The DOD's Changing Roles and Missions: Implications for Command and Control

Will M. Jenkins, Jr.

Program on Information Resources Policy

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Will M. Jenkins, Jr., is Executive Vice President and Chief Operating Officer of Home Health and Hospice Care, Inc., in North Carolina. He prepared this report while a Colonel in the U.S. Air Force, serving as an Air Force National Defense Fellow with the Program in 1993–94.

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Executive Summary

The future just ain't what it used to be.

General Colin Powell[*]

General Powell's understated eloquence focuses clearly on the challenges facing the United States and the post-Cold War order of nations in the mid 1990s. While the United States and the world are unquestionably at a pivotal point in history, this report does not attempt to convince the reader that the world geopolitical environment has changed or to enumerate reasons why the fall of the Berlin wall and the breakup of the former Soviet Union are important to U.S. national security strategy.

Neither does the report attempt to answer many of the questions it raises. Its essential format is a review of background issues, raising relevant questions with implications for the future but leaving the reader to judge. The questions themselves have value in focusing attention on implications for future command and control of military operations, and they suggest areas for further study.

Instead, by looking at recent U.S. military history, the report poses questions about the changing roles and missions of the military service departments, yet it is important to note that this is not a technical report about command and control systems, but rather a review of policy implications for command and control. It surveys some of the major issues in command and control, while leaving much background information unmentioned, and employs the historical perspective to highlight major issues.

The report begins with a review of military failures that provided the backdrop for many of the lessons learned prior to *Operation Desert Storm*. What did the nation learn from widely reported failures of the 1970s and early 1980s? What issues surfaced that have implications for command control of future wars?

The review of six military operations by the United States discussed offers insights into the following ongoing concerns: (1) Vietnam, (2) U.S. military operations to rescue the USS Pueblo in 1966, (3) seizure of the Mayaguez in 1975, (4) the abortive attempt to rescue American hostages in Iran in 1980—Operation Desert One, (5) the response to the terrorist bombing of the

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[*]Colin L. Powell, General, Former Chairman of the Joint Chiefs of Staff, "National Security Challenges in the 1990s: 'The Future Just Ain't What It Used to Be,'" *Army* (July 1989), p. 12.

U.S. Marines barracks in Beirut in 1983, and (6) Operation Urgent Fury in Grenada in 1983. These failures prompted a national debate on roles and missions for U.S. military forces and ultimately resulted in the most sweeping organizational changes in the Department of Defense (DOD) in more than fifty years, the Department of Defense Reorganization Act of 1986.

Many have pointed to *Operation Desert Shield/Operation Desert Storm* as proof positive that U.S. Military forces now "have their act together." This report examines the results of the Gulf War, in two ways: First, it provides an overview of the major successes and failures of land, air, and naval forces. Second, it asks three essential questions with profound implications for command and control in future warfare: (1) In what ways was the Gulf War typical of historically traditional wars? (2) To what extent is the Gulf War a good measure for the outlook of future wars? (3) To what extent must the Gulf War be considered an anomaly in the history of warfare?

Was *Operation Desert Storm* really a defining moment for national military strategy in the United States? The multitude of actions that led to the Coalition's ultimate victory were as extraordinary and interdependent as the objectives and mission statements were straightforward. In many respects, the Gulf War created more questions about command and control of military forces than it answered.

As the likelihood of future conflicts increases with global uncertainty, future wars may be strikingly different from the Gulf War and from other past conflicts. International developments in the Middle East, Somalia, Haiti, Bosnia, and Korea suggest that U.S. interests will continue to be threatened and have triggered a national debate on these questions, and the outcome of this debate and the answers to these and other questions asked in this report involve high stakes for the United States and for the world.

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Introduction

The future just ain't what it used to be.

General Colin Powell[1]

General Powell's understated eloquence focuses clearly on the challenges facing the United States and the post-Cold War order of nations in the mid-1990s. Don't brace yourself for another twenty pages of arguments typical of so many current national defense studies that try to convince the reader that the world geopolitical environment has changed, to enumerate the reasons why the fall of the Berlin Wall and the break-up of the former Soviet Union are important to U.S. national security strategy, and to suggest conclusions which can be drawn from these monumental world events and the post-Cold War world; this report does not propose to do that.

The approach. This report looks at recent U.S. military history and asks questions concerning the changing roles and missions of the military services. The Marshalls, Eisenhowers, and Pattons of yesteryear have become the Powells, Schwarzkopfs, and Horners of modern warfare. The report does not attempt to answer the questions it raises. The essential format of the report is to review the background issues and raise relevant questions that offer implications for the future and leave the reader to judge. The questions themselves have value in focusing attention on implications for future command and control of military operations and suggest areas for further study.

On command and control. Some have urged that renewed emphasis on command and control is needed because the United States is at the threshold of a future in which some of the premises of the Cold War and the utility of modern technologies are being replaced with new premises. These new premises present a developing image of warfare in which battles will be fought by commanders sitting at computer consoles mashing buttons on a keyboard.[2]

Important to note, this is not a technical report about command and control systems. Rather, it addresses policy implications for command and control in a broader sense as discussed by Dr. C. Kenneth Allard in *Command, Control and the Common Defense*:

> Command and control: The exercise of authority and direction by a properly designated commander over assigned forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures which are employed by a commander in planning, directing, and controlling forces and operations in accomplishment of the mission.[3]

Command and control has historically been cloaked in a cloud of mystery. causing it to mean different things to different people. This report uses Thomas P. Coakley's[4] conceptual framework, which emphasizes that the sole purpose of any C^2 system and process is to assist a commander in making reasoned decisions and getting them executed in a manner to accomplish the mission.

As this report merely surveys some of the major issues in command and control, it leaves much of the background information provided by Allard and Coakley unmentioned. However, any in-depth review of this subject should include a study of their research in this field. This report also draws heavily from Professor Anthony G. Oettinger's annual Seminar on Intelligence, Command, and Control[5] at Harvard University's Program on Information Resources Policy, where leaders from government and the private sector have explored the nation's troubling questions on command and control for more than a decade. Much of that dialogue has formed the background for this study.

Lessons from history. The report employs the historical perspective to highlight major issues in command and control. **Chapter Two** includes a review of the military failures which provided the backdrop for many of the lessons-learned prior to *Operation Desert Storm.* What did the nation learn from widely reported military failures of the 1970s and early 1980s? What issues surfaced that have implications for command and control of future battlefields?

Review of six U.S. military operations offers insight into these ongoing concerns: (1) Vietnam, (2) U.S. military operations to rescue the *USS Pueblo* in 1966, (3) seizure of the *Mayaguez* in 1975, (4) the aborted attempt to rescue American hostages in Iran in 1980— *Operation Desert One*, (5) response to the terrorist bombing of U.S. Marines barracks in Beirut, Lebanon in 1983, and (6) *Operation Urgent Fury* in Grenada in 1983.

The purpose of reviewing these six military operations is to provide a framework for discussion in later chapters. Any attempt to assume that the United States has achieved a consensus of opinion on any one of them would be ill advised.

Certainly, one could argue whether any one of these conflicts was typical of "traditional warfare." For example, at the Tet Offensive in Vietnam, one could question whether the conflict had evolved from guerrilla warfare into a more traditional conflict between two opposing armies only because the North Vietnamese had essentially decimated the instruments of revolutionary war in the South.[6]

Further, different operational environments of the military services have resulted in different attitudes about each of these conflicts, so that debate continues over key command and control issues, such as centralization versus decentralization, efficiency versus effectiveness.[7]

Chapter Three considers these examples to examine the highly publicized national debate on roles and missions for U.S. military forces that followed in Congress. What were the issues

that concerned Congress? Since prominent members of Congress preferred economic sanctions over military intervention to liberate Kuwait, what does this suggest about the use of U.S. military forces in future conflicts in the Middle East?

The resulting legislation. The debates over problems with military operations of the 1970s resulted in legislation calling for the most sweeping organizational changes in the Department of Defense (DOD) in more than fifty years—the Department of Defense Reorganization Act of 1986, often called the Goldwater–Nichols Act (GNA). What issues caused Congress to react? What specific legislative imperatives caused change in DOD?

Chapter Four highlights specific organizational and command and control issues that were addressed by the legislation. However, the legislation also included specific language to address civil-military relations and joint officer training matters that are outside the scope of this report. The organizational changes mandated by the legislation have been provided as background for testing command and control relationships during the Gulf War, and for suggesting implications for future warfare.

The Gulf War test. Many have pointed to *Operation Desert Shield/Operation Desert Storm* as proof positive that U.S. military forces have now achieved a higher level of joint interoperability. Others have argued that interservice rivalry continues to plague the military services, as in the Navy's complaint that war planners underutilized naval forces during *Operation Desert Storm.* Was this, in part, the reason for the decision to use Navy Tomahawk missiles to destroy an Iraqi nuclear facility near Baghdad following the war?[8]

This report examines the results of the Gulf War in two ways. First, it provides a general overview of the major successes and failures of land, air, and naval forces. Second, it asks three essential questions that offer profound implications for command and control in future warfare: (1) In what ways was the Gulf War typical of historically traditional wars? (2) To what extent is the Gulf War a good basis for projecting the outcome of future wars? (3) To what degree must the Gulf War be considered an anomaly in the history of warfare?

Was *Operation Desert Storm* really a defining moment for national military strategy in the U.S.? Saddam Hussein crystallized world opinion against his cause—annexation of Kuwait and its vast resources—as no world stage villain since Adolf Hitler. His actions were so distasteful that President George Bush was able to unite a strange set of bedfellows in a first-of-its-kind Middle East coalition, with a surprising number of Saddam Hussein's Arab neighbors joining "western" forces against him.

To what extent were national intelligence estimates accurate? President Bush convinced the American public to rally and crush this world-class villain who commanded the world's fourth largest army. Does the aftermath of the Gulf War indicate that Iraqi forces did, in fact, represent such a formidable armada? If not, what are the implications for national intelligence estimates?

The U.S.-led coalition was successful principally because it was a coalition of forces commanded by U.S. forces on U.S. terms, including clearly defined objectives (discussed in **Chapter Five**), one of the strengths of the war planning effort. Equally important were well defined goals and objectives for U.S. Central Command, which led the Coalition offensive. Yet much of the Coalition victory must be attributed to the remarkable amount of time enemy forces afforded the U.S. to deploy and stage an overwhelming military force in the Kuwait Theater of Operations (KTO).

The multitude of actions, however, that led to the Coalition's ultimate victory were as extraordinary and interdependent as the objectives and mission statements were simple and straightforward. These critical tasks included holding the Coalition together, deploying and sustaining joint forces halfway around the world, developing a war plan and order of battle with host nation and other coalition forces, and executing a plan acceptable to the public back home and around the world.[9]

In many respects, the Gulf War created more questions on command and control of military forces than it answered. Given the outcome of the conflict, what can we learn and what are the implications for future wars? Were organizational and interoperability issues resolved?

The future. Former Vice-Chairman of the Joint Chiefs of Staff General Robert T. Herres said in 1988 that another five to ten years were needed before the nation could realistically determine whether further restructuring of DOD's command and control arrangements was needed.[10] This report, in part, responds to his recommendation and the assessment of others that proper timing for further review of GNA legislation is now.[11]

Finally, this study draws from the historical perspectives provided in the first five chapters to suggest implications for future warfare (**Chapter Six**).

