. One bomb blew up as a British bomb expert tried to disarm it. The explosion tore a huge hole in the ship's side, sending a spectacular tower of smoke, fire, and debris skyward. The *Antelope* sank the next day.[18]

The problem of bombs that hit their targets but failed to detonate plagued the Argentines throughout the war. Some accounts estimate that nearly 80 percent of the bombs dropped on target malfunctioned because of poor wiring and delivery techniques. Releasing the bombs at very low altitudes (less than 40 feet) did not give the bombs sufficient time to arm themselves prior to impact.

On 24 May, bombs hit and damaged the landing ships HMS *Sir Galahad* and *Sir Lancelot*, which were bringing supplies to San Carlos. On 25 May, the same day an Exocet sank the *Atlantic Conveyor*, Argentine pilots made repeated passes and finally sank the destroyer *Coventry*. From 21 May to 25 May, the British paid an even higher price for establishing a beachhead at San Carlos: four of their ships sank, while at least ten others were hit and damaged by bombs.[19]

Although they suffered severe naval losses during the San Carlos encounter, the British inflicted a more damaging blow to the Argentine Air Force. Mirage and Skyhawk pilots flew against incredible odds in terms of distance, radar detection, surface-to-air missiles, and Harrier jets.[20] Approximately 109 Argentine aircraft were lost during the entire war. SAMs accounted for shooting down about 38 percent of them; the Harriers' kill ratio was 28 percent. The remaining third of the planes that the Argentines lost were shot down by small-arms fire or were captured/destroyed on the ground. Rapier proved to be the most effective land-based SAM, even though it had to be fired optically because the fleet's radar/electronics interfered with its radar. Foot soldiers carried the shoulder-fired Blowpipe, designed to hit both high-speed fighter aircraft flying low-level air strikes and helicopters operating in a standoff mode. The supersonic Blowpipe missile achieved its greatest success against Pucarás. More than half the SAM kills were attributed to Rapier and Blowpipe. The balance of SAM kills came from the ship-mounted Seawolf, Sea Dart, and Sea Cat missiles.[21]

Britain suffered its worst casualties from Argentine air power on 8 June, when British troops were caught in a poorly planned and badly executed operation to land soldiers at Fitzroy. Two landing ships, *Sir Tristram* and *Sir Galahad*, anchored in Fitzroy inlet (four miles from Bluff Cove) without protection from naval escort ships, offered an inviting target to the Argentine Air Force. Mirages and Skyhawks capitalized on the opportunity by dropping bombs on both ships, which were loaded with troops ready to disembark at Fitzroy. Without

naval- or land-based SAMs available to provide protective firepower, the *Tristram* and *Galahad* were extremely vulnerable. As a result, more than fifty lives were lost—the highest single-day casualty figure of the war for the British.[22]

Once the British absorbed their losses at Fitzroy, their move to retake Port Stanley progressed by using air strikes to soften up the Argentine strongholds for the final assault. These strikes, in combination with almost three days' continual artillery bombardment of Port Stanley and the surrounding area, led ultimately to the Argentine surrender to British ground troops on 14 June.

AIR power played a very significant role for both sides in the conflict over the Falklands/Malvinas. But one lesson which should not be ignored is that air power alone could not win the war. This assessment is not a departure from past doctrine but simply a reaffirmation of a time-honored principle of war: the combined actions of mutually supportive air, ground, and naval forces decide the difference between victory and defeat.

The absence of an adequate Argentine naval force and the inferior training of the bulk of Argentine ground troops resulted in Argentina's placing a disproportionate share of combat responsibility and expectations on the Argentine Air Force. This circumstance, coupled with the Argentines' failure to extend the vitally important Port Stanley airstrip and their very limited aerial-refueling capability, directly contributed to Argentina's defeat.

British combat operations in the conflict were successful not only because of the Argentines' fundamental military weaknesses but also because of the superb leadership and highly coordinated planning efforts carried out by the Royal Navy, Army, and Air Force at all levels of command. The navy provided a safe operating base for aircraft and furnished the needed fire support for ground actions. Royal Navy and Royal Air Force Harriers, operating side by side and flying off the same carrier decks, worked closely with one another to deliver maximum firepower on the enemy. A derivative of the Royal Air Force Harrier, the Royal Navy Sea Harrier was originally designed for fleet air defense. It demonstrated its flexibility, however, by performing air defense, ship attack, and—until the Royal Air Force contingent arrived—reconnaissance and ground attack. The air force made other important contributions by executing long-range bombing runs, conducting Nimrod reconnaissance missions, and performing aerial-refueling operations to sustain the 8000-mile logistical lifeline.

BRITISH Air Power made its greatest contribution as part of an integrated combat effort. Assessing the degree to which each service contributed to the final outcome of the war is not yet possible, in part because official military assessments on both sides have not been completed. However, one point is clear: The generals and admirals who one day may face the prospect of fighting a limited war in a remote region of the world must recognize and stress the importance of a balanced force concept. Implementation of this policy requires a potent air arm. As demonstrated in the South Atlantic conflict, air power, one essential element of an effective combined force, played a key role in determining both victory and defeat.

Kirtland Air Force Base,
New Mexico

Notes

1. Drew Middleton, "Electronics Tips the Scales of Combat," *New York Times,* 11 May 1982, p. A6.

2. Charles W. Corddry, "Britain's Near-Thing Victory," *Air Force,* December 1982, pp. 50-53; Alistair Horne, "A British Historian's Meditations," *National Review,* 23 July 1982, pp. 886-89.

3. Paul Eddy, Magnus Linklater, and Peter Gillman, *War in the Falklands: The Full Story* (New York: Harper & Row, 1982), pp. 205-11; "The Falklands Campaign: The Lessons," presented to Parliament by the Secretary of Defence (London: Her Majesty's Stationery, 1982), p. 9.

4. USAF *Fact Sheet* 82-25, "AIM-9 Sidewinder," July 1982; Derek Wood and Mark Hewish, "The Falklands Conflict—Part 1: The Air War," *International Defense Review*, No. 8 1982, pp. 977-80.

5. Wing Commander John D. L. Feesey, RAF, "V STOL: Neither Myth nor Promise—But Fact," *Air University Review*, September-October 1982, pp. 80-82; William S. Lind, "Simple Tanks Would Suffice," *Harper's*, September 1982, pp. 22-24.

6. Feesey, pp. 80-82.

7. Peter Archer, "On British Carrier, Pilot Recounts Order: Engage," *New York Times*, 10 May 1982, p. A9.

8. Val Ross, "Closing the Vise on Port Stanley," *Maclean's*, 7 June 1982, pp. 22-24; Eddy, Linklater, and Gillman, pp. 173-75.

9. Drew Middleton, "Wanted: More Arms," *New York Times*, 10 May 1982, p. A9.

10. Wood and Hewish, pp. 977-80.

11. General T. R. Milton, "Too Many Missing Pieces," *Air Force*, December 1982, pp. 48-49.

12. Lawrence Freedman, "The War of the Falkland Islands, 1982," *Foreign Affairs*, Fall 1982, pp. 196-210; Corddry, pp. 50-53; Wood and Hewish, pp. 977-80.

13. General T. R. Milton, "Drawing Lessons from the Falklands War," *Air Force*, July 1982, p. 89; Freedman, pp. 197-210.

14. William Border, "Britain Attacks Falklands Again," *New York Times*, 10 May 1982, p. A8.

15. Mark Hewish, "The Falklands Conflict—Part 3: Naval Operations," *International Defense Review*, No. 10 1982, pp. 1340-43; Freedman, pp. 197-210.

16. Eddy, Linklater, and Gillman, pp. 212-14.

17. Ibid., p. 218.

18. Wood and Hewish, pp. 977-80.

19. Ibid., p. 218.

20. Freedman, pp. 197-210.

21. Mark Hewish, "The Falklands Conflict—Part 2: Missile Operations," *International Defense Review*, No. 9 1982, pp. 1151-54; Corddry, pp. 50-53.

22. Jane O'Hara, "The Noose Tightens on Port Stanley," *Maclean's*, 21 June 1982, pp. 14-17; Freedman, pp. 197-210.

Albert F. Simpson Historical Research Center (AFSHRC) Redesignated

On 1 December 1983, the AFSHRC was redesignated the United States Air Force Historical Research Center (USAFHRC). This change was made to emphasize the center's focus on and commitment to the U.S. Air Force. The name of the physical facility, located at Maxwell Air Force Base, Alabama, will remain unchanged, honoring the memory of the first Air Force historian, Dr. Albert F. Simpson.

Heroism, Technology, and Strategy: The Brew of War

WAR is the result when the normal order and diplomacy among nations fail. Once the shooting begins, war fighting and the final outcome depend on a myriad of variables: national will and resolve, leadership, strategy, training, technology, heroism, time, even the weather—all become elements that work to determine victory or defeat. War is one of the grandest and most terrible of human endeavors, and modern warfare is tremendously complex. Today's military professional must be committed to learning as much as possible about the use of military force. To do otherwise is to countenance insularism and incompetence, which may result in tragedy.

In April 1982, Argentina, frustrated by years of negotiations over the status of the Falkland/Malvinas and South Georgia islands, sent her military forces to resolve the impasse. The resulting conflict surprised just about everyone, including the antagonists. Neither side was prepared for the scope and intensity of the conflict.

That is nothing new. Wars have a way of surprising their participants. All too often, what begins as a simple attempt to redress a perceived grievance ends up a tragedy that may involve many nations in a *danse macabre*. Sometimes such sequences alter the course of history. The assassination of the Archduke Franz Ferdinand by a Bosnian nationalist in June 1914, a relatively limited act of political violence, sparked a conflagration that led to the deaths of millions, the fall of monarchs, the rise of dictators, and, eventually, another cataclysmic war. Fortunately, the war in the South Atlantic directly involved the Argentines and the British only, though the potential for expansion was present.

Men, weapons, and the competence with which they are employed are all part of the brew of war. Yet in this age of sophisticated weaponry, it is easy to forget the human dimension. The quality of the individuals bearing arms is vital to the success or failure of any martial enterprise. Both Argentine and British airmen, sailors, and soldiers fought skillfully and bravely. The heroism of the Argentine aircrews and the bravery of the British who stood by their posts to defend the fleet from air attacks have been widely noted.
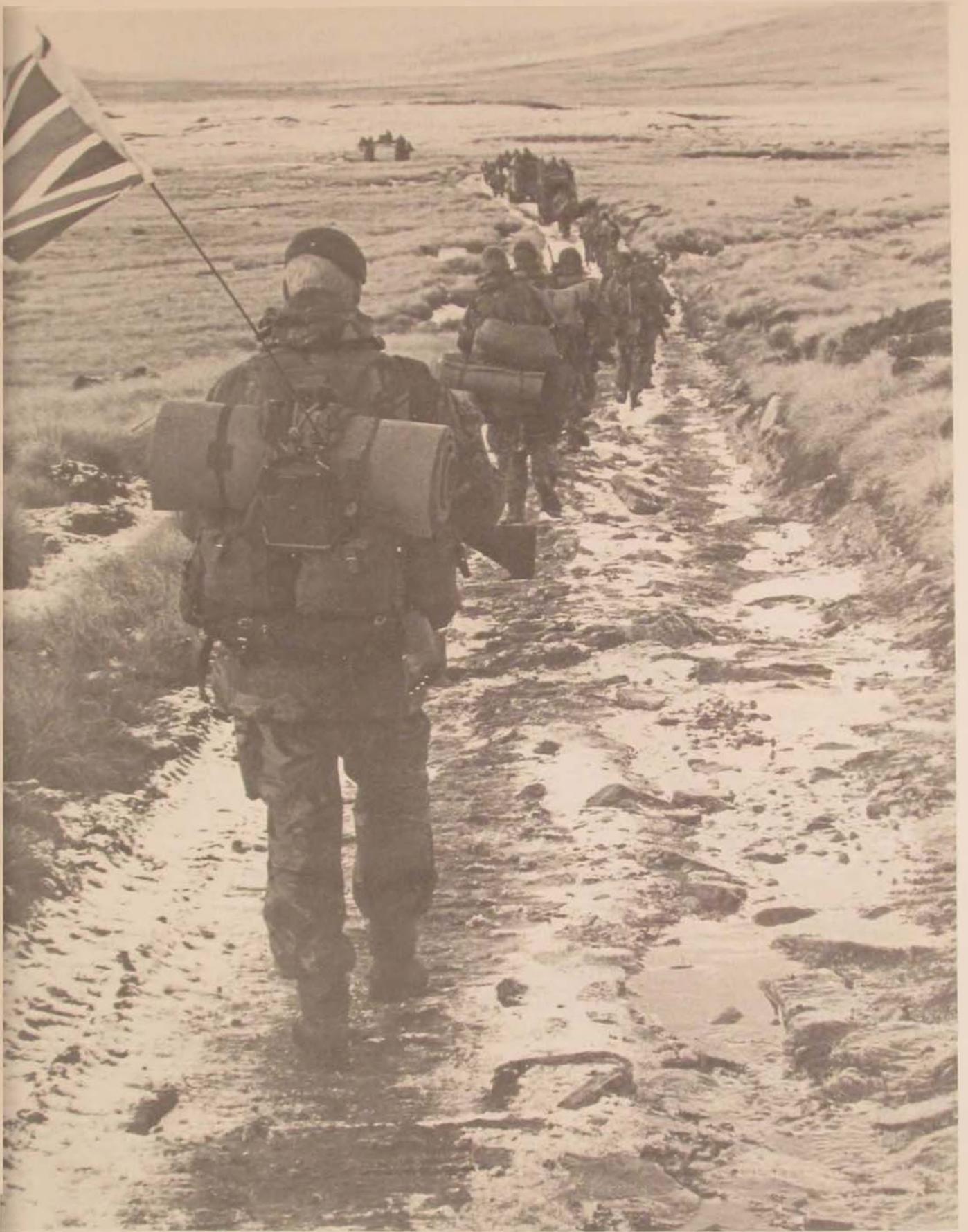
In this era of complex modern weapon systems, a nation's military could become a technocratic bureaucracy that can develop intricate and sophisticated military machines but has only limited knowledge of what is involved in using the equipment in battle. Air forces, in particular, need to be acutely aware of the temptation to substitute "switchology" for sound tactics. In the end, the British retook the islands because their troops and sailors outfought the Argentines. The British used their weaponry more effectively than the Argentines, who had weapons of comparable or better quality