International developments in the Middle East, Somalia, Haiti, Bosnia, and Korea have triggered a national debate on these questions as well as growing concerns over the proper roles and missions of the U.S. military in operations other than war. As might be expected, the outcome of this debate and the answers to these and other questions asked in this report involve high stakes. Stakeholders are represented throughout the government, the international security arena and America's defense-industrial sector as well as the American people. At risk for America is the effectiveness of U.S. military force in meeting the nation's political and military objectives.

Notes

[1]Colin L. Powell, General, Former Chairman of the Joint Chiefs of Staff, "National Security Challenges in the 1990s: 'The Future Just Ain't What It Used To Be,'" *Army* (July 1989), p. 12.

[2]Frank M. Snyder, private written communication, private communication, April 5, 1995.

[3]Dr. C. Kenneth Allard, *Command, Control and the Common Defense* (New Haven: Yale University Press, 1990), p. 16.

[4]Thomas P. Coakley, *Command and Control for War and Peace* (Washington, D.C:. National Defense University Press, 1992), p. 5.

[5]Guest speakers at the seminars examine specifics of the evolution since World War II of the conception, technologies, and institutional framework of the U.S. intelligence and military communities, drawing analogies wherever possible between the functions and support systems of the intelligence staff and the command-and-control line in the military world and management information and decisionmaking functions and support systems in the civilian world of business and government. Proceedings of the Seminar are published annually as Incidental Papers by the Program on Information Resources Policy at Harvard University.

[6]Thomas A. Julian, private written communication, April 28, 1995.

[7]Snyder, p. 3.

[8]Julian, p. 5.

[9]Steven F. Rausch, "Victory in the Desert," *Military Review* (September 1991), p. 1.

[10]Robert T. Herres, General, "Strengthening the Chairman of the Joint Chiefs of Staff," *Seminar on Command, Control, Communications, and Intelligence, Guest Presentations, Spring 1988* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-89-1, March 1989), p. 71.

Chapter Two
Clouds Over the Pentagon

*We are intended to seek and fight the enemy's fleet, and I
shall not be diverted from my efforts by any sinister attempt
to render us subordinate to, or an appendage of, the Army.*

**Commodore Isaac Chauncey, USN,
Letter to Major General Brown, USA
Lake Ontario, 1813[1]**

Commodore Chauncey's remarks emphasize the service parochialism that characterized military operations for much of this nation's early history. What sort of military culture would have caused Commodore Chauncey to make such a statement? What does his statement say about lack of cooperation among the military departments in his day and imply for U.S. armed forces today?

Review of these issues is particularly useful in determining whether current military organization, training, and doctrine will be effective in meeting the global demands of tomorrow's battlefields. Lessons learned from review of failed military operations in the last three decades will also be useful in determining to what extent *Operation Desert Storm* (see **Chapter Five**) evidenced correction of past mistakes.

Military planners often refer to Joint Riverine Operations in the American Civil War and General Dwight Eisenhower's joint *Operation Overlord* in the Normandy Invasion in 1944 as examples of how America's military forces have historically pulled together for victory in times of peril.[2] However, history is equally replete with evidence where the absence of inter-service cooperation characterized by Commodore Chauncey has resulted in military failure.

This chapter briefly explores the roots of inter-service rivalry and the impact that military culture has had on effective operations. It examines six combat operations since World War II that were plagued by inter-service rivalry and failures in service interoperability that served to focus the nation on this problem and that ultimately changed command and control relationships throughout DOD.

Roots of service autonomy. The military services emerged from World War II in a heated debate over service roles and missions. Serious efforts to promote inter-service cooperation began in the 1920s, but it was not until Congress enacted the National Security Act of 1947 that the U.S. officially "unified" its military forces. However, the 1947 Act (like most legislation) was a compromise that accommodated the individual services that feared subjugation by one another.[3]

In March 1948, James Forrestal, serving as the first Secretary of Defense, gathered his service chiefs in Key West, Florida and hammered out the Key West Agreement, later called

Functions of the Armed Forces and the Joint Chiefs of Staff. This agreement resulted after much arm-twisting to force the services to work together; its basic tenets are embodied today in *DOD Instruction 5100.1, Functions of DOD and Its Major Components.*[4]

In the eleven years that followed enactment of the National Security Act of 1947, the legislation was revised twice (1949 and 1958) and was augmented by Executive Plan 6 to clarify and expand on the Key West Agreement. It was another twenty-eight years before the legislation was changed again. Why? Was it because inter-service rivalry had been held in check? Perhaps more appropriately, was it because additional reform was not politically salient during those years?

More than twenty separate studies were conducted between 1958 and the early 1980s which were consistent in their findings—DOD was unable to achieve a balance between centralized control and decentralized operations (**Table 2-1**). This fundamental organizational dilemma hampered peacetime efficiencies, interoperability among the services, and combat operations.[5] Why were professional sailors, soldiers, airmen, and marines committed to the security of the nation not able to break this seemingly endless cycle of inter-service rivalry?

Cultural perspective. The roots of autonomy among the military services are deeply anchored in America's military heritage.[6] Kenneth Allard explored this issue in great detail and suggested that inter-service rivalry has been a manifestation of cultural differences among the military services. The services, in preparing forces for war, can have very different perspectives on war itself—if not also on the nature of war. This, then, emerges as the fundamental question underlying service roles and missions. The services historically, and to some extent rightfully so, view war in the medium where they fight first—land, sea, or air.[7] This does not imply that the roles and missions of the other services are not considered, because they historically have been.

The problem with command and control in military operations has been the priority each of the services has traditionally placed on individual roles and missions on the basis of their unique perspectives and historically derived autonomy. Have the rapidly changing military technologies blurred these lines of service autonomy in recent years, or should we expect these cultural differences to impact future warfare?

Wars offer a clear external threat that, for the most part, has caused our military services to pull together for the common good with a direct link perceived between organizational survival and national survival. In the absence of war, however, the services have perceived organizational survival as a function of budget priorities at the Pentagon. On the one hand, larger budgets tend to soothe inter-service rivalries. On the other hand, lean budgets tend to exacerbate cultural differences and priorities. These cultural differences and service-unique priorities were not

Table 2-1
Studies and Plans on Defense Reform

Year	Month	Study/Plan
1945	April	Special Joint Chiefs of Staff (JCS) Committee Report on Reorganization of National Defense
	September	Eberstadt Committee Report
	October	Collins Plan
1946	April	Thomas Bill
1947	January	Army–Navy Compromise Plan (Norstad–Sherman Plan)
	February	President Truman's National Security Act of 1947
1948	November	Eberstadt Committee (of the Hoover Commission) Report
1949	February	Commission on Organization of the Executive Branch of the Government (Hoover Commission) Report
	March	Tydings Bill
1953	April	Rockefeller Committee Report
		President Eisenhower's Reorganization Plan
	June	Hoffman Plan
1958	January	Wheeler Committee Report
	April	President Eisenhower's Reorganization Plan
1960	December	Symington Study on Reorganization of the Department of Defense (DOD)
1970	July	Blue Ribbon Defense Panel (Fitzhugh) Report
1978	June	Ignatius Report on Defense Reorganization
	July	Steadman Committee Report on National Military Command Structure
1979	February	Defense Resource Management (Rice) Report
	September	National Security Policy Integration Report
1981	December	Joint Planning and Execution Steering Committee Report
1982	February	Two separate reports of the Chairman's (of the JCS) Special Study Group
	February	General Jones's Reorganization Proposal
	April	General Meyer's Reform Proposal
1983	August	House Armed Services Committee Reorganization Proposals for the JCS
	(1983)	Krulak (U.S. Strategic Institute) Study
	(1983)	Byron (National War College Strategic Studies) Study
1984	April	Senate Armed Services Committee Study on the JCS and DOD
	September	Hudson Institute Committee Report on Civilian–Military Relationships
	November	DOD Review of JCS Reorganization Proposals
1985	February	Georgetown University Center for Strategic and International Studies Report
	October	Senate Armed Services Committee Staff Report on Defense Organization
	November	Moses (National Defense University National Security Essay) Study
1986	June	President's Blue Ribbon Commission on Defense Management (Packard Commission)
	October	Goldwater–Nichols DOD Reorganization Act of 1986

resolved in the two decades that followed World War II. The nation was preoccupied with other matters—the assassination of President Kennedy, the civil unrest of the 1960s, the escalation of the war in Vietnam, which polarized American society, Watergate, and the subsequent political turmoil during the Carter administration.

As the nation focused on such pressing domestic issues, differences among the services became more pronounced. With rapid changes in technology, the need for inter-service cooperation in combat operations and interoperability among weapon systems and support systems became more profound. By the time Ronald Reagan was inaugurated as President, the military's hollow fighting force had been widely reported in the press and embarrassing combat failures appeared to be the norm.

In the early 1980s, Congress became determined to fix the underlying causes of America's military ineffectiveness. The remainder of this chapter briefly discusses failure in six separate military conflicts that led to this national debate: (1) the Vietnam experience, (2) rescue of the *USS Pueblo* in 1966, (3) seizure of the *Mayaguez* in 1975, (4) the failed attempt to rescue American hostages in Iran in 1980, (5) response to the bombing of the U.S. Marines barracks in Beirut in 1983, and (6) the chaotic but successful *Operation Urgent Fury* in Grenada in 1983.

Six Conflicts Focus the Nation on Military Reform

One: Vietnam. Few wars can compare with Vietnam as an example of how Clausewitz's fog of war can preclude victory. Without question, Vietnam had a profound impact on Americans' perception of war and, subsequently, on U.S. national security policy in every major conflict since. Indeed, the requests for clearly defined objectives and overwhelming military force to engage the enemy made by General Colin Powell (see **Chapter Five**) were historically rooted as much in lessons from Vietnam as they were in the situation in Southwest Asia in the summer of 1990.

Despite the pitfalls of attempting to generalize about lessons learned from one of the most controversial wars in American history, Vietnam essentially provided the foundation for increased Congressional interests in military operations and for changes that followed, including eventual passage of Goldwater–Nichols. This report focuses on three general lessons learned from the Vietnam experience: (1) U.S. foreign policy in Vietnam did not reflect a clear understanding of the conflict and lacked clearly defined political and military objectives; (2) U.S. military strategy during the war reflected the confusion in U.S. national policy as well as age-old service parochialism; and (3) political considerations in the U.S. served as barriers to effective military operations and victory.

The first major lesson learned from failures in Vietnam is that America should clearly define its political and military objectives. The forces that caused failure for the military services in the 1960s-70s were already prevalent in the early 1950s. Much of that history is rooted in the

French failure in 1954 at Dien Bien Phu, a small township in the militarily strategic valley in Northwest Vietnam (then Indochina). The battle signaled the establishment of the North Vietnamese Army as a worthy military adversary in Asia and renewed the age-old struggle for rule of Vietnam.[8]

The French defeat at Dien Bien Phu also highlighted significant realities about revolutionary warfare and counterinsurgencies that were largely ignored by the West, and especially by the U.S. military planners, who viewed the results of the battle as just another French military disaster, a perception often linked to France's collapse in World War II.[9]

Significant lessons learned from the battle were largely overlooked and signaled general confusion about the nature of the conflict that eventually confronted U.S. military forces and the American people. Above all, the battle demonstrated the flexibility of a guerrilla armed force and the ability of those forces to change rapidly to meet tactical objectives. This called for new tactics in warfare, a lesson ignored by U.S. military planners, which attempted in large measure to control the operations tempo of the war with traditional tactics designed for traditional warfare against a recognized standing army in Europe. This underestimation of the value of guerrilla warfare both to affect public opinion in the U.S. and to impact military tactics in the war created confusion throughout the war.[10]

The battle at Dien Bien Phu was also significant in that it highlighted the futility of overdependence on air support and air logistics support in guerrilla warfare plagued by difficult terrain and adverse weather. While few combat-experienced commanders would engage the enemy without air superiority if given a choice in modern battle, overdependence on air power alone can prove fatal in battle, as it did for French forces at Dien Bien Phu. The French High Command's air superiority was interrupted by typhoon-like rain storms that prevented dependable flight plans and effective air resupply. In turn, the enemy adopted quick-reaction tactics to survive the French air threat and still engage. This was an important lesson largely ignored by U.S. forces in the decades that followed.[11]

The second major lesson learned from failures in Vietnam is that U.S. military strategy reflected the confusion in U.S. national policy and ambiguous goals and objectives in dealing with the North Vietnamese guerrillas. The U.S. was so blinded by the confusion and underlying political issues of the conflict that it erringly chose to focus on the conventional threat posed by the North Vietnamese army. Vietnam was a frustrating contradiction for U.S. military forces in that it was simultaneously a conventional war as well as a guerrilla insurgency. [12]

President Kennedy's vision and call for a new kind of war in Vietnam were in vain. Instead of developing new strategy to combat the guerrilla insurgency, the U.S. Army employed tactics of identify, contain, and destroy that were used by Grant and Sherman in the Civil War. While the Air Force provided tactical and close air support for U.S. ground forces, preference was given to

strategic bombardment as and for air supremacy over North Vietnam. The Navy reluctantly supported riverine warfare, but much preferred offshore power projection.[13]

Few of the services attempted to understand the nature of the conflict and adopt new tactics to engage the guerrillas. In Vietnam, each of the military services worked essentially independently of the others.[14]

The third major lesson learned from failure in Vietnam was that political considerations in the U.S. served as barriers to effective military operations and victory. In many respects, political undertones at home became the conflict. Military forces became so consumed with public opinion that immense pressure was imposed on commanders to produce good news. Vietnam became a war of technology, statistics, and pictures. "Truck count" articles were prepared daily for the press and briefings were structured to mention only the positive. A few exceptional photos were reportedly resubmitted to the press when no new good news surfaced from the day's order of battle.[15]

U.S. Ambassador to Vietnam Ellsworth Bunker's reports to the President on the progress of the war reflected the same optimistic overtones. By 1967, involvement in the war was beginning to impact President Johnson's plans for re-election, and he pressured everyone for progress on the war. Ambassador Bunker's casualty reports on enemy killed in action reflected this pressure.

Casualty statistics sent to the White House in 1968 reflected more than 182,000 North Vietnamese killed in action (KIA), plus 13,000 additional casualties for the Viet Cong infrastructure (VCI) and 16,000 defectors. In 1969, the reports indicated more than 200,000 KIA, 16,000 VCI, and 45,000 defectors. For 1970, enemy losses exceeded 103,000 KIA, 22,000 VCI eliminated, and 32,000 defectors.[16]

Further, Bunker's reports did not include enemy soldiers who were wounded but not killed in action. During his tenure, it was calculated as a general rule that 3.5 enemy soldiers were wounded for every one killed in action. Using these calculations, his reports totaled more than 2.3 million North Vietnamese casualties during that three-year period. If the figures were correct, there should have been no able-bodied men living in North Vietnam to resist government forces in the south by late 1970![17]

While political considerations encouraged the U.S. government to report these "optimistic" results to the American public, they also controlled the operations tempo of the war. Nowhere is this politically based military strategy more apparent than in the aftermath of the 1968 Tet Offensive. On the eve of the Tet Offensive, America could almost envision an end to the war. If the request of General Earle G. Wheeler, Chairman of the Joint Chiefs of Staff, for an additional 206,756 men had been granted, U.S. forces would have had an overwhelming advantage and the war might have ended. Of course, increased American forces committed to the war could have escalated the conflict to the point where U.S. public opinion might have viewed it as much more

than a police action. In turn, this would have risked outside intervention from either the Soviet Union or China. Instead, America's policy of gradual response prevailed, the request was determined to be politically unpalatable by the Johnson White House, and some eventually compared Tet to Dien Bien Phu because it marked a decisive turning point in the war.[18]

Fighting during the Tet Offensive of 1968 was fierce, and casualties were heavy on both sides. When it was all over, official U.S. figures showed more than 92,000 North Vietnamese had been killed. More than 10,000 Americans and South Vietnamese were killed, and fifteen Americans were awarded the Medal of Honor.[19]

Despite the carnage of the battle, the greatest impact of Tet was that it marked the end of escalating the war for the Americans. General Wheeler's request, much like General Colin Powell's request for overwhelming military force in the Gulf War, might have created an entirely different military situation. But his request also meant a significant change in U.S. military strategy, with total commitment to South Vietnam—a clearly defined national policy and military objective. However, it also would have meant Americanization of the conflict, call-up of American reserve forces, and vastly increased expenditures.[20]

This situation in Vietnam later sparked renewed debate in the post-Cold War era about how to use military force in Bosnia. Bosnia, like Vietnam, did not fit the classic war scenario for military planners. Instead of a clearly defined military objective to achieve victory over the enemy and occupy territory, Bosnia (like Vietnam) involves applying military pressure to achieve a diplomatic settlement.[21]

President Johnson responded to public opinion and elected to deny General Wheeler's request, de-escalate the war, and seek a negotiated settlement. In a televised address March 31, 1968, President Johnson announced his decision to maintain U.S. troop levels where they were and, unexpectedly, that he would not seek re-election.[22]

Two: Pueblo—1968. While Vietnam served as the foundation for increased disappointment with U.S. military operations, it also served as a springboard for a series of other failures that followed, beginning with the North Korean capture of the *USS Pueblo,* an intelligence gathering ship, in January 1968.[23] A former deputy director of the National Security Agency, Raymond Tate, among others, blamed command and control interoperability failures for the *Pueblo's* capture. His assessment was confirmed in a special Congressional investigation that indicated that the National Reconnaissance Center in the Pentagon was aware of North Korean plans to attack the *USS Pueblo* two full days prior to the attack. The National Reconnaissance Center informed the Naval Commander in Japan of North Korea's intent to seize the *USS Pueblo,* but the ship was never notified.

A breakdown in communications caused by the *Pueblo's* deployment schedule was a function of local fleet command, not the national command. The resulting confusion among the

various organizational elements in these commands prevented successful transmission of the alert message and resulted in the first-ever capture of a U.S. ship on the high seas and imprisonment of eighty-two Americans.[24] The incident became a prime example of communications interoperability problems within America's defense establishment that continue to threaten effective military operations.

Three: Mayaguez—1975. Communications failures also plagued the *Mayaguez* rescue mission. Communist forces from Cambodia seized the U.S.-flagged freighter *Mayaguez.* A small contingent of Marines was dispatched to recapture the ship and its crew, but, unknown to U.S. forces, the captives had already been placed on another ship and had been freed.

The President had access to enhanced communications technologies, better than those available to any previous Commander-in-Chief. Still, the actions he took to direct military operations were transmitted over nonsecure systems, so that the enemy knew everything that was going on at the same time as commanders in the field did. This was a violation of the principles of communications security.[25]

The White House issued orders through the National Military Command System that were relayed through a borrowed satellite, the NATO IIB. The security breakdown occurred at Clark Air Force Base in the Philippines, where Seventh Air Force transmitted orders to Seventh Fleet using an HF voice nonsecure system. Over the air and totally in the clear, commanders discussed the number of helicopters and men involved, as well as where they were going, timing of the mission, and replenishment rates. [26]

American forces were vulnerable. As might be expected, a number of helicopters were destroyed. Inadequate helicopter support to rescue the Marines frustrated retrieval efforts, resulting in several hours between rescue attempts. Once the first wave of Marines was evacuated, the remaining forces were exceptionally vulnerable, because the enemy knew their strength. Casualties among these Marines were heavy, because even the plans for the rescue mission were being transmitted among the services over nonsecure lines.[27]

What organizational problems contributed to this costly mistake? Why would airmen transmitting message traffic to seamen give any less consideration to communications security than intra-service secure transmissions? Did they? What role did failure to train and exercise jointly play in this mishap?

Four: Iran—1979. In November 1979 militant Iranians invaded the U.S. Embassy in Tehran and took sixty-six American hostages. The failed hostage rescue effort *Operation Desert One,* in 1980 cost seven American lives and plagued President Carter for the remainder of his presidency. The hostages were released in January 1981, just prior to the inauguration of Ronald Reagan as President.

The aborted Iranian hostage rescue mission has been one of the most widely publicized failures in joint military operations since World War II. The mission was a recipe for disaster by virtually every military consideration—planning, national leadership, training, and execution of the order of battle.

Every service wanted to be involved in the rescue attempt. To accommodate each of them, the worst possible mix of military forces was assembled—Marine pilots flying Navy helicopters with Army troops aboard and Air Force support forces. This mixture would be difficult to support even with extensive joint training and exercises—which they lacked. Planning for the rescue mission was unnecessarily complex, because the Pentagon planners wanted to make sure that each of the services was included in the operation.[28]

This was also one of the most widely publicized failures of the national command authorities. Not only did the Carter administration appear confused as to the geopolitical implications of the Islamic revolution in Iran, it depended heavily on economic and diplomatic sanctions to work and gave little thought until the last minute to planning a military solution.[29] Although the specific rescue target was clearly identified, national military strategy and preparation were not.[30]

In retrospect, did failure in Iran offer lessons learned about military command and control, adequate forces assigned against a mission, and clearly defined objectives that can be applied to future wars? As we examine the Gulf War later in this report, these issues were fundamental themes for General Powell as he prepared America's military forces for war. What do the results of *Operation Desert One* suggest for national military strategy in the Middle East, Eastern Europe, and Korea?

Five: Lebanon—1983. Controversy also followed the terrorist truck-bombing of the Marine barracks in Beirut, Lebanon, in 1983 when 246 people were killed. Dr. Samuel P. Huntington, former Director of the Center for International Affairs at Harvard University and former Coordinator of Security Planning at the National Security Council, cited confusion in the organizational chain of command as a fundamental weakness of U.S. military forces in the aftermath of the Beirut bombing.[31]

His findings resulted in a national debate on DOD organizational structures, which were so confusing that it was difficult even to determine who was responsible for the failure. The Marine detachment commander at the Beirut airport reported through Commander Sixth Fleet, to Commander-in-Chief European Command (EUCOM), to the Supreme Allied Commander, Europe (SACEUR). Not surprising, senior commanders in Europe were essentially uninvolved in a real sense in activities in Beirut.

When the Commandant of the Marine Corps, General P.X. Kelley, was dispatched to assess the situation, he returned to report that the responsibility of the service chiefs was to organize,

train and equip—an accurate assessment of their mission even to this day, for operational command of forces remains with the theater commanders.

However, when the theater Commander-in-Chief (CINC), in this case USINCEUR, investigated the incident, he reported that USINCEUR had little control over the Marines in Beirut, making it difficult for him to assess blame and relieve the responsible commander/officer. This was a fundamental command and control issue later addressed by eventual enactment of the Goldwater–Nichols Act in 1987. Eventually President Reagan publicly assumed full responsibility for the failed mission caused by DOD's confusing organizational structures (**Figure 2-1**).