In the larger context, strategists determine the employment of military men and machines. For the Argentine Air Force (FAA), the strategy was one of attrition: destroy the British fleet or sink as many ships as possible, in hopes that London would call off the war and offer a satisfying deal on the disposition of the South Atlantic islands. At the tactical level, this strategy required aircrews to fly into a very sophisticated air defense system employed by well-trained men. The British protected their fleet with a defense in depth: three basic layers of weaponry formed a gauntlet to be run by Argentine pilots. At the outer edge of the gauntlet, the British deployed their BAe-Harriers armed with all-aspect AIM-9L Sidewinder missiles. The Harriers, unable to keep up with the faster Mirages or even the older A-4 Skyhawks, fired at the Argentines as they flashed by en route to the fleet. If the Argentine airmen got past the Harriers, they faced surface-to-air

Neither Britain nor Argentina could gain complete air superiority over the Falkland/ Malvinas islands and the surrounding waters. The Argentine Air Force penetrated the British defenses to sink a number of ships. The British were never able to close the runway at Port Stanley, in part because of the effectiveness of Argentine antiaircraft fire. . . . The French-built Mirage IIIEAs flown by the Argentine Air Force (below) are among the world's best air-superiority fighters, but their potential superiority over Britain's slower Harriers (right) proved irrelevant. Because of the distance from the continent to the combat zone (about 400 miles), the Mirages were unable to expend fuel in dogfights. With their AIM-9L missiles, Harriers were able to take their toll of Mirages and Skyhawks.

missiles from the ships. Finally, British antiaircraft guns and Royal Marines and British Army troops firing Blowpipe hand-held SAMs waited at the end of the gauntlet. Argentine heroism could not overcome the disadvantage of a situation that had aircrews playing to the British strengths in technology and training. While brave Argentine pilots won the respect of their enemies, they also provided additional evidence that in this age of high-tech weaponry the defense has an advantage unless an innovative and imaginative offense can be devised.

Warriors, weapons, and strategy are among the basic elements of war that military professionals must master. Many important lessons about these elements can only come from a career-long study of war and its history. Through intense study in time of peace, military professionals prepare themselves for war.

Editor's note: We appreciate the help of Comodoro José C. D'Odorico, Argentine Air Force (retired), and Wing Commander Phillip Wilkinson, Royal Air Force, in obtaining photographs for this essay

The heroic exploits of war are frequently romanticized, as in the case of an artist's impression of an attack on a British ship (right). . . . In reality, modern war involves a mixture of hard work and boredom, punctuated by a few moments of terror. These British sailors (right, below) are loading bombs on a carrier deck in freezing weather. . . . Their Argentine airmen counterparts (below) prepare an A-4 Skyhawk for its next mission.

THE FIRST
RULES OF AIR WARFARE

Major Richard H. Wyman, USA

FLYING, an age-old dream of mankind, evolved rapidly as an instrument of war once the dream became reality. The French were perhaps the first to use aircraft as weapons of war in 1794. These lighter-than-air machines

enhanced observation, but, without a means of locomotion independent of wind speed and direction, they proved of little tactical value.[1] Yet, development of the first heavier-than-air craft at the beginning of this century signaled the tremendous wartime potential of the airplane. The battlefield suddenly became three-dimensional.

Early combat usually took the form of personal encounters between belligerents who customarily observed mutually accepted rules. But the industrial revolution introduced increasingly complex weapon systems and an impersonal element to war: the enemy became a faceless "they" who had to be destroyed.[2]

Belligerents recognized that the threat of reprisal could prevent unnecessary suffering. For example, in September 1915, the French notified the inhabitants of Sofia, Bulgaria:

> Our aircraft observe the rule of bombarding *only military establishments and those serving the national defence.* The German Zeppelins and aeroplanes, however, drop bombs on Salonika and Bukharest, assassinating old men, women, and children. . . . Such acts, such crimes, call for vengeance. . . . If such crimes are renewed, they will be followed by the same punishment.[3]

As an alternative to increased brutality, nations sought to epitomize the practical value of humanity and restraint. Peace followed war, but uncontrolled devastation of an enemy during war sustained hatred to the point that it obstructed normal relations. Furthermore, warfare without limits was contrary to the moral values of most civilized countries. But, most important, brutality bred brutality. For example, the German terror bombing against England that led to the 1917 Gotha raids over London may have contributed to indiscriminate allied bombing of Rhineland towns—or vice versa. However, warfare conducted at recognized levels of moderation and humaneness would encourage similar enemy behavior and ensure at least minimum protection for noncombatants. Potentially, international agreements could provide the necessary framework.

Hague Peace Conferences

The Hague Peace Conference of 1899 was the first significant attempt to regulate aerial bombardment. The conference unanimously adopted a declaration to prohibit "for a period of five years . . . the discharge of projectiles or explosives from balloons or by other new methods of a similar nature."[4] Later, the Hague Conference of 1907 renewed this declaration only after considerable debate. Why the change? Aviation apparently had little military value in 1899, but, with the advent of powered flight in 1903, its potential began to be recognized. By 1907, technology had developed so rapidly that countries with strong aviation programs were unwilling to restrict their deployment options. But weaker countries were quite willing to accept prohibitions, since they possessed virtually no offensive air capability.[5] Thus, conflict of interests among powerful and weak nations complicated these early attempts at regulation.

Further efforts to regulate aerial warfare came with recognition of its potential for destruction. The Conference of 1907 thus modified certain articles prepared at the Conference of 1899 and concluded that the remaining articles were so general that they, too, could be applied to both land and air warfare. This conclusion seemed logical since bombardment from the air was not unlike artillery bombardment.[6]

As a result, articles contained in Convention IV of the 1907 Hague Conference were considered binding on all nations, since they were "merely declaratory of existing laws and customs of war . . . [and were] of course binding independently of the status of the conventions of which they were a part." Thus, the articles, in effect, were customary law, but, according to provisions of the conference, they were binding only in conflicts involving signatory belligerents.[7] This apparent inconsistency proved unfortunate during World War I. On the one hand, France and Germany could claim that the articles did not apply, since neither nation had ratified the convention. On the other hand, either

belligerent could logically accuse the other of violations, since the articles conformed to customary international standards. This double standard undermined the effectiveness of the rules.[8]

Problems Posed by Air Power

The use of air power during World War I introduced a number of unexpected problems. In early conflicts, fighting was more or less limited to well-defined areas, and it progressed at a slow rate. Noncombatants were generally aware of the areas where battles were likely and could, therefore, leave the scene. To some extent, their deliberate decision to remain absolved the belligerents of responsibility for injuries.[9] But the speed and mobility of the airplane allowed sudden bombardment of cities, towns, and villages far from the normal lines of fighting, and noncombatants were unexpectedly caught in the midst of fighting. Another result was the destruction of historical monuments, private homes, hospitals, etc., that might not have occurred in land warfare. This destruction often resulted from imprecise target location as well as bomb delivery error.[10]

Worst of all was the tactic of deliberately bombing cities to terrorize civilian populations. The rationale was that the psychological effect of these attacks would bring demands for peace. Interestingly enough, the tactic generally strengthened the enemy's resolve and prolonged hostilities in World War I. But what was the alternative? Total abolition of air warfare was unlikely, since no country wished to renounce its development and possible use of such a versatile and potent weapon system. Stricter regulation of air warfare was another solution, although the laws of war have not always been effective. Finally, many jurists recommended that air warfare should be treated as an extension of land or naval warfare and thus regulated by existing land and naval warfare laws. This approach required strengthening the rules governing land

and naval warfare, but it also implied other more serious problems.[11]

Army aircraft in support of land forces should logically be regulated by rules of land war, and naval aircraft in antisubmarine or antishipping operations should be covered by rules of naval war. But what about naval aircraft in support of ground operations or the reverse? Would a pilot be required to switch rules as he passed over the shoreline? The range and mobility of aircraft to operate over both land and sea during a single mission further complicated the problem. Consequently, most military experts and world jurists concluded that existing regulations could not satisfactorily control air warfare. Just as the air over land and sea forms a single medium, a single set of rules independent of land and sea boundaries must control aircraft.[12]

Although jurists disagreed on precise ways to limit air warfare, they generally agreed that existing prohibitions against aerial bombardment of cities were inadequate. The fundamental question centered on what constituted a defended city, since Article 25 in Convention IV of the 1907 Hague Conference prohibited aerial bombardment of undefended population centers. Was a city defended if military forces were deployed in or around it even when there was no real antiaircraft capability? How could a pilot determine whether a city was defended? Even the absence of antiaircraft emplacements was insufficient, since the city might be defended by interceptor aircraft. But there was a logical paradox. A manufacturing center for some critical war material deep in the enemy's rear would be immune to destruction if it was not defended, but a city of no military value with thousands of people and one antiaircraft gun could be bombed to the ground.[13]

Therefore, Article 25 failed its most basic test because it was illogical. Not only could an enemy use it to protect his most vital assets, he could also use it to justify inhumanity. It was unworkable, since the criteria for defining a defended city were too vague. Moreover, if rules "are to commend themselves to observance by

fighting men, they must be based as much on considerations of military expediency as upon considerations of humanity."[14]

The Commission of Jurists
(1922-1923)

At the end of World War I, a need existed for international arms limitation. The bitter experiences of the war, such as the terror bombing of population centers, showed clearly that massive suffering could result from poorly regulated bombardment, and a far greater potential for destruction appeared likely in the future. This desire for arms limitation led to the Washington Conference on the Limitations of Armaments in 1921 to consider limits on naval war vessels and other matters.[15] The conference recognized that any attempt to limit the size or number of nations' military aircraft would be difficult, since commercial assets might be quickly converted to wartime use. Consequently, comprehensive rules that conformed to accepted military practice and were consistent with established principles of warfare would provide the most effective control.

Because of the technical nature of aviation, the Washington Conference recommended a separate session concerned exclusively with these new methods of war.[16] It thus established the Commission of Jurists to consider:

> (1) whether existing rules of international law adequately covered "new methods of attack or defense . . . [developed] since the Hague Conference of 1907," . . .; and if they did not, (2) "what changes in the existing rules" ought . . . to be adopted. . . .[17]

The commission decided in the planning phase to restrict consideration to aircraft and radio, since the Washington Conference had already issued declarations concerning submarines and chemical warfare.