Undoubtedly Clausewitz's *friction of war*[32] was present in the aftermath of the Beirut bombing, but failure to take into account military organization, intelligence, and security needs was central to the problem.[33] However, the question lingers, have military command and control structures been sufficiently reinforced and streamlined to avoid such failures in the future?

Six: Grenada—1983. The successful U.S. invasion of Grenada in October 1983 was also marked by poor communications, inadequate intelligence, interoperability shortcomings, and evidence of inadequate joint training. Some have highlighted the successes of *Operation Urgent Fury* in Grenada beginning with the contributions made by Special Operations Forces (SOF),[34] but it is difficult to understand why an international superpower would experience any problems whatsoever in such a small-scale conflict. In the fall of 1983, Congress was asking some of these same questions.

The Grenada crisis erupted quickly on October 19, 1983. Planning for the October 25, 1983, military invasion was extremely compressed. Forces were assigned to the unified U.S. Atlantic Command with three strategic objectives: first, protect the lives of U.S. citizens; second, restore order for the island's democratic government.; and, third, eradicate Cuban, Soviet, and other East Bloc influences on the island.[35]

The actual fighting on Grenada ended quickly—as might be expected for a limited engagement of this scale. At dawn on October 25, 1983, U.S. Marines captured the vital Pearls airstrip to cut off Cuban defenders from reinforcements and enable the bulk of American forces to deploy on the island. Marines met only light resistance at the airstrip. The main offensive was directed toward the vital Salines/St. George's region, where U.S. Rangers experienced heavy resistance. The final beach assault followed after sundown that day, and enemy forces collapsed the next morning. Scattered sniping continued until November 2, 1983. When complete, the operation had secured all Americans unharmed, and friendly military losses and Grenadian civilian casualties were minimal.[36] In this sense, the operation was a success. What contributed to the successful elements of the engagement? Should Grenada be considered an anomaly for future military operations on the basis of the small size of the military objective?
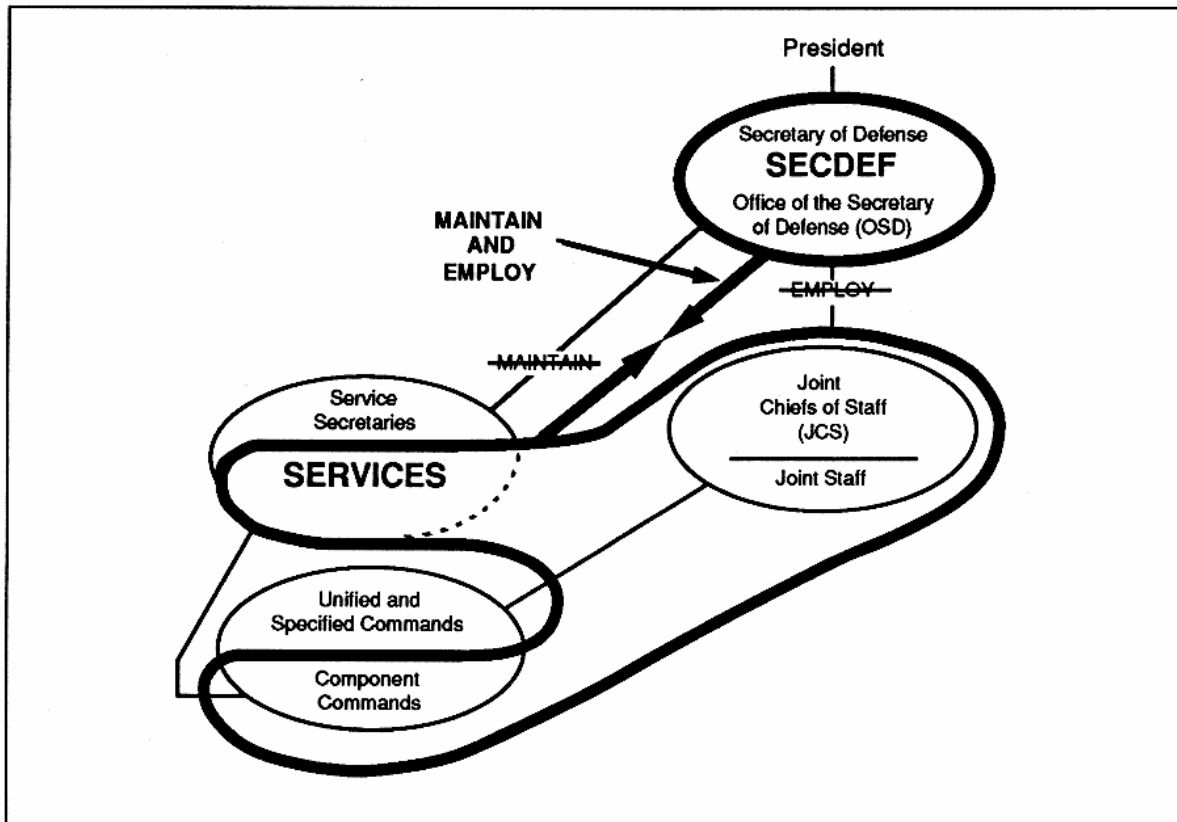
Figure 2-1
Department of Defense Organization as Portrayed by Critics

In many respects, Grenada raised more questions than it answered. Although allowances were made for the little time provided to plan *Operation Urgent Fury*, many have criticized the operations plan and command relationships on the island.[37] Criticism of the planning concluded, among other things, that military forces were insufficiently trained in joint combat operations.[38]

However, the singularly distinguishing failure of the mission was the inability of ground forces to communicate once deployed on the island. This failure has been highly publicized, and even a motion-picture film based in part on a Grenada-like operation showed soldiers using personal telephone credit cards to place calls and relay information concerning deployed forces.

Further, Army elements initially on the ground were unable to speak to the Navy ships offshore to request and coordinate naval gunfire. This prevented naval gunfire from supporting Army ground forces in the initial stages of the operation. This occurred in large measure because each of the services purchased equipment irrespective of joint interoperability needs.[39]

Problems in the Grenada operation were merely the latest indicators highlighting an urgent need for inter-service teamwork in combat operations. James R. Locher III, then a professional

staff member on the Senate Armed Services Committee (SASC) Staff and later Assistant Secretary of Defense for Special Operations and Low Intensity Conflict in 1993, prepared a special Senate staff report, *Defense Organization: The Need for Change*, which paved the way for Congress to re-evaluate the way American military forces prepared for war—the most sweeping Congressionally mandated changes in this area since the 1958 amendments to the National Security Act of 1947.[40]

Dr. Archie D. Barrett, a professional staff member on the House Armed Services Committee Staff (HASC) and author of numerous articles on the need for Defense reorganization, was equally critical of *Operation Urgent Fury*. He cited the need for improved joint training and joint exercises as a major lesson-learned from the operation. He used Army helicopters as a case in point. During Grenada, Army helicopters carrying wounded soldiers needed to land on Navy carriers but could not. Although the Navy was correct in not allowing the Army pilots to land because landing on a carrier at night is a very dangerous operation without proper training, this failure emphasized the need for joint training and joint service exercises.[41]

Still others have questioned whether Grenada was even a crisis in the real sense or just another example of national leadership inserting military forces into political situations of questionable national security value—again, unclear national objectives. Some have even speculated that the events surrounding the murder of Prime Minister Maurice Bishop were only a pretext for the military intervention.[42] Even though President Reagan regarded Grenada's strategic location in the Caribbean vital to U.S. interests in the region, the fact that the island had become one of the twelve most militarized states in the world in terms of population under arms added fuel to the fire.[43] Were vital U.S. national interests at stake in Grenada? What does this suggest about current national military strategy in the Balkans, Korea, and Africa?

Certainly Grenada was no Cuban missile crisis, and (although the political establishment was committed to the security of American students and other U.S. citizens on the island) the Reagan administration was philosophically disposed to reverse the impression that America lacked the political resolve to deal with communism from a position of weakness.[44]

By the time U.S. forces were invading Grenada, members of Congress were already bombarding the Pentagon with questions concerning a confusing chain of command in the aftermath of the terrorist bombing in Beirut. Criticism was widespread (**Table 2-2**). When the President acting as Commander-in-Chief ultimately assumed full responsibility, matters were made worse, because command and control organizational structures in that theater prevented anyone from being held personally accountable. As news of failure in interoperability during Grenada reached Washington, Congress was outraged (see **Chapter Three**).

Comment—Former Secretary of Defense Schlesinger

"In the absence of structural reform I fear that we shall obtain less than is attainable from our expenditures and from our forces. *Sound structure will permit the release of energies and of imagination now unduly constrained by the existing arrangements.* Without such reform, I fear that the United States will obtain neither the best military advice, nor the effective execution of military plans, nor the provision of military capabilities commensurate with the fiscal resources provided, nor the most advantageous deterrence and defense posture available to the nation."

Comment—Former Secretary of Defense Laird

"This neglect of organizational issues, particularly organization of the military command structure, is self defeating. Without an effective command structure, no level of defense spending will be sufficient to meet the needs of the nation's security."

John R. Locher III, "Defense Reorganization: A View from the Senate," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 149.

Table 2-2
Criticisms

Have the fundamental problems of interoperability, joint training/exercising, and confusing organizational structures that produced these much-publicized failures been corrected? As we look to the Gulf War (see **Chapter Five**) that followed Goldwater–Nichols, can we be certain that solutions in these problem areas have even been tested?

Notes

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[2]Joint Staff Pub 1, *Joint Warfare of the US Armed Forces* (Washington, D.C.: U.S. Gov't Printing Office, November 1991), p. 10-61.

[3]Dennis W. Tighe, "Unification of Forces: The Road to Jointness?" (Fort Leavenworth, Ks.: U.S. Army Command and General Staff College, 1990–91), p. 2.

[4]Craig S. Faller, "The Navy and Jointness: No Longer Reluctant Partners?" (Newport, R.I.: Naval Postgraduate School, December 1991), p. 33.

[5]Ibid., p. 45.

[6]C. Kenneth Allard, *Command, Control, and the Common Defense* (New Haven: Yale University Press, 1990), pp. 1-264.

[7]Allard, p. 6.

[8]Howard R. Simpson, "The Lessons of Dien Bien Phu," *Military Review* (January 1992), p. 62.

[9]Ibid.

[10]Ibid.

[11]Ibid., p. 72.

[12]Timothy J. Lomperis, "Giap's Dream, Westmoreland's Nightmare," *Parameters* (June 1988), pp. 19, 30.

[13]Wayne K. Maynard, "The New American Way of War," *Military Review* (November 1993), p. 6.

[14]Ibid., p. 15.

[15]Patrick O. Clifton, "The Vietnam Victory," *Air University Review* (July-August 1983), p. 92.

[16]Wallace J. Thies, "How We (Almost) Won in Vietnam: Ellsworth Bunker's Reports to the President," *Parameters* (Summer 1992), pp. 91-92.

[17]Ibid.

[18]Clifton, p. 92.

[19]Lomperis, p. 20.

[20]Ibid.

[21]Michael R. Gordon, "Pentagon Is Wary of Role in Bosnia," *The New York Times*, March 15, 1994, p. 6.

[22]Lomperis, p. 21.

[23]Raymond Tate, "Worldwide C3I and Telecommunications," *C3I: Issues of Command and Control* (Washington, D.C.: National Defense University Press, 1991), p. 9.

[24]Ibid.

[25]Tate, p. 10.

[26]Ibid.

[27]Ibid., p. 11.

[28]Thomas P. Coakley, *Command and Control for War and Peace* (Washington, D.C.: National Defense University Press, 1992), p. 51.

[29]Lewis B. Ware, "Some Observations on Islamic Revolution," *Air University Review* (July-August 1983), pp. 65-71.

[30]William F. Hickman, "Did It Really Matter," *Naval War College Review* (March-April 1983), pp. 17-29.

[31]Samuel P. Huntington, "Organizational Structure," *C3I: Issues of Command and Control* (Washington, D.C.: National Defense University Press, 1991), p. 236.

[32]Carl von Clausewitz, *On War*, Edited and translated by Michael Howard and Peter Paret (Princeton, N.J.: Princeton University Press, 1976), p. 119.

[33]Coakley, p. 51.

[34]Daniel P. Bolger, "Special Operations and the Grenada Campaign," *Parameters*, **18** (Dec. 4, 1988), p. 49.

[35]Ibid., p. 53.

[36]Ibid., p. 55.

[37]Huntington, p. 236.

[38]Martha E. Maurer, *Coalition Command and Control: Key Considerations* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, September 1993), p. 93. Afterward published as *Coalition Command and Control: Key Considerations* (Washington, D.C.: National Defense University and Harvard University, 1994).

[39]U.S. Congress, Senate Committee on Armed Services, *Defense Organization: The Need for Change* by James R. Locher III, Comm. Print 99-86 (Washington, D.C.: U.S. Gov't Printing Office, 1985) p. 365.

[40]Allard, p. 191.

[41]Archie D. Barrett, "Defense Reorganization: A View from the House," *Seminar on Command, Control, Communications, and Intelligence, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), p. 180.

[42]Richard D. Hooker, Jr., "Presidential Decisionmaking and Use of Force: Case Study Grenada," *Parameters* **21**, 2 (Summer 1991), p. 61.

[43]Alberto R. Coll, "Why Grenada Was Important," *Naval War College Review* **40**, 3 (Sequence 319, Summer 1987), p. 8.

[44]Hooker, p. 63.

Chapter Three

Fury In The Halls of Congress

*A close look at the Grenada operation can only lead to the conclusion
that, despite our victory and success, despite the performance of the
individual troops who fought bravely, the U.S. armed forces have serious
problems conducting joint operations. We were lucky in Grenada;
we may not be so fortunate next time.*

Senator Sam Nunn[1]

Senator Nunn's remarks characterized the sentiment of the Congress and the mood of the
nation. The U.S. military establishment had not won a war in forty-five years. Vietnam had
polarized public opinion about military service. While the root causes of failures involving the
Mayaguez, Operation Desert One in Iran, the Marine barracks in Lebanon, and *Operation Urgent
Fury* in Grenada were argued in Congress, the credibility of America's armed services had been
jeopardized, as shown by declining recruiting and retention rates.

This chapter focuses on the national debate over DOD reform in the 1980s among members
of Congress, the military leadership, and individuals in the private sector that prompted major
changes in DOD organization, roles and missions (**Table 3-1**). It discusses reactions from the
Executive Branch and the response from Congress that eventually led to final legislation. With
this as background, **Chapter Five** examines whether these issues continue to plague U.S. military
forces and whether the Gulf War answered Congress's concern for enhanced command and
control and improved joint interoperability.

The Call For DOD Reform

Congress. Several senior members of the Senate Armed Services Committee and the
House Committee on the Armed Services responsible for overseeing military authorizations
indicated that Congress should assume much of the blame for creating the hollow force of the
1970s. However, during the 1980s Congress pumped money into defense in one of the largest
peacetime defense build-ups in modern history. As expected, military accountability and
credibility became crucial issues for the Congress as stewards of the public trust. Although few
would argue that the military had not become a hollow force in the late 1970s, increased
programmatic funding in the 1980s was highly controversial, and several members of Congress
were eager to exploit any appearance of excess and waste. Reports of $600 toilet seats further
tarnished the military's image.

Congress responded to widely publicized government waste and excess by forming the
Congressional Military Reform Caucus (MRC) in 1981. Initially, Congress was primarily
interested in using the MRC to exert greater influence on defense expenditures during the Reagan

Table 3-1
Fundamental Problems

1. Imbalance between service and joint interests

2. Inadequate joint military advice

3. Inadequate quality of joint duty military personnel

4. Imbalance between the responsibilities and command authority of unified combatant commanders

5. Confused and cumbersome operational chains of command

6. Ineffective strategic planning

7. Inadequate supervision and control of defense agencies and DOD field activities (e.g., Defense Logistics Agency and Defense Contract Audit Agency)

8. Confusion concerning the roles of the secretaries of the military departments

9. Unnecessary duplication in the top management headquarters of the military departments

10. Congressional micromanagement of DOD

John R. Locher III, "Defense Reorganization: A View from the Senate," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 149.

build-up. Eventually their focus became the need for defense reform—a thorough re-examination of roles, missions, and organizational relationships within the Department of Defense (**Table 3-2**).

Military leadership. General David C. Jones, then Chairman of the Joint Chiefs of Staff (CJCS), sparked widespread debate on defense reorganization on February 3, 1982, during a closed hearing on the Fiscal Year (FY) 1983 Defense Authorization Act.[2] He openly criticized the uniformed services' ability to organize, train, and equip forces for joint warfare and went on to become widely outspoken in national publications on the need for defense reform.[3]

This criticism, of course, spoke to the very heart of DOD's mission. He was joined by then Army Chief of Staff General Edward C. (Shy) Meyer. Internal DOD sponsorship for reform, articulated by two of its most senior officers, cemented support and interest not only in Congress, but also in the American public as a remedy for military failures of the previous decade (**Table 3-3**). In retrospect, then, it appears that legislative involvement in resolving DOD organizational problems was actually invited by the Pentagon leadership.

In the minds of many members of Congress, the real question became not whether the Department of Defense should be reorganized but, rather, how extensive the changes needed to be and when was it necessary to implement the changes. Reorganization hearings continued

Table 3-2

Studies Critical of DOD Organization (Four Decades)

**Studies Critical of DOD Organization
(Four Decades)**

- Rockefeller to Brown
- Defense Organization Study, 1977-1980
- CSIS Defense Organization Project
- Heritage Foundation Mandate for Leadership II
- Packard Commission
- Senate Staff Report, 1985

Archie D. Barrett, "Defense Reorganization: A View from the House," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 187.

Table 3-3

Events Leading to 1986 DOD Reorganization Legislation

**Active Support of
Generals David Jones and Shy Meyer**

Congressional Initiative:
   House
   - Representative White
   - Representative Nichols
   - Representatives Aspin, Skelton, Kasich, Hopkins

   Senate
   - Senator Tower
   - Senators Goldwater and Nunn

Source: Archie D. Barrett, "Defense Reorganization: A View from the House," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 187.

throughout 1983–85 under the leadership of Representatives Bill Nichols and Les Aspin in the U.S. House of Representatives. Senator John Tower, Chairman of the SASC, conducted hearings in the Senate but expressed less interest in defense reform.[4] The Senate's reform champions were Senators Barry Goldwater and Sam Nunn.

Private sector concerns. Leaders in both the public and private sector were called upon to lend their expertise as Congress struggled with proposals for change. Harvard University's Program on Information Resources Policy (PIRP) was actively engaged in the issue of defense reform. PIRP's annual *Seminar on Command, Control, Communication, and Intelligence* featured key speakers who in many respects were shaping the national debate, including: General Robert T. Herres, Vice-Chairman of the Joint Chiefs of Staff[5]; General John H. Cushman, author of *Command and Control of Theater Forces: Adequacy*[6]; and professional staff members of the Senate Armed Services Committee, James Locher III,[7] and of the House Armed Services Committee, Archie D. Barrett,[8] each of whom had a profound influence in drafting the eventual legislation. Dr. Anthony G. Oettinger, Director of the Program on Information Resources Policy, was called to testify before the House Armed Services Committee on this critical issue.[9]

> In calling for a balanced approach to reform, Dr. Oettinger pointed out to the committee that division of responsibilities among the CINCs and the services, between the Chairman and the Chiefs, produces some tensions and some checks and balances that are beneficial. The services ensure the basic competency; their specialized roles and missions are essential for fielding competent components. The generalists are essential for fielding unified commands.[10]

He also stressed that Congress should strike a balance between organization and technology when completing their deliberations:

> The best radios, the best computers, the best high technology without the right organization and the right people won't do it, and this opportunity to fill in the balance in the organization is the important element.[11]

The National Debate

Executive Branch. The Administration tried in vain to distance itself on the matter. Those organizations in the Pentagon that opposed reorganization, especially the Navy, found themselves swimming up stream. Former Secretary of the Navy John Lehman was quoted in the *Washington Post* as characterizing defense reform as "an old, bad idea [that] surfaces again."[12]

Reaction within the Administration to criticism of the military did little to help the situation. Dr. Huntington at Harvard University characterized the Administration's view toward reorganization within the Department of Defense as "monumentally indifferent" with "articulate hostility" being expressed by the Secretary of Defense.[13] Dr. Huntington said:

> One can understand the indifference, since the Secretary of Defense can legitimately feel he has other priorities, including the military budget, weapons systems issues, and other things ranking considerably higher than tinkering with the way his office and associate offices work. There is also an argument articulated by Fred Ikle, Under Secretary of Defense for Policy, that organization isn't terribly important after all; that with the right people, any organizational structure can function. Consequently,

Ikle believes it is almost a waste of time to tinker with organization. If he
is right, however, then clearly an awful lot people—important people,
busy people, powerful people—have been concerned with
inconsequential issues, and have, in effect, been wasting their time.[14]

Congressional response. Senator Nunn was critical when Secretary of Defense Casper
Weinberger appeared before the SASC on November 14, 1985, to examine organization within
the DOD. The hearing turned quickly to the failures cited in Iran, Lebanon, and Grenada. Senator
Nunn openly engaged Secretary Weinberger about a widely reported incident during *Operation
Urgent Fury* in Grenada in which an Army element, pinned down by enemy fire and unable to
communicate with supporting Naval vessels, used the island's telephone system and a soldier's
AT&T calling card to contact Ft. Bragg in North Carolina and relay an urgent request.[15]

The *Washington Post* highlighted the exchange between Senator Nunn and Secretary
Weinberger:

The defense secretary also clashed repeatedly with Senator Sam
Nunn...on whether inadequate radios hampered U.S. military forces
during the invasion of Grenada in 1983. "They were not hampered
significantly," Weinberger testified. "That is directly contradictory to
your own Department of Defense report," Nunn said, holding up a thick,
mostly secret after-action report on the Grenada operation. "You are
making unclassified statements that are completely rebutted by classified
material. To say those communications problems interfered with the
success of the operation is to fly in the face of the facts," Weinberger
said. "That's very crafty wording," Nunn snapped, his voice rising. "The
operation was successful; therefore, nothing interfered with the success
of the operation because it was successful. That's a ridiculous way to
examine problems. I congratulate you as a lawyer, but as a secretary of
defense I don't think that's an appropriate way by which to proceed in
solving problems."[16]

For nearly a full year following this pointed exchange in the Senate, the Congress of the
United States in both houses was fully engaged in studying proposals for defense reform (**Figure
3-1**). Again, Senator Nunn emphasized the significance of the national debate, saying "this
legislation is probably the most important undertaking regarding national security in the last 30 or
40 years and perhaps longer."[17]