Delegations from six countries—Great Britain, France, Italy, Japan, the Netherlands, and the United States—met at The Hague during the period from 11 December 1922 to 19 Febru-

ary 1923. Each delegation included one or two jurists and various technical advisers. This diversity proved fortunate because the jurists were generally idealistic with little or no combat experience, but the technical advisers were military men of considerable experience in the use of aviation and radio in warfare. Thus, ideas ranged from the most idealistic and impractical to the most pragmatic.[18]

This philosophical balance was fortunate for another reason. Following World War I, the general public of the various countries was probably more interested than the military in establishing controls on the use of aviation and radio. Many people had had first hand experience in the tragedies of war, and aviation and radio played especially prominent roles in these experiences. Consequently, the balance between civilian and military interests established credibility with the civilian population.[19]

The commission formed two committees: one to draft rules for the regulation of aviation and another to do likewise for radio. Both committees included one voting member from each delegation and various national experts to provide technical advice. Several of the jurists participated in the committee sessions. Although this tended to impede the work of the committees, since the jurists required considerable time to consult with their technical advisers, it did ensure the balance and credibility mentioned earlier.[20]

The commission also established a number of guidelines early in its deliberations. It agreed that no new code should contradict, at least in principle, existing rules for land and naval warfare; that is, it sought to draft a body of rules that conformed to actual practices but agreed with

the spirit of existing regulations and was consistent with the basic principles of war. However, as desirable as it was to limit suffering and destruction, the commission recognized that rules should not restrict the legitimate rights of belligerents to defeat enemy forces—a basic principle of land and sea war. Otherwise, they would lose credibility, and belligerents would refuse to apply them in wartime.[21]

The Hague Rules of Air Warfare

The final report of the Commission of Jurists consisted of two parts: Part I provided rules for the use of radio in warfare (12 articles), and Part II contained a highly organized, comprehensive code for control of aviation in warfare (62 articles). Interestingly, the report included no provision to preclude application of the articles to belligerents who did not accept the convention. The commission noted that similar provisions in the Hague Conventions of 1899 and 1907 unnecessarily weakened their applicability and expressed hope that, in any conflict involving parties that were not signatories to these rules of air warfare,

> the contracting parties, instead of treating their agreement as having immediately ceased to be binding, . . . would offer it to a non-contracting belligerent as a modus vivendi; and if the offer were declined, they would still be at liberty to consider the . . . [actions] of the non-contracting belligerent [and to continue to obey] a treaty which had not automatically ceased to operate. . . .[22]

Perhaps the most urgent issue confronting the commission was the regulation of aerial bombardment. From the beginning of the conference, the delegates agreed that regulation was necessary. Certainly, indiscriminate bombing practiced at times during World War I caused unnecessary suffering and destruction and violated existing rules of war. But what should be done? Any attempt to prohibit bombing was unreasonable and even impractical. The committee on aviation was unable to resolve the problem, and the issue was debated and finally settled before a full session of the commission.[23]

Two of the five articles adopted by the commission regulating bombardment read as follows:

> *Article 22:* Aerial bombardment for the purpose of terrorizing civilian population, of destroying or damaging private property not of military character, or of injuring non-combatants is prohibited.
>
> *Article 24:* (1) Aerial bombardment is legitimate only when directed at a military objective. . . . (2) Such bombardment is legitimate only when directed exclusively at the following objectives: military forces; military works; military establishments or depots; factories constituting important and well-known centers engaged in the manufacture of arms, ammunition or distinctively military supplies; lines of communication or transportation used for military purposes. (3) The bombardment of cities . . . not in the immediate neighborhood of the operations of land forces is prohibited. In cases where the objectives specified in paragraph 2 are so situated, that they cannot be bombarded without the indiscriminate bombardment of the civilian population, the aircraft must abstain from bombardment. (4) In the immediate neighborhood of the operations of land forces, the bombardment of cities . . . is legitimate provided that there exists a reasonable presumption that the military concentration is sufficiently important to justify such bombardment, having regard to the danger thus caused to the civilian population. (5) A belligerent State is liable to pay compensation for injuries . . . caused by the violation . . . of the provisions of this article.[24]

The commission agreed that "a belligerent ought not to direct his attacks against the civil population who take no part directly or indirectly in the operations of the war, or against private property or institutions of a charitable educational or religious character. . . ."[25] This principle suggested three guidelines: the distinction between combatant and noncombatant was critical; indiscriminate bombing and bombing to terrorize were unacceptable; and only targets of military value should be attacked.[26]

The rationale for Article 22 is obvious, but Article 24 is more complex in the sense that it makes a significant distinction between bombing in the immediate neighborhood of operations (tactical) as opposed to more distant bombing (strategic). Part (3) of the article severely limits strategic bombing when it prohibits

bombing that poses substantial danger to non-combatants.[27] In Part (4), however, tactical bombing that may cause heavy civilian casualties is permissible if the military objective is sufficiently important.

Aviators were also given major discretionary power in deciding such questions as these: Will substantial danger to noncombatants result? Is the target outside the neighborhood of operations? Does the value of a target outweigh the danger to noncombatants? Furthermore, the article seeks to balance protection of noncombatants against military realities. Presumably, noncombatants near the front lines could evacuate prior to tactical bombardment and thus required less protection than noncombatants in more distant cities that might be bombed with little or no warning.

Significantly, the new rules did not mention the criterion of defended versus undefended to determine target legitimacy. Instead, they introduced the criterion of military objective in stating that bombardment is essentially legal only if it is directed at military objectives. Moreover, the risks of injury to noncombatants must be weighed against the military importance of the objective. This new criterion is more reasonable, since "it is in accord both with current practice and with sound strategical and tactical common sense. A belligerent will not wish to risk his planes and pilots . . . [except on those targets] of military importance."[28]

Other articles provide for the protection of historical buildings and monuments, places of worship, and hospitals; prohibit attack on crew members parachuting from a disabled aircraft; give rules for aircraft markings; and discuss use of tracer and explosive ammunition as well as rescue of aircraft at sea. Also included are such topics as espionage, escape and evasion from disabled aircraft, protection of civilian aircraft, neutral airspace, and perfidy. Even a casual comparison of the rules for air warfare with current practices reveals striking similarities. (See Air Force Pamphlet 110-31.) But the Hague rules were never ratified by the signatories. Why?

Evaluation of the Hague Rules

The Hague rules received general approval by most of the world's jurists, who recognized them as a legally consistent, comprehensive code for the regulation of air warfare.[29] Popular opinion was also favorable, but the rules were subject to extensive criticism.

Although the concept of military objective to test for target legitimacy was widely praised, many critics considered it too narrow. According to Article 24, military objectives are activities or objects designed primarily to support the military effort. To cope with the complexities of modern warfare, the military effort requires support from a country's total industrial base. But the commission excluded such objects as blast furnaces, boot factories, electric works, and grain silos, as well as oil wells, refineries, and depots. These objectives have a significant impact on a belligerent's ability to wage war even though they are also vitally important in a nonmilitary sense. Critics cautioned that belligerents would ignore this definition of the military objective, since it was not comprehensive. Consequently, violations by one side would lead to reprisals by the other, and warfare would degenerate into a barbaric struggle with little respect for humanity.[30]

The U.S. military also expressed concern. It was risky to establish rules, since the airplane was advancing rapidly and no one could be sure of its future capabilities. The argument was that no country should be expected to deprive itself of a future technological leap that might shorten a war or mean the difference between victory and

defeat. In fact, such regulations would suppress the natural, technological evolution of warfare. Some sources even felt that rules of aerial warfare were unnecessary because the combatants themselves experience the horrors of war. Consequently, there is a natural self-interest in preventing unnecessary suffering. The fear of retaliation will effectively control future use and "there is no need for jumping hastily at conclusions and saying that the next war will be an aerial war and a horrible war."[31]

Perhaps the most significant criticism concerned a lack of precision in the language of certain articles, but some sources considered this looseness a strength, since too much detail would complicate compliance. As noted earlier, almost everything is directly or indirectly related to the modern war effort, and, thus, virtually anything can be considered a legitimate military objective. Bombing would ostensibly almost always be justified. But an increase in barbarism will inevitably lead to increased human suffering. Consequently, rules could actually make matters worse.[32]

In any event, the signatories did not ratify the final report of the Commission of Jurists. In fact, "the valuable work of the Commission appears to have been all but forgotten. Even the learned societies . . . apparently ceased to concern themselves with the problem. Public opinion . . . appears to have become in large measure indifferent."[33]

The United States enthusiastically supported formation of the Commission of Jurists, but it refused to ratify the report. Why? Even though the delegations to the commission reached unanimous agreement on the proposed code, the agreement was substantial but not total.

There were compromises, and some articles were clearly not in the best interests of all participants.[34] Secretary of the Navy Edwin Denby indicated in a 1923 memorandum that the proposed codes were acceptable to the Navy Department but that one of the powers represented at the commission did not consider regulation necessary and might be "willing to permit the work . . . to be forgotten."[35]

Secretary Denby's remark reflects U.S. suspicions that other powers less than enthusiastically supported the commission's findings. Only the United States and Japan expressed willingness to accept the rules of the commission without change. The Dutch maintained that the rights of neutrals were not adequately protected. The French felt that other existing international agreements adequately regulated air warfare. But most serious was the British refusal even to consider these rules pending further international discussion.[36]

Some U.S. military aviators were also skeptical of regulation. Since technology had developed rapidly, no nation wished to restrict its future options, especially if other powers used the regulation to gain an advantage. Thus, despite widespread praise for the proposed rules in the press, in official statements, and in public support for the rules, many government and military leaders had serious doubts. (See footnotes 22 and 27.)

Timing was another factor. The General Report of the Commission of Jurists was submitted to the Secretary of State on 26 February 1923. But since the final session of the Sixty-seventh Congress ended only six days later, the Senate did not consider the report. Before it could be considered by the Sixty-eighth Congress on 3 December 1923, the death of President Warren G. Harding and his replacement by Calvin Coolidge brought about an unexpected change in administrations. President Harding had expressed pride in the "helpful part we [the United States] assumed in international relationships"[37] and had supported the Washington Conference. President Coolidge advocated

"policy of drift with regard to Europe"[38] and may not have given priority to the air rules. Whether this reflected a change in positions of the two administrations is not clear, but the turmoil and disruption brought by the sudden change in administrations may have led to reduced emphasis on the rules.

OTHER factors relate to the spirit of the times: the war to end all wars had come to a victorious end, and problems in Europe had become "their" problems. The country was returning to its traditional isolationism, based in part on wide ocean barriers that precluded air attacks against American cities.[39] Some experts even claimed that the new economic interdependence stemming from increased industrialization would reduce the likelihood of serious conflict even without regulation.

Although the public feared indiscriminate bombing, it was in love with the airplane and excited by its glamour. Fear of bombing was quickly overshadowed by concern for chemical warfare. The nation's thoughts turned to the death rain of chemicals that could possibly exterminate entire urban populations in a few hours. As a further diversion, a successful attempt by the League of Nations to abolish *all* aerial bombardment would effectively eliminate the need for rules.[40]

No definite reason has been found for the U.S. failure to ratify the rules. Certainly, the difficulty in obtaining Dutch, French, and British concurrence in the rules was a factor. But the rules conformed to the U.S. government's position and, in general, were favorably received by the public. Perhaps the real reason lies hidden in a combination of factors and events of the time. One of the most important considerations was the country's rapid return to an isolationist philosophy with its general abandonment of an international role. A contributing factor was the skepticism of the U.S. military, which was highly respected and exerted considerable influence at that time. This lack of support for regulation by *those who knew best* was probably very significant.[41]

The importance of those early rules can be appreciated somewhat in terms of their effect during World War II. Although the rules were not ratified, both sides publicly acclaimed their adherence and accused their opponents of violations. Indiscriminate bombing did occur, but, as mentioned earlier, fear of retaliation was a restraining force. Most nations now apply rules based on this early prototype; even a casual review of the Law of Armed Conflict and its application to the U.S. Air Force underscores the similarity. Essentially, these first rules and their minor modifications form the basis for all current regulation of air warfare. What caused the long delay? Perhaps the words of Admiral William L. Rodgers, a U.S. technical adviser on the Commission of Jurists, offer a partial explanation:

> The group of rules of international law based on humanitarian practice are already well tried out and likely to endure. Another group of rules deals with new instruments and agencies of warfare. Such rules, if introduced too hastily into codes of war before experience of war has tried the new agencies, will probably be denied observance in the next war, until the new agencies have been used and have shown their value.[42]

Air Command and Staff College

Notes

1. John B. Moore, *International Law and Some Current Illusions* (New York: Macmillan, 1924), p. 192.

2. J. M. Spaight, *Air Power and War Rights*, third edition (London: Longmans, Green and Co., 1947), pp. 109-12.

3. J. M. Spaight, *Air Power and War Rights* (London: Longmans, Green and Co., 1924), p. 199.

4. Frank E. Quindry, "Aerial Bombardment of Civilian and Military Objectives," *The Journal of Air Law* 2 (1931):482.

5. Wo-Chiang Lin, "Aeronautical Law in Time of War," *The Journal of Air Law* 3 (1932):82-84.

6. Ibid., pp. 84-85.

7. Ibid., pp. 86, 92; James B. Scott, editor, *Conventions and Decla-*

rations of 1899 and 1907 (New York: Oxford University Press, 1915), p. 103.