Three major efforts constituted the bulk of the research. First, a Blue Ribbon Commission
on Defense Management, the Packard Commission, published a formal report reviewing national
security planning and budgeting, military organization and command, acquisition organization
and procedures, and government-industry accountability.[18]
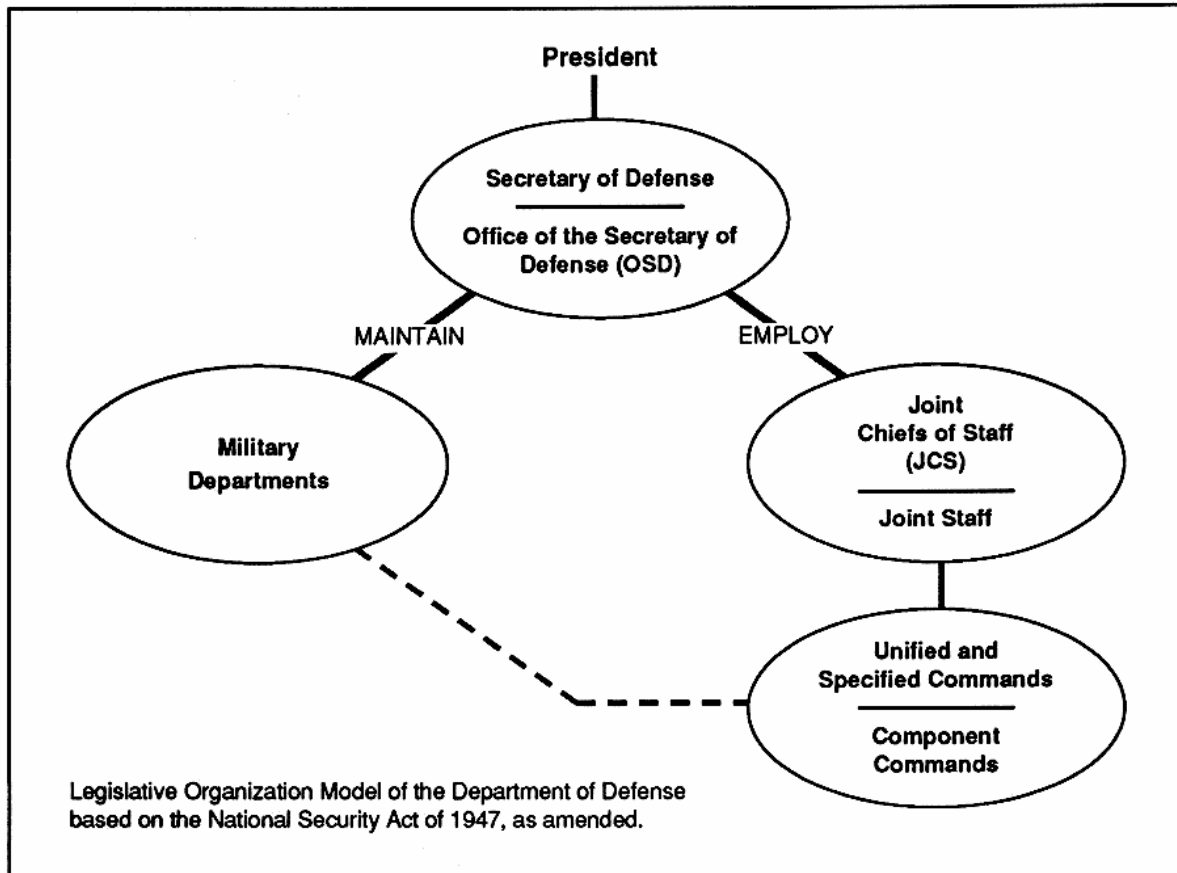
President

Secretary of Defense
_____
Office of the Secretary of
Defense (OSD)

MAINTAIN   EMPLOY

Military
Departments

Joint
Chiefs of Staff
(JCS)
_____
Joint Staff

Unified and
Specified Commands
_____
Component
Commands

Legislative Organization Model of the Department of Defense
based on the National Security Act of 1947, as amended.

Archie D. Barrett, "Defense Reorganization: A View from the House," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 181.

Figure 3-1
Legislative Organization Model, DOD, 1958–1986

Second, the Senate undertook a separate study under the leadership of Senators Nunn and Barry Goldwater, then in his last term prior to planned retirement. The study was directed by then SASC professional staff member James R. Locher III, later selected as Assistant Secretary of Defense for Special Operations and Low Intensity Conflict.[19] Many consider publication of that study, with its 645 pages and 92 recommendations, to have been a defining moment in the defense reform debate.[20] The bipartisan study identified DOD problem areas that later served as the fundamental bases for legislative reform (**Table 3-4**).

Third, the U.S. House of Representatives undertook an equally intensive study under the leadership of Representatives Bill Nichols and Les Aspin. That study was directed by HASC professional staff member Dr. Archie D. Barrett. As in the other studies, the issue was how to restructure the Department of Defense, but Dr. Barrett also focused on the longer-term issue of professional development of Joint Specialty Officers (JSOs).[21]

Table 3-4
Fundamental Purposes of Reorganization Act of 1986

1. **Improve the quality and enhance the role of professional military advice**
   - Military expertise must be more effectively applied

2. **Strengthen civilian control of the military**
   - No major problems, but a number of useful improvements

3. **Strengthen the authority of joint military officers**
   - A fundamental shift of power and influence

4. **Improve the preparation of, and incentives for, military officers serving in joint duty positions**
   - Better joint command and planning skills

5. **Enhance the effectiveness of military operations**
   - Integrated fighting teams

6. **Strengthen central direction and control while increasing decentralization of execution and other management authority**
   - Both can be improved

7. **Clarify the operational chain of command**
   - Clarity of command lines is critical

8. **Reduce and streamline the defense bureaucracy**
   - Size and complexity hinder effective management

9. **Reduce Congressional micromanagement**
   - Burdens of Congressional oversight must be lessened

10. **Provide for the more efficient use of resources**
    - Defense resources are not unlimited

11. **Improve the supervision and control of defense agencies and DOD field activities**
    - Improved resource management

12. **Implement fully the National Security Act of 1947**
    - Current inconsistencies confuse authority and weaken management

13. **Provide for continued study and significant management attention to defense organization issues**
    - Many issues remain unresolved or unclarified

John R. Locher III, "Defense Reorganization: A View from the Senate," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 165.

Similar findings emerged from these collective efforts. First, the military services tended to place service interest ahead of joint operations, creating considerable obstacles for interoperability in joint training, exercises and operations, including the critical element of command and control. Second, the advice of the CJCS held little value for the service chiefs since the Joint Chiefs of Staff (JCS) operated by consensus vote. Third, the combatant commanders had

little control over subordinate commanders from other services, forces in their area of operations, and the defense budget.[22]

Legislative compromise. Like most issues involving major legislation, a host of proposals were forwarded by well-meaning individuals on how to "fix" the Pentagon. Some proposals were more radical than others. Former Army Chief of Staff General Edward C. Meyer suggested replacement of the JCS by a separate body of full-time advisors to the National Command Authority (NCA).[23]

Separate bills were introduced by Senator Eagleton and Congressman Skelton that essentially eliminated the JCS structure as it existed in favor of a Chief of Military Staff responsible for a national general staff. Some compared such reforms to the German military organization of the first half of this century.[24] A compromise bill introduced by Congressmen Nichols, Aspin, and Skelton proposed keeping the JCS organization but subordinated the Joint Chiefs to a military advisory role under the chairman.[25]

The House version of defense reorganization passed on November 20, 1985, setting the stage for major defense reform. The initial Packard Commission findings were reported in February, 1986. The Senate reviewed the Packard Commission's recommendations and found them consistent with the proposed Senate bill.[26]

Two exceptions were noted. First, the Packard Commission focused to a large extent on the need for acquisition reform, an issue that continues to be debated in the halls of Congress and the Pentagon. Second, unlike the House legislation, the Packard Commission provided no in-depth analysis on the need for JSOs.

The impact. The inevitability of most of the reforms ultimately proposed in the House and the Senate, with the notable exception of the joint specialty officers, was accepted by DOD without strong objection during the congressional hearing cycle. The services considered the JSO mandate as an unquestioned intrusion into management of the officer corp. Ironically, DOD did not request to participate in drafting the officer management legislation. Some have suggested that officials within the Pentagon anticipated broad, general guidance on officer joint staff duty, like that given the Secretary of Defense in the FY85 Defense Authorization Bill.[27]

Still, others have suggested that it was more than that. The 1986 legislative initiatives digressed from "business as usual" between Congress and the Pentagon. For more than forty years, the Pentagon had come to expect that major legislative initiatives were submitted by the Pentagon and altered slightly by the Congress but eventually resulted in law. Major provisions of legislation were routinely crafted by Pentagon staffers, and Congress merely formalized procedures desired or already in place within DOD. The 1986 legislation represented a major departure from this historical trend.[28] The resulting specifics in the legislation on JSO

management and promotions (**Table 3-5**) serve as an important lesson for Pentagon leadership in dealing with Congress.

The proposed legislation suggested a rather radical alteration to "business as usual" within DOD. The organization of the DOD (**Figure 3-2**), although its record was not unblemished, had served the nation well while protecting our national sovereignty during World War II and had carried us through four decades of the post-war period while avoiding war with the Soviet Union and in Europe.[29]

The Reagan Administration had pledged to rebuild the nation's defenses. The Reagan build-up, however, had focused for more than five years on weapons systems modernization rather than organizational structure, and legislative reform, so many believed, placed some of those modernization programs at risk. Kenneth Allard offered a third and more introspective analysis:

> At a more profound level, the services sensed that the effort to reform the
> Pentagon had serious implications for the structure of command, that is,
> the system by which authority is distributed throughout a military
> organization. Each of the services has such a structure: it is a well-
> defined, hierarchical, top-to-bottom arrangement that precisely defines
> every layer of the organization, its relationship to every other activity,
> and—to a very large degree—the roles and functions of the people who
> make it up. Although command structures differ from service to service
> they are at the heart of military life, exerting a common regulatory effect
> on the soldier, the sailor, the airman, and the marine.[30]

Regardless of the uneasiness at the Pentagon, President Reagan formally endorsed the Packard Commission findings and urged Congress to enact them.[31] On September 12, 1986, the Congressional Conference Committee agreed on the final version of the defense reform legislation, the Goldwater–Nichols Department of Defense Reorganization Act of 1986, named after two of its staunchest supporters.[32] A discussion of the major provisions of that legislation that specifically address the issue of command and control follows in **Chapter Four** of this report.

In retrospect, DOD's perceived inability to perform its primary mission caused Congress to exercise its Constitutional mandate. Still, are the service interoperability issues that prompted Congress to act still prevalent in DOD command and control structures? An examination of the Gulf War (see **Chapter Five**) provides new questions about whether or not Goldwater–Nichols should be credited for "fixing" DOD's organizational problems or whether some of the same concerns continue to linger and impact combat force interoperability (see **Chapter Six**).

Table 3-5
Reorganization Act

Problems	Proposed Solutions
For the most part, military officers: **1. Do not want to be assigned to joint duty**	**1A. Incentives** – Promotion and assignment requirements – Meaningful work on Joint Staff and CINC staffs **1B. Mechanisms** – Joint Staff nominees—among the most outstanding – Selection of all officers by JCS Chairman and CINCs
2. Are pressured or monitored for loyalty by their services while serving in joint assignments	**2A. Protection** – Promotion policy objectives – Guidelines to promotion boards – Joint officer (designated by JCS Chairman) on promotion board – JCS Chairman's review of promotion board reports – Procedures for monitoring careers – Congressional reports and oversight **2B. Independence** – Joint Staff and CINC staffs made more independent (JCS Chairman and CINCs strengthened) **2C. Countervailing Pressures** – Suspension from duty—JCS Chairman and CINCs – CINCs evaluation of subordinate commanders – JCS Chairman's evaluation of 3- and 4- star nominees
3. Are not prepared by either education or experience to perform their joint duties	**3A. Creation of Joint Specialty** – Education and experience requirements – One-half of joint duty positions – 1000 critical positions—repeat tours **3B. Education** – Curricula of joint and service colleges – At least 50 percent of joint college graduates assigned immediately to joint duty
4. Serve for only a relatively short period once they have learned their jobs	**4A. Length of Joint Duty Assigments** – 3 years—General or Flag Officers – 3 1/2 years—all other officers

John R. Locher III, "Defense Reorganization: A View from the Senate," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 159.

Robert T. Herres, "Strengthening the Chairman of the Joint Chiefs of Staff," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1988* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, 1-89-1, March 1989), 82.

Figure 3-2

Defense Department Organizational Structure

Notes

[1]Sam Nunn, United States Senate, "DOD Reorganization: An Historical Perspective," *The Armed Forces Journal International* (October 1985), Extra, p. 15.

[2]Craig S. Faller, "The Navy and Jointness: No Longer Reluctant Partners?" (Monterey, Calif.: Naval Postgraduate School, 1991), p. 52.

[3]United States Congress, House Committee on the Armed Services, *Reorganization Proposals for the Joint Chiefs of Staff: Hearings before the Investigative Subcommittee,* 98th Congress, 1st Session, June 14, 1983, p. 1.

[4]Faller, p. 58.

[5]Robert T. Herres, "The Role of the Joint Chiefs After the 1986 Defense Reorganization Act," *Seminar on Command, Control, Communications and Intelligence, Guest Presentations, Spring 1989* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-90-3, August 1990), pp. 105-130.

[6]John H. Cushman, "Reorganization of the Department of Defense," Hearings Before the House Sub-committee on Investigations, Armed Services Committee, U.S. House of Representatives, printed in *Congressional Testimonies July 1983–April 1990* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-92-3, February 1992), pp. 61-81.

[7]James R. Locher III, "Defense Reorganization: A View from the Senate," *Seminar on Command, Control, Communications, and Intelligence, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), pp. 147-172.

[8]Ibid., Archie D. Barrett, "Defense Reorganization: A View from the House," pp. 173-194.

[9]Anthony G. Oettinger, "Reorganization of the Department of Defense," *Congressional Testimonies July 1983–April 1990* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-92-3, February 1992), pp. 82-92.

[10]Ibid., p. 82.

[11]Ibid., p. 83.

[12]John Lehman, Secretary of the Navy, "Let's Stop Trying to be Prussians," *Washington Post,* 10 June 1984, C-7.

[13]Samuel P. Huntington, "Centralization of Authority in Defense Organizations," *Seminar on Command, Control, Communications, and Intelligence, Guest Presentations, Spring 1985* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-86-1, April 1986), pp. 1-3.

[14]Ibid., p. 2.

[15]C. Kenneth Allard, *Command, Control, and the Common Defense* (New Haven: Yale University Press, 1990), p. 1.

[16]Ibid., p. 2.

[17]Sam Nunn, United States Senate, "DOD Reorganization: Summary of the Problems," *The Armed Forces Journal International* (October 1985), Extra, p. 37.

[18]Presidential Blue Ribbon Commission on Defense Management, *A Quest for Excellence* (Washington, D.C.: U.S. Gov't Printing Office, 1986), p. xvii.

[19]James R. Locher III, *Defense Organization: The Need for Change*, Staff Report to the Committee on Armed Services, U. S. Senate, Oct. 16, 1985 (Washington, D.C.: U.S. Gov't Printing Office, 1985).

[20]Dennis W. Tighe, "Unification of Forces: The Road to Jointness?" (Ft. Leavenworth, Ks., U.S. Army Command and General Staff College, 1991), p. 2.

[21]Archie D. Barrett, *Reappraising Defense Organization* (Washington, D.C.: National Defense University, 1983), p. 78.

[22]Tighe, p. 2.

[23]Edward C. Meyer, "The JCS—How Much Reform is Needed?" *The Armed Forces Journal International* (April 1982), p. 82.

[24]Williamson Murray, "JCS Reform: A German Example?" *Naval War College Review* (November–December 1985), pp. 28-41.

[25]Richard J. Blanchfield, *Goldwater–Nichols (Defense Reorganization) Help or Hindrance* (Newport, R.I.: Naval War College, 1988), p. 6.

[26]Faller, p. 59.

[27]Ibid., p. 60.

[28]Blanchfield, p. 5.

[29]Robert J. Murray, "JCS Reform: A Defense of the Current System," *Naval War College Review* (September-October 1985), p. 20.

[30]Allard, p. 2.

[31]President Reagan's Message to Congress Supporting the Packard Commission Recommendations for Defense Reform, in *A Quest for Excellence* (Washington, D.C.: U.S. Gov't Printing Office, 1986), pp. 43-50.

[32]Faller, p. 61.

Chapter Four

The Legislative Imperative

...the reorganization of the Department of Defense may be
the most important thing that Congress does in my lifetime.
It will be the most important thing that I tried to do in mine.

Senator Barry Goldwater[1]

Senator Goldwater's assessment of the Goldwater–Nichols Department of Defense Reorganization Act of 1986 (GNA) characterized predictions prevalent throughout the public and private sectors at that time about the far-reaching impact of this legislation. Taken at face value, the legislation was intended to transform America's military forces into a cohesive working team by redefining organizational relationships that Congress assessed as the fundamental reason for previous operational failures. A Senate press release stated:

> The major purpose of the bill is to integrate more effectively the
> powerful capabilities of the Army, Navy, Air Force and Marine Corps. It
> seeks to overcome the weak inter-service cooperation that has hampered
> our military operations from the Spanish-American War to the
> Operations in Grenada.[2]

This chapter examines the specific legislative objectives detailed in the law that impact on command and control of military operations (**Table 4-1**) in five areas: (1) new reporting requirements mandated by Congress, (2) reorganization of the Joint Chiefs of Staff, (3) restructuring of the combatant commands, (4) reorganization of the service secretariats, and

Table 4-1
Goldwater–Nichols Act

Title I	Department of Defense generally
Title II	Military advice and command functions
Title III	Defense agencies and Department of Defense field activities
Title IV	Joint officer personnel policy
Title V	Military departments
Title VI	Miscellaneous

Robert T. Herres, "Strengthening the Chairman of the Joint Chiefs of Staff," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1988* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, 1-89-1, March 1989), 70.

(5) creation of JSOs. Important to note, the legislation also contained overarching guidance on organization of the military service secretariats and joint officer professional development that, while important in their own right, go beyond the scope of this report and are therefore only briefly mentioned.

When preparing this report, I questioned the value of reviewing specific details of this legislation after almost a decade since enactment. Two observations on that basic question follow: First, much public debate surrounded GNA and many well-meaning scholars on both sides of the argument contended that no single piece of legislation, including GNA, could be expected to correct the myriad interoperability issues cited during the congressional debate. Second, General Herres, while summarizing the sentiment of many, indicated many of the issues would need to be revisited a decade after GNA to determine if further restructuring was needed (**Figure 4-1**).
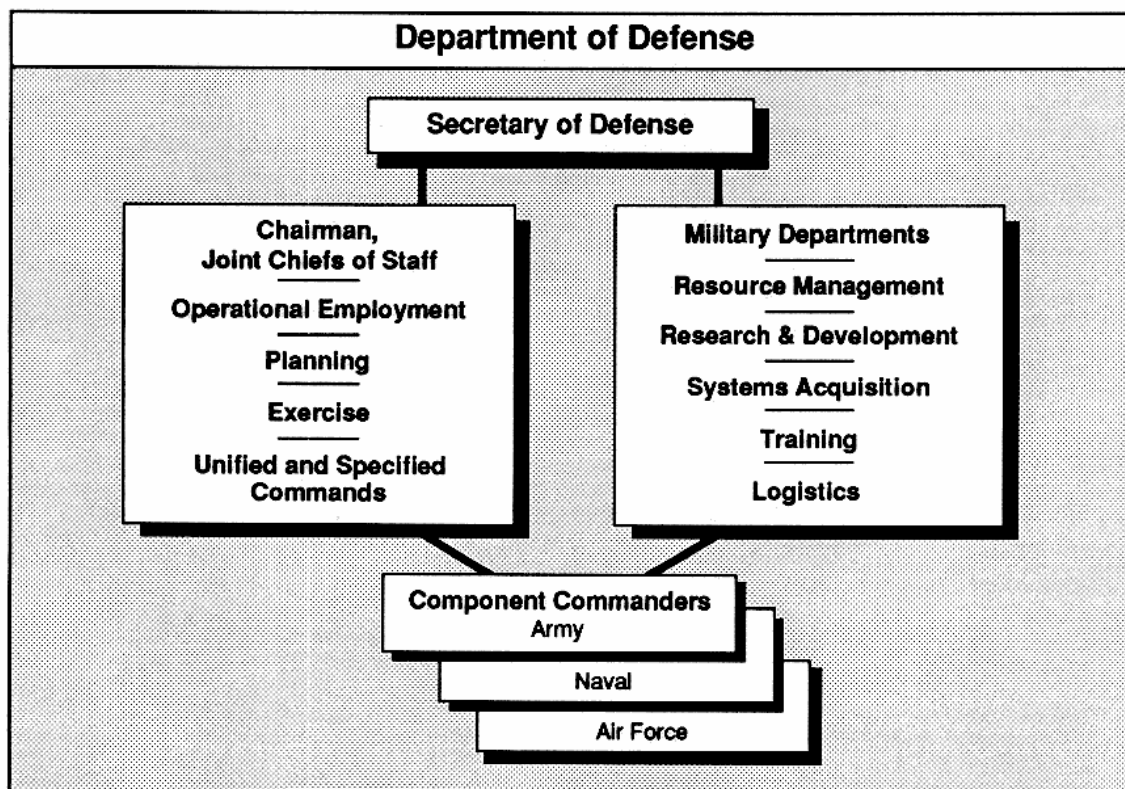
Source: Robert T. Herres, "Strengthening the Chairman of the Joint Chiefs of Staff," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1988* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, 1-89-1, March 1989), 75.

Figure 4-1
Chains of Command Following DOD Reorganization

GNA demonstrated congressional resolve—and frustration—not only with the failure of military operations but also with corresponding failures in defense acquisition that resulted in the purchase of widely reported $600 toilet seats and $7,000 coffee pots. In that sense, the enactment of GNA was not so much a rifle-shot attempt to pinpoint DOD organizational problems as it was

a shotgun effort to reform the defense establishment with all of its perceived ailments. In the years that followed, Congress approved additional proposals that provided comprehensive changes to the unified and specified commands.[3] A brief review of those and other changes follows in this report.