8. Paul W. Williams, "Legitimate Targets in Aerial Bombardment," *The American Journal of International Law* 23 (1929):573-74.

9. James W. Garner, "International Regulation of Air Warfare," *Air Law Review* 3 (April 1932):122-23.

10. Ibid., p. 112; Captain Elbridge Colby, "Aerial Law and War Targets," *Journal of International Law* 19 (1925):709-11. Naval and artillery bombardment shared similar accuracy problems, although critics tended to ignore that fact. For further discussion, see M. W. Royse, *Aerial Bombardment and the International Regulation of Warfare* (New York: Harold Vinal, 1928), pp. 168-73.

11. Garner, pp. 112-13, 115.

12. Spaight, *Air Power*, 1924, pp. 32-35; Garner, p. 115.

13. Colby, pp. 704-05.

14. Williams, p. 571.

15. Howard S. Leroy, "Limitation of Air Warfare," *Air Law Review* 12 (1941):24-25.

16. Quindry, pp. 485-86.

17. Moore, p. 185.

18. Rear Admiral William L. Rodgers, "The Laws of War Concerning Aviation and Radio," *The American Journal of International Law* 17 (1923):630-31, 633.

19. Ibid., pp. 630-31.

20. Ibid., pp. 631-32; Moore, p. 191.

21. Rodgers, pp. 632-35; Moore, p. 190.

22. Moore, p. 208. Many European politicians and military professionals may not have shared the view that the articles did not apply to warfare involving nonsignatory combatants. In fact, many feared that this provision might be tantamount to unilateral disarmament by the signatories. However, the commission clearly recognized this danger, but it only wished to preclude an automatic disregard of the rules provided that both sides observed them in practice.

23. Ibid., pp. 194-96.

24. Ibid., pp. 241-43.

25. Garner, p. 114.

26. Then, as now, there existed advocates for targeting civilian population centers for the express purpose of breaking the enemy's will to resist. This was seen as a deterrent to future warfare. The commission recognized but did not intend to preclude psychological terror experienced by civilians living near legitimate military targets,

which were suddenly and unexpectedly bombed by aircraft.

27. This part of Article 24 was perhaps the most controversial provision of the entire code and resulted only after lengthy and heated deliberations. The difficulty was that it attempted to impose severe restrictions on the distinct advantage of aerial bombardment—the rapid and unexpected destruction of objectives deep in the enemy's rear. The lesser restrictions on targets in the combat zone merely allowed engagement by aircraft of targets that could perhaps be more economically and effectively engaged by artillery or other means. (See Part 4.) Thus, Part 3 may have unintentionally violated the principle of economy of force by preventing the most efficient use of a weapon system. Moreover, strict interpretation of collateral damage to noncombatants as evidence of indiscriminate damage might, for all practical purposes, eliminate aerial bombardment. As a result, bombardment by aircraft was more restricted than bombardment by other means. Royse, pp. 227-29 and 232-34.

28. Colby, p. 709. Note the reference to economy of force, a basic principle of war.

29. Leroy, p. 30. Unfortunately, acceptance of the rules by jurists is not sufficient since warring nations must voluntarily abide by them.

30. Quindry, pp. 489, 508-09.

31. Colby, pp. 712-13; Rodgers, p. 633.

32. Williams, p. 576; Colby, p. 715.

33. James W. Garner, "International Regulation of Air Warfare," *Air Law Review* 3 (July 1932):317.

34. Rodgers, p. 639.

35. U.S. Government Printing Office, *Papers Relating to the Foreign Relations of the United States* I (1922):88.

36. U.S. Government Printing Office, *Papers Relating to the Foreign Relations of the United States* I (1925):93-107.

37. U.S. Government Printing Office, *Papers Relating to the Foreign Relations of the United States* I (1923):XVIII.

38. Oswald G. Villard, editor, "The President and the Progressives," *The Nation* CXVII, 19 December 1923, p. 703.

39. Manley O. Hudson, "Aviation and International Law," *The American Journal of International Law* 24 (1930):237.

40. Garner, p. 321; Charles Warren, "Belligerent Aircraft, Neutral Trade, and Unpreparedness," *The American Journal of International Law* 29 (1935):204.

41. Colby, pp. 713-15.

42. Rodgers, p. 639.

In guerrilla warfare, select the tactic of seeming to come from the east and attacking from the west; avoid the solid, attack the hollow; attack; withdraw; deliver a lightning blow, seek a lightning decision. When guerrillas engage a stronger enemy, they withdraw when he advances; harass him when he stops; strike him when he is weary; pursue him when he withdraws. In guerrilla strategy, the enemy's rear, flanks, and other vulnerable spots are his vital points, and there he must be harassed, attacked, dispersed, exhausted and annihilated.

Mao Tse-tung, *On Guerrilla Warfare*, translated by Samuel Griffith, p. 46

books, images, and ideas

THE CARTER ADMINISTRATION: THREE ACCOUNTS

Dr. John Allen Williams

THE press, the instant historians, and the voters have all been unkind to the Carter administration. Perhaps the record of that period will look better after a period of reflection than it does now—such is usually the case as young scholars in search of tenure rush to publish their dissertations—but the revisionism will not begin here. Despite several notable accomplishments, the Carter administration was fundamentally flawed by the lack of a larger vision and the political skills to carry it out.

It should not have been so; they were good people, most of them. Jimmy Carter is a fine and decent man, who brought the best personal instincts to his office and combined them with a keen intelligence and an incredible attention to detail. Many of his appointees, considered individually, were outstanding, even if the chemistry among them was not always the best. He entered office with a reservoir of good will from an American people anxious to put Vietnam and Watergate behind them and ready for a leader who would "never lie to them" and would demand of them, "Why not the best?" Yet less than four years later, Carter would be repudiated at the polls by those same Americans, who voted overwhelmingly to entrust their futures to Ronald Reagan. By an incredible combination of bad administration and bad luck, Jimmy Carter's support evaporated, and

we still must look back to Dwight D. Eisenhower to find a President who served two full terms. What happened? Some of the answers may be found in the three books reviewed here, but not all.

FROM an analytical perspective, the best of the three books by far is *Thinking about National Security* by Harold Brown—one of the few senior Carter administration officials who should emerge from his duties with his reputation enhanced.† (Warren Christopher and Walter Mondale are two others.) Let us note at the outset that Dr. Brown's prose does not sing, yet it is clear and straightforward, and he does not dodge the tough questions. It was Brown who nudged Carter toward a more coherent strategy of steady increases in military procurement, which had been seriously underfunded since the Vietnam War. One suspects, in fact, that Brown would have been happier working for Ronald Reagan.

Brown's recommendations for increasing U.S. military capability are sensible and overdue. They derive additional credibility from his understanding of the basic sources of U.S. strength:

> . . . the very security of the United States must be derived from the fundamental principles, values, and aspirations of the nation. Security must depend on the nation's internal political and economic strength; the will of the people and their ability to persevere in a given course; the quality of U.S. education and technology; the state of national leadership; and the degree of confidence the public has in that leadership. . . . Internal cohesion is needed to build both a strong national security program and an effective economic program.

However much they may be needed, military enhancements will not guarantee national security if domestic political will and trust are lacking. Brown understands this far better than do many others who share his sense of urgency about military increases.

After four years of publicity, Brown's specific policy recommendations are well known. The book contains no surprises, but it lets him make a more organized case for his policies. Being out of office, he can be more candid about the need for increased expenditures, but he does not use the opportunity to settle any personal scores he may have. Indeed, his analysis would be much more entertaining, and perhaps even more informative, if he had chosen to reveal more of himself (and in this area, the difference between Brown's book and the others to be discussed here could not be more pronounced). He now believes that ". . . the U.S. stake in Vietnam appears in retrospect to have been much too small to justify the cost of U.S. involvement." Beyond a couple of additional sentences, that's it. How did this revelation come upon him? What does it teach this most astute individual about national security decisionmaking processes and the people who run them? How does he feel about his own role in that undertaking? It would be interesting to know.

Still, *Thinking about National Security* is a practical and sensible overview of U.S. national security issues, from geographical considerations to questions about technology, nuclear strategy, arms reductions, and national security organization. Only in the last area does much new emerge: the former Secretary of Defense favors a greatly restructured military at the top, with a Joint General Staff reporting to a Chief of Military Staff, and with the service chiefs stripped of their joint responsibilities. Repeatedly, Brown reminds the reader of the limited utility of military strength by itself and of the importance of integrating economic, political, and military strategies and arms control. This well-

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written book would be an excellent text for courses in national security policy, as well as a fine primer for the intelligent citizen who wishes to know the rationale behind U.S. military policy.

I F Harold Brown's book is the least personal, then Hamilton Jordan's *Crisis* is an example of the other extreme.† However, somewhat to my surprise, the character that unfolds in its pages is enormously more sympathetic than the one depicted in the popular press. Jordan is seen as a person of considerable intelligence and honesty, and if he was sometimes out of his depth, he possesses the insight to be aware of it and the candor to report it. *Crisis* is "a good read"—a detailed and highly personal account of the last year of the Carter Presidency by an official who figured more prominently in the events of that period than was recognized at the time. Beginning and ending with Inauguration Day 1981, the text is organized chronologically as a daily record of events accompanied by the author's own impressions of them. Occasional flashbacks are inserted where appropriate to maintain continuity or to illuminate some point.

It is perhaps too easy to be put off by Jordan's "gee-whiz" style or to underestimate a man who—let's be honest—often came across as a boorish provincial. Doing so would be a serious mistake, for Jordan is a perceptive observer of the events occurring around him and is sensitive to his own generally undeserved image. He was a primary factor in Jimmy Carter's meteoric rise to the Presidency, and he has many worthwhile observations about democratic politics. Chief among his concerns are the effects of the McGovern Commission reforms, which served to fragment the Democratic Party and increase the power of organized special interests. Jordan

also describes the cynicism (as opposed to healthy skepticism) of the press, members of which cannot imagine that political leaders may be motivated sometimes by honorable, or even noble, intentions. Jordan notes too the tremendous success that liberal Democrats have had in electing Republican presidents by withholding their full support for the Democratic ticket in 1968 and 1980 and in supporting the 1972 kamikaze run of George McGovern. Surprisingly, Jordan did not foresee the dramatic effect of television coverage marking the first anniversary of the American embassy takeover in Iran. This coverage, broadcast on election eve, was disastrous for Carter's reelection effort.

With the notable exception of Edward Kennedy, Jordan does not skewer anyone in his book. But his "warts and all" approach does not display anyone in a consistently favorable light either. This is apparent even in his treatment of Jimmy Carter. Jordan notes: "Increasingly, the President approached his speeches like an engineer; he regarded them as vehicles for making logical arguments. If the speech contained enough facts to support a contention or a policy, then it was 'successful.' " The result was a tendency to include laundry lists of references dear to the hearts of the interest groups that comprise the Democratic coalition. Jordan tells us that the President's media adviser, Gerald Rafshoon, once noted that Carter's speeches should have ended with a commercial:

> President Carter's speech was brought to you by the supporters of the Equal Rights Amendment, the American labor movement (with the exception of the Teamsters), the consumer movement, the friends of Israel, and some white Southerners.

Jordan also correctly observes that too much public attention was focused on the hostages by the administration, although the media ensured that this issue would be prominent until it was resolved. The administration decision not to do

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†Hamilton Jordan, *Crisis: The Last Year of the Carter Presidency* (New York: G. P. Putnam's Sons, 1982, $16.95), 419 pages.

any unnecessary traveling until the crisis was over, a policy originally urged by Jordan, also served to trap the administration and draw increased attention to the situation until the policy was reversed finally, for political reasons, after the failure of the rescue attempt.

Crisis is the most enjoyable of these three Carter administration accounts, although it serves as a vivid reminder of a very frustrating year. One could also quarrel with his characterization of Vietnam as "the nation's first military defeat" rather than as a sad political defeat. (Furthermore, in 1814 the British, not the Vietcong, burned the city of Washington.) But it is worth the book price just to read Jordan's discussion with Colonel Beckwith about the hostage rescue attempt. "Chargin' Charlie's" comments about their training, and especially about their plans once inside the embassy, make the courage and determination of the military men on this mission indeed real.

R EADING Jimmy Carter's *Keeping Faith* may bring back the powerful emotions that many Americans felt during his Presidency, particularly in the final year: frustration, anger, helplessness, and eventually outrage over events seemingly out of control.† The good intentions, the impotence, the hand-wringing, the weeping—all are included in Carter's book. Especially the weeping, which occurs every fifty pages or so and begins on page seventeen with his diary entry describing the walk to the White House on Inauguration Day: "People along the parade route, when they saw that we were walking, began to cheer and to weep, and it was an emotional experience for us as well."

But too much can be made of these atmospherics, even though they contributed mightily to the frustrations of the last Carter year. It is not really fair to criticize a book for accurately recall-

ing the emotions of the period it describes. Jimmy Carter's honesty in exposing personal feelings that others might choose to suppress makes him too inviting a target, and the resultant cheap shots would not be very enlightening.

Personally, and predictably, Carter appears in these pages as a kind and charitable man of deep, religiously based moral convictions that are a source of immense personal strength. Politically, Carter appears as a President who was able to gain office but had neither a clear overview of what he hoped to accomplish nor the political skills to succeed. Often the reader is alternately struck with admiration for Carter the man and appalled by the failure of Carter the political leader to conceptualize and to promote his vision. Some examples of this may suffice: Carter is a man of admirable personal loyalty, yet because of this, he was unable to distance himself from those around him (such as friend Bert and brother Billy) who would cause him great political damage. He could be decisive, yet for reasons still inadequately explained, he chose to let the ailing Shah of Iran into the country, precipitating the hostage crisis that paralyzed his administration for more than a year and helped cause his defeat in the 1980 election. That he understood the symbolism of the President is shown by his leaving the armored limousine during his inaugural parade, yet he did not understand the need on other occasions to preserve the grandeur of the U.S. Presidency by, for example, refraining from appearing in a cardigan sweater during a Presidential television address. Perhaps more than any previous President, Carter integrated the Vice President into his administration's activities, yet he failed to heed the Vice President's counsel on occasions when he should have, as in the case of the politically disastrous July 1979 Camp David self-criticism sessions and the subsequent "malaise" speech that only made the

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President look foolish. He believed deeply in human rights but was unable to apply the concept effectively or consistently. It is as if Carter's personal strengths—loyalty, attention to detail, compassion, the common touch—became liabilities when *writ large*.

Richard Neustadt has noted that presidential power is the power to persuade. Although Carter frequently could not persuade Congress, foreign leaders, or ultimately the electorate of the wisdom of his policies, he could be formidable indeed one-on-one. The phenomenal attention to detail that sometimes may have prevented him from having a broader view was indispensable in the Camp David negotiations between President Anwar Sadat of Egypt and Prime Minister Menachem Begin of Israel. Although the Camp David process has floundered on the rocks of Arab extremism and Israeli ambitions for perpetual control of "Judea and Samaria," the agreement itself was a signal accomplishment—the high point of the Carter presidency. It is hard to imagine anyone else (except possibly Henry Kissinger) being successful, and Carter deserves great credit for this triumph. His detailed description of the negotiations is the best part of the book.

Less satisfying is the overall impression of the Carter years. Like the Carter administration itself, the whole of the former President's thought seems less than the sum of its parts. In viewing situations individually, Carter grasps the issues and appears to understand them in all their complexity. But surveying them collectively, he seems to have no overarching philosophical or political perspective holding everything together other than situation-specific prag-

matism. Similarly, neither his administration nor the American people seemed to sense a coherent framework or a strong sense of direction during the Carter era. This apparent vacuity manifested itself in many ways, from the philosophical and personal incompatibility of the hawkish Brzezinski and the owlish Vance to the confused United Nations vote on censuring Israel.

However, the fact that the Carter administration was repudiated at the polls and in the eyes of journalists does not mean that it was a failure, even if a vindication (as in the cases of the Truman and Eisenhower administrations) is unlikely soon. There were notable accomplishments besides the Camp David agreement, including a necessary and favorable treaty with Panama and an FY 1981-85 defense plan that was in many ways more sensible and coherent than his successor's, although it was underfunded. It is hard to argue that the Carter of 1979-80 was soft on defense. True, he did cancel the B-1 bomber, but he accelerated development of cruise missiles and a follow-on stealth bomber. Also, his MX program called for two times the number of missiles that are now planned, and they were to be deployed in such a way that they could conceivably survive a first strike.

ON BALANCE, these books, *Thinking about National Security*, *Crisis*, and *Keeping Faith*, describe a Carter administration that did not live up to the potential of the many people who served it, including the President himself. The country needed leadership; what it got was engineering.

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TOWARD A REFORMED NATIONAL GUARD

Dr. Curtis Cook

VISTA 1999 attempts to chart the future for the Army National Guard and the Air National Guard.† It is a counterpart to such studies as *Air Force 2000* and *Seapower 2000*, which attempt to give focus to long-range planning. *VISTA 1999* evidently was commissioned on 22 December 1980, with preparation coming in the following year. The study attributes authorship to a task force consisting entirely of active and retired members of the Guard. Its quality is uneven and neither as polished nor as comprehensive as *Air Force 2000*, but it does have two central themes that pervade it, give it coherence, and make it worth reading.

The first of these themes is that the Guard has a far larger share of the mission than its share of the budget, and dependence on the Guard is likely to increase. One claim is that the Air Guard "performs between 30 and 35% of the Air Force mission for about 3.5 percent of the Air Force budget." (p.4)

The second major theme is that the Army and Air Guard are uniquely suited to join in the preparation for "combined force" warfare. While the Air Guard would have some additional missions in augmenting the regular force, according to the study, its principal effort should be collaboration with the Army Guard in a combined force. Here, combined force goes beyond the current concept of joint operations and approaches an organic relationship between air and ground forces. *VISTA* calls for "a single-hat chain of command at the adjutant general level." (p. 47)

The organizational pattern of the study is straightforward. First comes an estimate of the future international and domestic environments. This is followed by an assessment, based on estimates of the Guard's present and future mission and posture. Separate but closely related chapters then focus on the Army and Air Guard specifically.

international and domestic environment

The discussion of the international environment is sensible though uninspired. The authors put forward as U.S. interests such items as national security and the management of East-West relations. Self-determination among nations should be supported with U.S. allocated funds, they indicate, but not human rights abroad. Sound bilateral relations with allied nations, as well as solutions to economic and energy problems, are also cited as U.S. interests. The international environment in which these interests are pursued will be increasingly hostile and difficult. Complex problems will abound. The military strategy necessary to meet the challenge of this international environment continues to be deterrence of undesirable acts by relying on the Triad force posture and maintaining a diversity of military capabilities.

The domestic section of this chapter takes up two main points: "national military strategy" and "manning the force." The information presented on the latter point is interesting because demographic trends present some implications for the Guard that differ from their implications for the active force. Since the Guard is organized by state, state-oriented demographic projections can guide decisions to

change Guard unit missions. States with growing populations and greater success in manning their Guard units should be assigned expanded missions and be given priority where modernization of equipment is concerned. Observation of the distribution and characteristics of the work force also leads to the proposition that Guard units engaged in high-technology activity (such as repair of sophisticated equipment) might be formed and located in high-technology manufacturing and research areas of the country. Included in the work force would be people who had left the active military for more attractive salaries, as well as people without prior service who might wish to serve in a context that would not require them to leave their civilian jobs and current homes. And with the declining number of what are now defined as military-aged people, the Guard might sustain its manpower requirements by letting its age distribution shift toward the older end of the spectrum. This flexibility to recognize demographic variables is an advantage the Guard enjoys over active forces.

Unfortunately, the quality of the domestic section of this chapter is undermined by its lurid prose. For example, we read: "Iran has been plunged into bloody chaos and turned overnight from a bastion of Western strength to a cauldron of virulent antiwesternism, its oil treasures lying provocatively exposed to lustful Russian eyes." (p. 16)

A more difficult problem with this section is the sources it uses in developing its picture of American society. While some scholarly works were consulted, the authors depended too much on popular, journalistic information. As a result, the discussion of American society is neither analytical nor objective.

Several arguments in this section correspond to those advanced by the military reform movement. For example, the study complains that, in the absence of a clearly articulated and carefully followed strategy, "substrategic reflexes govern," such as the "technical ambitions of engineers." (p. 17) The illustration cited is the plac-

ing of a gas turbine engine in the M-1 tank. Also in this section of *VISTA 1999* is a call for maneuver warfare to be our tactic instead of attrition warfare.

Except for the data on demographics and work force, the domestic arena chapter added little to the study. The subsequent chapters, which speak directly to the Army and Air Guard, are the heart of the study. I want to turn to them, concentrating on the Air Guard.

Army and Air National Guard Mission and Posture

The Air National Guard chapter begins with a call for "a major policy initiative to shape a long-term Army and Air National Guard program around the concept of Combined Forces employed in maneuver warfare." (pp. 46-47) It then argues at length for the maneuver warfare concept, especially in the context of the European theater.*

With regard to the NATO environment, the study explains that Soviet forces depend on a highly centralized command structure that leaves lower-level commanders little latitude for self-initiated action. Thus, presenting these commanders with unanticipated situations would be highly advantageous because of inevitable Soviet delays in reacting that would result while the high command makes decisions and then relays orders for local commanders to carry out.**

Closely integrated air and ground units can execute maneuvers that continually pose new and hopefully unanticipated situations to the enemy. Provided it has the right weapons and sufficient practice, the Guard can do this. For the Army Guard, that would mean relatively light armament with specific, previously deter-

*For critiques of the tactics advocated in *VISTA 1999*, see Fred Frostic, "*VISTA 1999* v. A Plan to Win," *Armed Forces Journal International*, June 1982, pp. 17-19; and Trevor N. Dupuy, "The Pied Pipers of 'Maneuver-Style' Warfare," *Armed Forces Journal International*, November 1981, pp. 73-78.
**I take this to be consistent with the thinking behind John Boyd's Observation-Orientation-Decision-Action loop.

mined regional responsibilities for which the training and equipment can be optimized. For the Air Guard, this means improved close air support (CAS), which, in turn, means that the Guard must have a good CAS fighter, a competent forward air control system, and good close-in tactical reconnaissance. Specifically, recommendations call for the Air Guard to have:

• The four-barrel GAU-8 cannon in pod mount for installation on any Guard tactical fighter aircraft.
• The Canadian Rocket Vehicle 7 for ranges longer than that of the 30-mm cannon to give a defense suppression capability.
• A close-support fighter, cheaper and with certain improvements over the A-10 (smaller, more maneuverable, better acceleration, for example). The Guard would require 750 of these.
• An air superiority fighter. Proposed is the winner of a fly-off between F-16A and F-5G, Type 1. This requirement is for 670 new aircraft.
• Forward air controllers (FACs) with specialized FAC aircraft. The FACs would be integrated directly into the fighter units.

Improvements in two other Guard missions, aerial refueling and airlift, are also discussed. Additionally, strategic airlift is proposed as a new Guard mission. The authors of the study believe that used DC-8/B-707 could be procured cheaply for larger loads and used DC-9/B-727-200 for lighter loads. The latter are particularly important because they also would give the Air Guard the self-contained capability in peacetime to transport Army Guard units to training sites for combined operations practice.

military reform

The Air Guard chapter reflects thinking that is particularly similar to the thinking and prescriptions of the military reform movement, although I do not know whether the reformers or the Guard should get credit for originating the ideas. The ideas of the reformers, to the extent

that they are reflected in the operation of the Military Reform Caucus on Capitol Hill, are solicitous of Reserve and Guard forces. The caucus was given twenty-eight specific reform oriented amendments which its members might have offered to Fiscal Year 1983 defense legislation. Four of these amendments are aimed at the Air Force. Of the four, two are presented in *VISTA 1999* (a close-support fighter for the Guard and an F-16/F-5G fly-off with procurement of the winner for the Guard), and the other two are consistent with *VISTA 1999* proposals (voiding the MSIP package for F-16, on the grounds that it reduces needed performance, and canceling the C-5B buy in favor of fast sealift and off-the-shelf or used commercial air frames). The reformers' insistence on maneuver warfare doctrine comes through strongly in *VISTA 1999* also, as does their criticism of the purchase of high-technology weapons. There is a similar but somewhat weaker correspondence between the Army Guard preferences in *VISTA 1999* and the work of the Reform Caucus.

The corresponding Fiscal Year 1984 caucus proposals, attributed this time directly to Senator Gary Hart, number more than thirty and include ten or so applicable to the Air Force. There is somewhat less linkage evident between the *VISTA 1999* and Hart's FY84 proposals for the Air Force than was the case in the previous year. While the assumptions underlying the FY83 and FY84 reform proposals may be similar, the FY84 version seems to be more specifically addressed to procurement matters than to doctrine, training, and use of Reserve/National Guard forces. It does, however, conclude with a call for $1 billion to be added to the defense budget for improving Guard units along the lines of *VISTA 1999*.

Wᴴᴵᴸᴇ the quality of *VISTA 1999* is uneven, it is at least an important document that should be read by military leaders and defense analysts. Its importance derives from these points:

• Its vision of an integrated Army-Air Guard force is surprising and is at odds with the preference for an independent and balanced air force that one seems to encounter in the active force. Also, in calling attention to the distinct political situation of the Guard, the study tells why the Guard is uniquely positioned for assignment to "combined force" missions.

• The correspondence of the study's ideas with those of the military reform movement. The reformers have a number of supporters in the Guard, or vice versa.

• Demographic and work force changes over the next fifteen years, which may well bring significant changes in the distribution of responsibilities between active and Reserve/Guard forces.

ADDITIONALLY, the opportunity to learn about Guard posture and practices makes this study valuable reading. Despite the study's highly impressionistic views of American society, *VISTA 1999* contains a kernel of military analysis that is of consequence.

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AIR UNIVERSITY REVIEW
AWARDS PROGRAM

W. Hays Parks has been selected by the Air University Review Awards Committee to receive the annual award for writing the outstanding article to appear in the *Review* during fiscal year 1983. His article, "Linebacker and the Law of War," was previously designated as the outstanding article in the January-February 1983 issue. The other bimonthly winners for 1982-83 were Dr. Joseph D. Douglass, Jr., "What Happens if Deterrence Fails?" November-December 1982; Major Lonnie O. Ratley III, "A Lesson of History: The Luftwaffe and Barbarossa," March-April 1983; Captain Forrest E. Waller, Jr., "Paradox and False Economy," May-June 1983; Lieutenant Colonel David J. Dean, "Air Power in Small Wars," July-August 1983; and Major General I. B. Holley, Jr., USAFR (Ret), "Of Saber Charges, Escort Fighters, and Spacecraft," September-October 1983.

POTPOURRI

Although the official history of the United States Air Force in Southeast Asia has been received with something less than unrestrained enthusiasm by knowledgeable segments of the scholarly community, this latest volume merits high praise. Colonel Ray Bowers knows his sources, he writes clearly and with candor, and he obviously loves his subject. As a result, *Tactical Airlift* ranks as the finest historical study yet produced in the Southeast Asia series.

Bowers begins with an account of the Counterinsurgency Years, 1946-64. Exploiting oral history material, he traces the evolution of tactical airlift in Vietnam from the informality of Farmgate's C-47 operation to the more systematic uses of C-123s in Mule Train and the emergence of the Southeast Asia Airlift System (SEAAS). As individualism gave way to organization in an expanding war, Air Force commanders sought a flexible and efficient airlift system that could sustain growing logistical requirements while remaining responsive to tactical demands. By the end of 1964, the nucleus for an aerial port system was in place, communication facilities and navigational aids had been improved, and a centralized system of scheduling and control had been implemented. Carrying over 6000 tons of cargo a month, SEAAS transports were making a major contribution to the war effort, especially in support of remote Special Forces camps. However, as the author notes, "airlift could neither force the enemy to fight in unfavorable circumstances nor compel the loyalty of the South Vietnamese people to their government." (pp. 146-47)

Part II, Years of Offensive, 1965-68, features the central role of C-130s in General Westmoreland's ill-fated "war of attrition." A changing command structure had SEAAS give way in 1966 to Common Service Airlift System, while airlift participation in major ground combat operations increased significantly.

The C-130 quickly came to dominate tactical airlift in Vietnam. The numbers tell the story: a C-123B carried a payload of 11,000 pounds at a cruising speed of 140 knots and required a takeoff run of 4670 feet to clear a 50-foot obstacle; a C-130B lifted more than three times the payload (36,270 pounds), cruised twice as fast (293 knots), and needed less runway for takeoff (4330 feet). Flying around the clock, using primitive forward airstrips with poorly prepared surfaces that often were closer to 2000 than to 4000 feet long, and frequently operating at the limits of safety, the C-130 force dominated the airlift effort by 1966.

The rapid influx of U.S. combat units and increased level of hostilities placed a severe strain on the airlift infrastructure. Scheduling went awry, ground equipment broke down, aircrews suffered from inadequate housing and messing, and accident rates soared. Above all, Air Force commanders failed to give necessary priority to expansion of aerial port facilities—the key to high-volume operations.

Formation in October 1966 of the 834th Air Division under Brigadier General William G. Moore, Jr., marked a turning point in airlift operations.

"I love TAC, I love those C-130s, and I love that [tactical airlift] mission," Moore once said. Energetic, demanding, competent, and enthusiastic, he implemented more efficient scheduling procedures (including a new emergency request system), emphasized improved tactical methods (especially the use of tactical airlift liaison officers with ground units), pressed for better equipment and facilities, and stressed safety. Conditions improved, tonnage carried went up, and accident rates came down. Nevertheless, Bowers notes, "The flying game in Vietnam remained a tough and challenging business, and the possibility of disaster seldom far from sight." (p. 251)

While paying adequate attention to managerial and organizational matters, Bowers emphasized combat and logistical operations. Separate chapters cover the major battles of the period: Junction City, Khe Sanh, and Tet. Indeed, tactical airlift's finest hour came at Khe Sanh. The besieged garrison required 235 tons per day to sustain combat (the defenders of Dien Bien Phu needed 200 tons). Flying in bad weather and subject to intense antiaircraft fire, airlift pilots found missions to Khe Sanh "the supreme test of airmanship." They met the challenge. Employing a variety of innovative delivery techniques, transport pilots brought in more than 12,000 tons between late January and early April 1968. "Airlift," Bowers concludes, "made possible the allied victory at Khe Sanh. . . ." (p. 295)

After reviewing the role of airlift in irregular warfare and in Laos, the author in the final section of *Tactical Airlift* discusses the Years of Withdrawal, 1969-75. This period featured comparative stability for the airlift system in Vietnam, as C-130/C-123 monthly tonnage declined from 68,300 in January 1969 to less than 10,000 in January 1972. Efficiency continued to improve (although attempts to apply computers to airlift management failed), blind and high-altitude airdrop capability made significant gains, and doctrinal conflicts with the Army subsided. Airlift transports participated in combat operations in Cambodia and Laos, and they helped to blunt the Communist offensive of Easter 1972. Airlift support of the Vietnamese defenders of An Loc, Bowers writes, turned out to be "the most trying time of the war for Air Force C-130 crews." (p. 539) While the courage and ingenuity of airlift personnel saved An Loc, the situation in South Vietnam continued to deteriorate. As events soon demonstrated, the Saigon regime could not survive without U.S. assistance.

Bowers reaches positive conclusions about airlift efforts in Southeast Asia. "Mistakes and bureaucratic inanities were not absent," he observes, "but the working of the airlift system in Vietnam proved the human strengths of the professional United States Air Force." (p. 659) Although many airmen felt frustrated that so much struggle and sacrifice had come to naught, the airlift system emerged "healthy and vigorous" from the bittersweet experience of Vietnam.

Tactical Airlift is a model study—authoritative and nicely constructed—and a pleasure to read. Colonel Bowers has crafted a fitting memorial for his fellow airlifters who shared the joys and sorrows of participating in America's most perplexing war.

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The U.S. Government Response to Terrorism: In Search of an Effective Strategy by Dr. William Regis Farrell. Boulder, Colorado: Westview Press, 1982, 142 pages, $20.00.

This excellent book is probably the best account available on how the U.S. government has institutionally responded to the growing problem of terrorism. As the reader readily discovers, doing something about terrorism is far more difficult than understanding or explaining it. Dr. William Farrell seeks to determine to what extent the lack of a U.S. antiterrorist strategy is due to the structure and functions of existing U.S. governmental agencies. He begins by discussing the challenge policymakers face in simply defining the nature and scope of terrorism. Perceptions of what terrorism is or is not are manifold. Of particular interest to readers is a chapter that examines the legal, political, and sociological concerns of military involvement in terrorist incidents.

Despite its intractable nature, governments must deal with terrorism. However, responding actively to terrorism can induce a host of concerns, external and internal, to government bureaucracies (particularly in democratic societies). In the U.S. government, meeting the terrorist threat can involve over 30 government agencies, raising jurisdictional disputes over who is authorized to do what. This problem is exacerbated by the fact that terrorism is *not* a primary responsibility of any agency. Consequently, antiterrorist measures do not compete well for talent and resources within the government or the individual agencies. U.S. antiterrorist effort within the bureaucracy is maintained for the most part because some officials recognize terrorism as a worldwide threat and because the United States is involved episodically in terrorist incidents.

Dr. Farrell has done an outstanding job of tracking down and documenting the interdepartmental process by which U.S. policy is formulated and implemented. He identifies the major organizational players and delineates their antiterrorist responsibilities. He also shows that there are major obstacles inherent in the structure of the policymaking process and the established functions of the participating agencies which make the future emergence of such a strategy unlikely. This prognosis appears confirmed by the present administration, which has publicly given the problem of terrorism high priority but has not made any substantive changes to the existing interdepartmental structure.

The U.S. Government Response to Terrorism is for the serious reader. There are no dramatic descriptions of terrorist exploits or international intrigue. Instead, the author has painstakingly researched the "process" and noted its capabilities and limitations. While the book tends to focus on the U.S. bureaucratic structure, many of the challenges and difficulties apply to bureaucracies in general. For those in government who are a part of this interdepartmental structure, this work is a must.

Lieutenant Colonel Richard Porter, USAF
Washington, D.C.

The CIA: Reality vs. Myth by Dr. Ray S. Cline. Washington: Acropolis Books, 1982, 351 pages, $12.50 cloth, $8.95 paper.

Dr. Ray S. Cline traces the origins, developments, and achievements of the OSS and provides a detailed history of the CIA from its beginnings to the Casey era. His coverage of the CIA has an enormous amount of data woven carefully into clear patterns.

Cline believes that the CIA should focus on research and analysis rather than paramilitary operations. Under the heading of research and analysis, Cline includes several elements. First, Cline believes that the CIA should coordinate the collection of information from all sources. Agents in the field should be given detailed requirements so that they can obtain relevant information. Second, the author emphasizes that the CIA should integrate and analyze this intelligence with respect to the intentions and capabilities of other nations. Cline has given a methodology for the analysis of capabilities in *World Power Trends and U.S. Foreign Policy for the 1980s* (1980). Third, the CIA should relay the resulting reports to relevant policymakers, especially to the National Security Council. Otherwise, foreign policy decisions will be made on the basis of only scattered pieces of intelligence and guesswork. Cline states that such information transfers yielded results that helped the United States obtain a favorable outcome in the Cuban missile crisis.

Cline recommends that the CIA resume its preparation and dissemination of national estimates. These are essentially projections designed to reduce the uncertainty for policymakers. They would cover such questions as: What is the Chinese leadership likely to be doing in a few years? What is the possibility of a Sino-Soviet reconciliation?

Using examples from the past, the author discounts the paramilitary side of covert operations. He cites the Bay of Pigs fiasco, in contrast to the analytic and research success of the CIA during the Cuban missile crisis. He indicates that the CIA was *unable* to overthrow President Allende in Chile. When the coup did occur in 1973, it was not under the sponsorship of the CIA, even though the Agency has been blamed in the American press for this "exploit." Another paramilitary failure occurred in 1958, when the CIA failed to overthrow President Sukarno of Indonesia. The paramilitary successes of the CIA in Iran in 1953 and Guatemala in 1954 have been overstated, Cline believes, since little effective opposition was encountered. The CIA operation in Laos with the Meo tribesmen Cline dismisses without adequate discussion of its possible value.

The author finds the origins of CIA involvement in paramilitary operations to be in the OSS. "Wild Bill" Donovan, Cline indicates, was not especially interested in analytic studies but stressed paramilitary operations, which were highly praised by some commanders in the European theater. Cline states that the military and political condi-

tions of the 1960s and 1970s were less "congenial" to such functions. He finds paramilitary operations to be inherently weak. Once a CIA connection is revealed, the U.S. government is faced with the choice of abandoning the operation or changing it to an overt military intervention. Nevertheless, we must ask whether the Bay of Pigs disaster was due to strategic conditions of that period, to the nature of paramilitary operations, or to poor planning by the CIA leadership.

Cline cites the crippling effects of past congressional monitoring of covert CIA functions. The Hughes-Ryan Amendment (1974) required the briefing of seven congressional committees on covert action. When so many congressmen and staff were involved, nearly every covert operation was leaked immediately. The amendment was modified in 1981. Briefly, Cline mentions the unfavorable effects of the Freedom of Information Act also. The author could have expanded on this topic, since through this act foreign embassies can obtain a substantial amount of sensitive information.

The CIA: Reality vs. Myth is a scholarly presentation. Cline asks every possible question of his data and produces generally reasonable, balanced conclusions. I can recommend this book highly for anyone involved in the military or foreign policy sectors of the United States.

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U.S. Army Special Warfare: Its Origins by Alfred H. Paddock, Jr. Washington: National Defense University Press, 1982, 221 pages, $6.00.

Colonel Paddock's book traces the origins of the Army's psychological and special warfare capabilities from 1941 until the 1952 establishment of the special warfare center—today the John F. Kennedy Center for Military Assistance—and the 10th Special Forces Group. The author, who has extensive experience with the Special Forces in Vietnam and in psychological operations, describes the birth of U.S. special warfare forces in the Office of Strategic Services during World War II and their troubled development in the postwar period, concluding with the Korean War. The Korean conflict, coupled with Western military deficiencies in Europe, provided the impetus for the formal establishment of special warfare capabilities.

The author indicates that throughout this period the Army was not quite sure what to do about either psychological warfare or special operations, but the former was more readily accepted because it seemed to fit into the Army's own image of its role. Though the potential of unconventional warfare was acknowledged with the establishment of the Special Forces in 1952, those units were designed for insurgency operations only and were aimed specifically at Eastern Europe. It was only later, as the war in Southeast Asia increasingly absorbed U.S. attention, that the Army began to develop a counterinsurgency capability.

The most stimulating sections of the book are Paddock's reflections on the obstacles encountered by the advocates of special warfare. He argues that the key problem was that a conventional army was trying to cope with an unconventional idea. In an era of severe manpower and money constraints, the Army was reluctant to allocate scarce resources to a capability it considered of doubtful use; and it remained suspicious of elite, specialized forces. To these problems were added bureaucratic jealousies between the Army, the Air Force, and the CIA over who should control special operations; the political sensitivities of developing, in a peacetime environment, the "dirty tricks" of special operations; and the belief among military officers that unconventional warfare had limited potential in a nuclear age. Colonel Paddock concludes that the Special Forces emerged only through the vigorous efforts of a few Army officers, coupled with strong prodding of the "conventional" soldiers by senior civilian officials in the government. The same combination would lead to the heyday of the Special Forces during the Kennedy administration.

Written in a spare, straightforward style and with extensive notes and bibliography, *U.S. Army Special Warfare* is an excellent study of bureaucratic resistance to new ideas and of the maneuverings involved in creating new organizations. Obviously, it will be particularly important reading for those interested in either the post-World War II Army or the development of modern U.S. unconventional warfare capabilities.

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Vietnam Tracks: Armor in Battle 1945-1975 by Simon Dunstan. Novato, California: Presidio Press, 1983, 191 pages, $40.00.

Vietnam Tracks is a detailed account of the modification and development of various armored fighting vehicles (AFVs) employed during the Vietnam War, with particular emphasis on U.S. tanks (the M48A3 Patton and M551 Sheridan) and armored personnel carriers (the M113 armored calvary assault vehicle). In the foreword, retired Major General George S. Patton asserts that the book represents an important contribution toward understanding armor's "capabilities and limitations in a counterguerrilla environment which those who practice the profession of arms may well come to experience again." However, *Vietnam Tracks* is primarily a "hardware" book that centers more on the armored vehicles themselves than on how they functioned in support of a strategy of counterinsurgency.

As with most works of the "hardware" genre, *Vietnam Tracks* offers a flood of photographs (indeed, over half the book consists of pictures of AFVs and related captions). Oddly for a publication of this type, none of the photos are in color, nor are there any schematics of the AFVs. But author Simon Dunstan does provide tables of organization and equipment, as well as some order of battle data for many of the allied armor formations that fought in the war.

Dunstan is at his best when he describes the tactical problems encountered by U.S. and, to a lesser extent, ARVN, Australian, and French AFVs. Nearly every AFV that fought in large numbers during the war is chronicled by the author. Descriptions of the initial deployments, track characteris-

tics, maintenance and mobility problems, and the modifications (many ad hoc) brought about through combat experience are some of the book's strong points. Of particular note are the individual treatments given the M48A3 Patton tank, the ill-fated M551 Sheridan tank, and the M113 armored cavalry assault vehicle. Perhaps realizing that the technical aspects of AFVs might prove to be somewhat tedious for the reader, Dunstan also has woven a number of "war stories" into his discourse. These accounts provide the reader with a good feel for what tactical armored combat was like in Vietnam, particularly for U.S. forces.

While *Vietnam Tracks* succeeds as a "hardware" catalogue of AFVs during the war, the book fails to fulfill General Patton's claim that it provides an evaluation of the role of armor in counterinsurgency strategy. Indeed, when the author does address this larger (and far more interesting) question, his analysis is not only brief but subject to challenge. Basically, Dunstan uses the participation of armor in the war as justification for its efficacy in counterinsurgency operations. The fact that the Army used AFVs in search and destroy operations or as a means of adding mobility and shock action to allied units appears to have satisfied Dunstan that armor war is effective against guerrillas. The waters are muddied even further when the author asserts, incorrectly, that there was a "deep-seated" Army prejudice against the use of tanks in Vietnam. He then follows this contention with the only piece of evidence offered in support of armor's effectiveness, a 1967 evaluation accomplished by the Army itself. What *Vietnam Tracks* does demonstrate is the ability of armor to operate in some of the more hostile terrain of Vietnam, not armor's suitability for counterinsurgency operations.

Ironically, the more conventional military operations of 1972 and 1975, situations where armor ought to have been most valuable, are almost ignored by the author. Less than four pages are given to an analysis of these two offensives.

For those individuals with a deep and abiding interest in the development of armored fighting vehicles and their use in a tactical environment, *Vietnam Tracks* will be of some interest. Those seeking the "lessons of Vietnam" as they relate to armor's role in a strategy of counterinsurgency will have to find their answers elsewhere.

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Soviet Policy in East Asia edited by Donald S. Zagoria. New Haven, Connecticut, and London: Yale University Press, 1982, 360 pages, $25.00.

With its military buildup in East Asia now to the point that the Soviet Union can actively challenge U.S. preeminence in the West Pacific, this volume could not have come at a more opportune time. Sponsored by the Council on Foreign Relations, Donald S. Zagoria brought together twelve eminently well-qualified scholars with varied backgrounds to evaluate Soviet policies in East Asia and their implications for the United States. The result is a well-balanced compendium of eleven studies covering both broad areas of Soviet policies and perceptions and narrower issues focusing on particular problems or countries. Zagoria introduces the analyses with a careful evaluation of the strategic significance of Asia to the Soviet Union and the United States, while Richard Solomon concludes the volume with a discerning dissection of the policy options open to the United States in the closing years of this decade. The nine analyses in between provide the substantive core of the work.

In examining their various policy areas, the contributors present a montage of critical factors affecting Soviet objectives in the East Asian region. John J. Stephan provides a superb analysis of Soviet perceptions of Asia, integrating Russian and Communist views through an analysis of the geographical, historical, and ideological factors that influence the Soviets' current complex view of the region. The succeeding chapters present analyses of specific policy areas. Seweryn Bialer discusses the implications of the Sino-Soviet dispute from Moscow's perspective, Robert Scalapino analyzes Soviet political influence in Asia, and Fuji Kamiya discusses the dispute with Japan over the northern territories by placing it in the perspective of 130 years of conflict. Zagoria and Sheldon Simon review the complications Moscow encounters in Southeast Asia because of its support for Vietnam. Ralph Clough takes a careful look at Soviet policies toward the two Koreas, and Robert Campbell discusses and analyzes the problems involved in the development of Siberia. Paul Langer evaluates the strengths and weaknesses of the Soviets' military deployment in Asia.

These chapters demonstrate that Moscow faces a series of weaknesses as it develops its policies for the 1980s. Its growing conventional military strength, for example, remains limited by internal logistical problems that leave the Soviet Union incapable of conducting sustained warfare much beyond its own borders. Its continuing support of Hanoi's expansionist policies reduces its influence with the nations of ASEAN, raising fears that Soviet use of the military facilities at Da Nang and Camranh Bay will lead to coercive policies directed at the nations of Southeast Asia.

Lest these and other areas of Soviet weakness be seen as easy targets for U.S. manipulation, Solomon's concluding chapter balances Soviet strengths and weaknesses with U.S. problems in the region. The challenge of Soviet military power is compounded by the legacy of eroded U.S. credibility that stems from U.S. actions in the 1970s. Overcoming this legacy complicates U.S. policy options in determining future patterns of U.S. security relations in Asia. Building coalitions to offset growing Soviet strengths depends to a great extent on Asian confidence in Washington's long-term willingness to maintain a strong military presence. The issues Solomon raises are critical and, when evaluated in the context of the earlier chapters in this compendium, provide an excellent basis for assessing future U.S.-Soviet relations both in Asia and in the wider global environment. Thus, this volume is a valuable contribution to the library of any professional soldier.

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The Australian-American Security Relationship: A Regional and International Perspective by Henry S. Albinski. St. Lucia, Queensland, Australia: University of Queensland Press, 1982, 257 pages, $48.50.

Professor Henry Albinski's analysis appeared as a new phase in Australia-U.S. relations seemed to be beginning: Prime Minister Robert Hawke was expressing his wish to strengthen the ANZUS (Australian-New Zealand-United States) alliance. At the Washington Press Club on 15 July 1982, he also said, "We will pursue an independent and self-respecting foreign policy, based on cool and objective assessment—hardheaded, if you like—of Australia's genuine international obligations." Albinski's book examines U.S.-Australian security relationships and provides historic background of the Fraser-Carter years.

For a developed country, Australia has an unusual military history; traditionally, her forces have fought overseas alongside powerful allies—the United Kingdom or the United States. During World War II, the Japanese bombed Darwin but realized that they did not have the capability to invade Australia. While Canberra is very conscious of its vast, underpopulated, mineral-rich territory, the lack of an identifiable threat "in the foreseeable future" has hitherto had an inhibiting effect on Australian strategic planning.

The Australian-American Security Relationship is a careful study depicting the differences and congruities in economic, domestic political, diplomatic, and defense matters that affect security relations between Australia and the United States. If an average of 72 footnotes a chapter seems excessive to the general reader, the interested student is furnished careful references for further reading.

Albinski's analysis follows a logical plan, proceeding from a sketch of the conceptual framework to a broad-brush picture of the whole area, an overview of Southeast Asia and the ASEAN community, and a more minute examination of Australian and U.S. relationships with individual nations. The military relevance of the Indian Ocean to Australia and the allies' geostrategic interests and objectives in the Indian Ocean littoral and hinterland are surveyed next; and examination of the often overlooked South Pacific region brings the third ANZUS partner, New Zealand, into the picture. The concluding chapter, on Australian-U.S. relations, deals with three areas that the author believes may have the potential to erode the security connection: alleged U.S. interference in Australian affairs, purported U.S. disregard for Australian sensibilities, and "bilateral strains arising from basically nonsecurity issue differences."

Professor Albinski pursues his theme with enthusiasm in his own inimitable style. I strongly recommend *The Australian-American Security Relationship* as a valuable source of information for those with an interest in the strategic affairs of the Southern Hemisphere.

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International Politics in Southern Africa edited by Gwendolen M. Carter and Patrick O'Meara. Bloomington: Indiana University Press, 1982, 270 pages, $32.50 cloth, $8.95 paper.

This volume of nine concisely written essays focuses on the diplomatic and military strategies of extraregional powers in southern Africa. Other topics addressed include the role of donor agencies, the status of South Africa in the region's political economy, and international moral protest against apartheid.

Of particular interest to the military reader is the chapter on "U.S. Policy toward Southern Africa" by Robert M. Price. The United States, we are told, desires incremental change in the Republic of South Africa's governmental structure in order to ensure both continued U.S. access to industrially essential raw materials and minerals and the maintenance of open sea lines of communication from Persian Gulf oil fields to the Atlantic Ocean. Price suggests, however, that the radical destabilization of South Africa is inevitable, yet the political ascendancy of revolutionary elements need not threaten U.S. economic or geostrategic interests. The West is the only significant market for South Africa's mineral exports and has little to fear. No successor regime in South Africa, regardless of its antipathy toward the West, could afford to reduce such exports greatly; its need to augment hard-currency reserves and to prevent unemployment problems in the mining industry would prohibit that.

The inevitability of the present South African government's collapse forms a central theme of *International Politics in Southern Africa.* However, the contributors fail to offer a detailed account of how this impending political transformation is likely to occur (although Price does make passing reference to a transition period marked by reduced mineral production). Clearly, Pretoria has not shown signs of reacting in supine fashion to armed rebellion. Indeed, should its existence be threatened, the white minority regime probably will lash out at its enemies in an extremely destructive manner with attendant large-scale loss of life. Further, in such an environment, the output of extractive industries may well be reduced dramatically or halted altogether. Given this scenario, current U.S. efforts to achieve peaceful, evolutionary change in South Africa while securing vital strategic and economic interests appear most prudent.

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The Bishops and the Bomb: Waging Peace in a Nuclear Age by Jim Castelli. Garden City, New York: Doubleday, 1983, 283 pages, $7.95.

Journalist Jim Castelli provides the text of the 339-paragraph pastoral letter titled "The Challenge of Peace: God's Promise and Our Response," preceded by a 184-page account of the two-year process by which the U.S. Catholic bishops composed it.

The Reverend Theodore M. Hesburgh, in his foreword, writes that "Nuclear force is one of the few things on earth that's evil per se," adding that this pastoral letter is "the finest document ever to emerge from the U.S. Catholic hierarchy." This opinion among the bishops was not unanimous, for one bishop termed it a "pastoral and theological

minefield." There was controversy during its preparation, and more controversy can be expected.

Extensively argued, the letter proceeds from the belief that the world has entered a "new moment," demanding fresh reappraisal to save the "human family" from self-destruction. The bishops want to provide the inspiration for "perfection on a theology of peace" and carry out their obligation as bishops of the universal Church to "interpret the moral and religious wisdom of the Catholic tradition by applying it to the problems of war and peace today."

While claiming to speak as pastors and teachers, not as politicians and technicians, the bishops do not shirk policy advocacy. Because it is morally unacceptable to "intend" to kill the innocent as part of a strategy, not all forms of war fighting and deterrence are morally acceptable. Thus, targeting doctrine is a proper matter for concern, as is the relationship of nuclear deterrence to war-fighting strategies. Because proportionality is essential to just war doctrine, the use of nuclear weapons to counter a conventional attack is "morally unjustifiable." The bishops urge NATO to adopt a no-first-use policy. They repeat their support for conscientious objection in general, as well as for selective conscientious objection to participation in a particular war, and further "insist" on legislative protection for both categories.

Other policies come in for comment. Any attempt to support regimes that violate human rights is "morally reprehensible." The harm inflicted on the poor of the world by the arms race is more than "can be endured." Abortion in the United States (some 15 million since 1973) is tied to defense policy rhetorically:

> We must ask how long a nation willing to extend a constitutional guarantee to the "right" to kill defenseless human beings by abortion is likely to refrain from adopting strategic warfare policies designed to kill millions of defenseless human beings, if adopting them should come to seem "expedient"?

The pastoral letter seems likely to become part of what Irving Kristol has called, in a somewhat different context, the "massive miseducation about the moral dimension of US foreign policy." But the ideas in the pastoral letter are not going to go away. Many books on many subjects are published every year. You had better read this one.

<div style="text-align: right;">
Dr. James H. Buck
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Future Fire: Weapons for the Apocalypse by Ann Marie Cunningham and Mariana Fitzpatrick. New York: Warner Books, 1983, 274 pages, $8.95 (paperback only).

Future Fire belongs to that new genre of research and writing on military affairs which, for lack of a better phrase, can be termed "fast-food analysis." The meat of the subject is there all right, but somehow it got lost among the fillers, extenders, and secret sauces. The reader's hunger is satisfied, but he receives little or no real nourishment.

The book purports to be a "primer of modern weapons technology" in response to "the policy of the government—in particular the departments of defense and energy—to keep *us* in the dark." In reality, it provides the reader with chapter after chapter of facts, figures, photos (almost one every other page), and commentary concerning the U.S. arms buildup without the benefit of supporting data. With no footnotes or bibliography, only occasional attribution of quotations, and no credits under the photos, the book reflects a distinct lack of sound research.

It is further flawed by numerous errors of fact, indicating that research for the book, although broad, was not deep. For example, Ann Cunningham and Mariana Fitzpatrick justify the increased military spending by the Soviet Union "... in good part for the purpose of defending the Chinese border." The authors also state that the Hawk missile had a 96-percent kill rate in "Southeast Asia," as well as elsewhere; but they claim that when the United States sent "smart missiles" to Vietnam, "most of them were flops."

Perhaps the most disturbing part of *Future Fire*, however, concerns the Soviet Union's capability to conduct chemical warfare. The authors state that the Soviet Army has "50,000-100,000 troops that specialize in detecting and decontaminating poison gas. The United States has about 6,000 comparable units." In addition, the authors contend that the United States is superior to the Soviet Union in chemical defense. Not only are the U.S. figures greatly overestimated, but a serious defense issue, chemical defense, is brushed aside in favor of a diatribe against binary weapons. The authors of *Future Fire* cannot see the obvious forest for their own ideological trees.

Each chapter reads like a separate magazine article, complete with provocative titles, such as "The Road to Megaweapons: The History of U.S. Nuclear Strategy," "Shuttles and Killer Satellites: Warfare Moves into Space," and "The Spiraling Cost of Megaweapon Defense." When the authors have exhausted such topics, there are no conclusions; the book simply ends without any great ideological summing up.

I cannot recommend the work to even the casual observer of the international arms race. Quoting from this book is the scholastic equivalent of dueling with wet powder.

<div style="text-align: right;">
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Combat Motivation: The Behavior of Soldiers in Battle by Anthony Kellett. Hingham, Massachusetts: Kluwer Boston, 1982, 336 pages, index; $22.00 student edition, $38.00.

Why do soldiers fight? Here, at last, is a usable professional volume concerned with the combat soldier and the human variables that affect his performance on the battlefield—a book that emphasizes both the underlying human motivations and the environmental factors influencing combat behavior.

For almost as long as men have fought in wars, they have debated and written about the relative strengths of armed forces by using numerical comparisons of manpower, weapons, and units. However, a numerical comparison tells at best only part of the story. Other factors, which are nonquantifiable, are important also—factors such as leadership, fear, confusion, courage, and cowardice. These factors, which Clausewitz has called "frictions," separate a real war from a paper exercise. One defense consultant remarked that

intangibles are more important than material factors by 200 to 300 percent.

Just because intangibles are nonquantifiable does not mean that we cannot understand and use them. Anthony Kellett's *Combat Motivation: The Behavior of Soldiers in Combat* does a superb job of describing them and contributing to our better understanding of the human dimension in war. Originally written for the Canadian Department of National Defence, his study is based on historical descriptions of the human dimension of Canadian, British, American, and Israeli experiences since 1940. Although the examples describe ground combat experiences primarily, the lessons learned have equal applicability to ground, air, and naval forces.

Kellett's method for describing the human dimension in war is to examine human experiences in combat and from those experiences determine the factors bearing on combat performance. Among the factors identified as affecting combat motivation are group loyalty, unit esprit, manpower allocation policies, training, discipline, leadership, ideology, preconceptions of combat, combat stress, and combat behavior. Thus, combat motivation is a process that begins in the garrison and continues through combat. Kellett rightly points out that each factor is not necessarily important to every person or group all the time; rather, these are broad factors that affect human behavior from time to time under various conditions. It is important, therefore, to understand the conditions under which various factors become operative so that remedies may be employed to redirect negative motivating factors into more positive ones.

What is most interesting in the book is the repeated demonstration of the fact that the factors which operate in wartime have their roots in peacetime. Example after example shows that whatever motivational qualities a person or unit has in peacetime carry over to wartime and have an important influence on combat performance. This finding has important implications on the training and motivation of soldiers in peacetime. Similarly, every person who leads or is led should be aware of policies, procedures, personalities, etc., that develop or impede positive motivation and should know what steps to take to foster or enhance proper motivation.

Kellett's book should be considered among the best sources explaining how human beings behave under combat conditions. Francis Bacon wrote "Some books are to be tasted, others to be swallowed, and some few to be chewed and digested." *Combat Motivation* is one of the "few."

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Definitions and Measurements of Détente: East and West Perspectives edited by Daniel Frei. Cambridge, Massachusetts: Oelgeschlager, Gunn, and Hain, 1981, 216 pages, $25.00.

Tradition tells us that the more exacting theologians spent a great deal of time and effort debating the number of angels who could simultaneously dance on the head of a pin. They apparently debated this topic without ever bothering with two fundamental questions: whether any angels ever desired to dance there in the first place and whether the answer itself had any relevance to policy decisions of their era. The intellectual heirs of these theologians, calling themselves social scientists, convened in Zurich, Switzerland, in 1979 to debate how to measure and define détente between East and West in Europe. Profiting from the ridicule heaped on their forebears, they invested a tremendous amount of effort in definitions and motivational rationale. They explicitly stated that measurement of détente would be difficult because the measurement process might be distorted for political ends. That appears to be one of the few valid conclusions they reached. Having observed détente survive such diverse administrations as Nixon's and Carter's in a reasonably recognizable and consistent form, they were no more prepared for Reagan Haig than they were for Poland or Afghanistan.

Daniel Frei's slim volume is a revised and expanded version of the proceedings of these social scientists at Zurich. Written after the conference, *Definitions and Measurements of Détente* reflects their thoughts after examining one another's positions. It can provide today's Air Force officer with an intellectual exercise in understanding the terminology and thought processes of these academics. Because every NATO government at one time or another employs academic social scientists as defense and or foreign policy advisers, the military professional should understand something of their thought processes. Unfortunately, this particular volume is not very stimulating, reaches few firm conclusions, has been overtaken by events, and is narrowly written for the specialist in social science pseudostatistics.

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Jane's Avionics 1982-83 edited by Michael Wilson. London: Jane's, 1982, 330 pages, $110.

The renowned series of annual Jane's yearbooks is joined this year by a new addition on avionics. The editors term *avionics* as "operational systems or equipment designed specifically for piloted fixed-wing aircraft and helicopters, airships, balloons, drones and remote-piloted vehicles (RPVs)." Editor Michael Wilson begins the volume with an excellent foreword bringing the reader up-to-date on the current status of avionics development. Believing that readers may not appreciate fully the development of aircraft avionic systems over the years, the editor also provides a succinct summary of the evolution of these systems since the beginning of flight and, particularly, since World War II.

The bulk of *Jane's Avionics 1982-83* covers the multitude of avionic systems in typical Jane's fashion. Radar, navigation systems, antisubmarine and electronic warfare equipment, communications, data processing systems, flight instruments, and flight data recorders are some of the areas included. Flight simulators are covered also, in part because of their ever-increasing use and sophistication.

The price and the highly technical nature of this new publication will narrow its readership, but *Jane's Avionics* editions should be a valuable ready reference for anyone interested or working in avionic areas today and during the years to come.

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R the contributors

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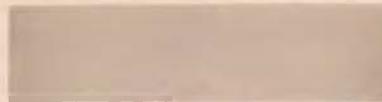
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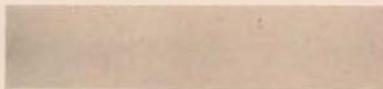
Colonel Joshua Shani is an Israeli Air Force Wing Commander who served in the 1967 War, the War of Attrition, and the 1973 Yom Kippur War. As a Squadron Commander, he flew the lead ship in the Entebbe raid. Colonel Shani is a graduate of the Israeli Air Force Academy and the USAF Air War College.

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Captain Mark S. Braley (USAFA) is an AFIT student at Stanford University. While a cadet at USAFA, he had several poems and a short story published in the cadet creative writing magazine. He graduated as Outstanding Cadet in English for 1979 and was then assigned as an English instructor at USAFA Preparatory School. Later he served as a Maintenance Officer on C-5s at Travis AFB, California. In 1982, he was awarded the Airlift Association Young Officer Leadership Award and was named the 60th Military Airlift Wing Junior Officer of the Year. In 1983, Captain Braley was recognized as the California Air Force Association Company Grade Officer of the Year. His article is first-prize winner in the third annual Ira C. Eaker Essay Competition.

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AWARD

The Air University Review Awards Committee has selected "Soviet Design Policy and Its Implications for U.S. Combat Aircraft Procurement," by Rebecca V. Strode, as the outstanding article in the January-February 1984 issue of the *Review*.

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