While GNA fundamentally changed the DOD's organizational structure and command relationships (**Figure 4-2**), it should be viewed as the centerpiece of an even greater movement to rethink the nation's defense. Part of that rethinking process was to reach agreement on precisely what the problems in DOD really were, and it is generally agreed that despite intense publicity there was no unanimity on this issue—nor on the solutions.[4]
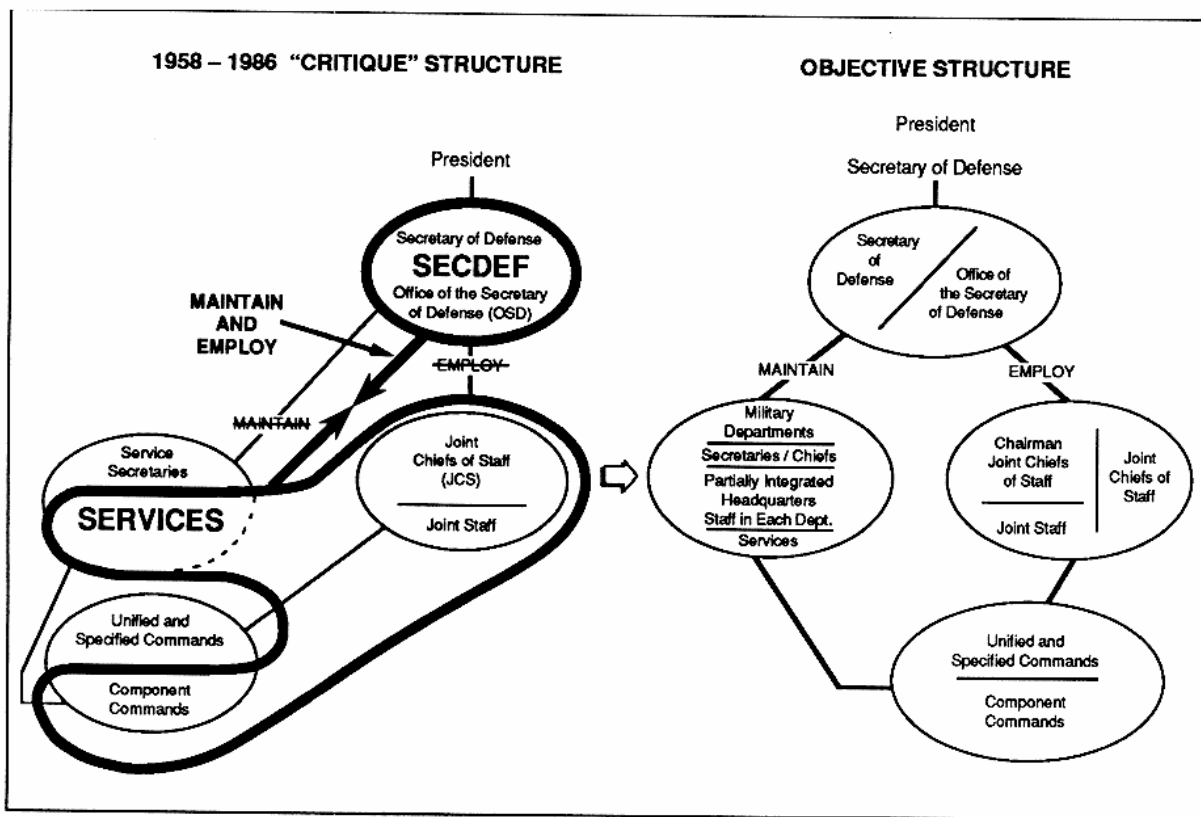
Archie D. Barrett, "Defense Reorganization: A View from the House," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 191.

Figure 4-2
Defense Reorganization: The 1986 Act

Much of the debate focused on the problems cited in the report John Locher compiled for the Senate.[5] Others, such as Dr. Oettinger of Harvard University, while supporting Locher's findings, urged Congress to pursue a "balanced" approach to DOD reorganization. Dr. Oettinger said:

over the last forty years there has been a consistently troubling question that something organizational, something not merely technical or merely personal, might be broke in the military machine and might need fixin'.[6]

He further argued that solutions should focus on six broad areas that transcended individual military operations:

> practical options that are at your [Congress's] disposal to tune-up [another reference to need for balanced reform] the six aspects of a CINC's command authority that govern [his effectiveness]: (1) How a CINC's command is to be organized and employed in operations; (2) how forces of his command are to be trained; (3) how forces of his command are to be equipped; (4) the resources to be provided to forces of his command; (5) how administrative and logistical support is to be provided to the forces of his command; and (6) personnel actions as to key members of his command.[7]

GNA was far-reaching in the sense that it attempted to address each of these concerns. Changes were made in five general areas: (1) reporting requirements to Congress, (2) reorganization of the JCS, (3) assignment of the majority of forces to the combatant commands under the responsible CINC, (4) restructure of the military service departments, and (5) changes in joint officer personnel policy.

New Reporting Requirements. First and perhaps foremost, the legislation highlighted Congress's ongoing interest in the DOD's changing roles and missions—and in the administration's strategic objectives to address those changes by requiring new periodic reports submitted to the Congress. This change came in the form of a new report Congress required the President to submit annually with the DOD budget.

> Congress specifically required, "a comprehensive description and discussion of...worldwide interest, goals and objectives that are vital to the United States...the foreign policy, worldwide commitments, and national Defense capabilities necessary...the proposed short term and long term uses of political, economic, military, and other elements of national power to...achieve the goals and objectives...and an evaluation of the balance among all elements of national power."[8]

Congress also changed reporting requirements for the Secretary of Defense to require annual updates on the major missions and force structure, with justification for both. This, in effect, has enabled Congress to initiate every subsequent legislative hearing cycle with a public debate on national military strategy, using DOD's vision and strategy as a benchmark for funding defense programs.[9] To what extent does this requirement forecast ongoing congressional interest in the public debate on the proper roles and missions for military forces and for the national military strategy?

As expected from the heated debate over build-up in the defense budget in the 1980s, accompanied by reports of fraud and waste in the department, the new legislation included changes in reporting requirements for the Planning, Programming and Budgeting System (PPBS) and for the Joint Operational Planning Systems (JOPS), the lifelines to programmatic defense planning and funding.

The legislation mentioned specific content which was now required in the reports. First, the reports must describe national security strategy objectives with priorities established for each military mission to support the strategy. Second, operational planners were now required to include specific force levels with projected available resources.

Additional reporting requirements were also levied on the newly empowered CJCS. Every three years, CJCS was required by law to submit to the Secretary of Defense a report on the roles and missions of the armed services, with complete latitude to recommend organizational changes to enhance the effectiveness of operational forces, reduce duplication among the services, achieve maximum effectiveness of armed forces, and report changes in technology that can be effectively applied in warfare. This was the first significant legislative proposal to review service roles and missions since the Key West accord of 1949.[10] The legislation further required CJCS to review "not less often than every two years...the missions, the responsibilities, and force structure of each combatant command and recommend to the President...any necessary changes."

This opened the door for a complete and periodic review of the Pentagon's Unified Command Plan not only by civilian leadership throughout the Executive Branch, but also by members of Congress. Subsequent chapters will examine to what extent command and control relationships in the UCP were tested in *Operation Desert Storm* and other post-Cold War contingencies.

Finally, the new legislation required four separate management studies from (1) the Secretary of Defense, (2) the CJCS, (3) an independent contractor, and (4) the three service secretaries acting jointly. These were one-time assessments required the year following enactment of the legislation. However, the legislation was specific in requiring that these studies focus on the organization of the Office of the Secretary of Defense and whether the PPBS needed revising.[11] That debate has continued through the mid-1990s.

Reorganization of the Joint Chiefs of Staff. The second major area addressed in the new legislation was reorganization of the Joint Chiefs of Staff. Much of the discussion during the legislative hearing cycle on defense reorganization focused on the weakness of the office of the CJCS in the decisionmaking process, both operationally and in resource allocation among the services. GNA changed that (**Table 4-2**).

Table 4-2
DOD Reorganization Act of 1986—Title II
Military Advice and Command Functions

Role of the Chairman, JCS:

- Principal military adviser to NCA
- Directs Joint Staff

Role of the Vice Chairman, JCS:

- Continuity of advice to NCA
- Continuity of supervision to Joint Staff

Role of the Combatant Commanders:

- Increased operational authority
- Increased programming influence

Robert T. Herres, "Strengthening the Chairman of the Joint Chiefs of Staff,"
*Seminar on Intelligence, Command, and Control, Guest Presentations, Spring
1988* (Cambridge, Mass.: Harvard University Program on Information Resources
Policy, 1-89-1, March 1989), 72.

GNA significantly strengthened the Office of the CJCS. The Chairman became the
principal military advisor to the President, the National Security Council, and the Secretary of
Defense. As we will explore later, the significance of this provision impacted military operations
when GNA received its first real test in *Operation Desert Shield/Storm*. But the question remains:
to what extent was war in the Persian Gulf a valid test for GNA?

Although GNA encourages the CJCS to consult with other DOD agencies (e.g., service
chiefs, unified and specified commanders, defense agencies) as the Chairman deems appropriate,
the legislation clearly identifies that officer as the senior uniformed officer of the nation. Prior to
GNA, the Secretary of Defense often dealt directly with the CINCs and left CJCS out. of the
decisionmaking process. Now, CJCS has a greater role. Orders are developed by Joint Staff,
reviewed by the CJCS, and taken directly to the SecDef, who makes recommendations to the
President as Commander-in-Chief.

Further, GNA strengthened the CJCS by providing a Vice-Chairman to serve in the absence
of the CJCS and to function a second in military rank only to the CJCS. That office also calls for
a four-star general or full admiral.

The CJCS, or the Vice-Chairman in his absence, was given full direction and control of the
Joint Staff, authority previously shared with the service chiefs. That provision had profound
impact on the planning, programming, and budgeting system. Through control of the Joint Staff,
Congress charged CJCS to:

develop strategic plans to conform to resource levels projected by the Secretary of Defense, develop doctrine for the joint employment of armed forces, advise the Secretary on priorities identified by the unified and specified commands and the extent to which the service budget submissions support those priorities, and submit to the Secretary of Defense alternative budget proposals which conform with those priorities.

This legislation clearly gave the CJCS the authority to become the dominant leader in defense organization and budgeting priorities—two essential elements of the post-Cold War Pentagon reality that are explored further in **Chapters Five** and **Six** of this report.

Restructured Combatant Commands. The third major area specifically addressed in the new legislation was the relationship of the CINCs to the service Chiefs, or (perhaps more important) the relationship of the combatant commands to the individual services. The legislation addressed the problems reported in the aftermath of the bombing of the Marine barracks in Lebanon head on. The legislation specifically charged the service Secretaries (with the exception of service-unique missions such as organizing, training, and equipping forces for the CINCs) to "assign all forces under their jurisdiction to unified and specified commands to perform missions assigned to those commands, and further...all forces operating within the geographic area assigned to a unified combatant command, shall be assigned to and under the commander of that command."[12]

As intended, this significantly changed the concept of chain of command operationalized by the armed services. An examination of the confusion in the chain of command for Marines in Europe following the bombing in Lebanon indicates a distinct difference prior to enactment of this provision of the Goldwater–Nichols Act. GNA, by design, streamlined the organizational chain of command while empowering the operational CINCs.[13]

Reorganization of the Service Secretariats. The fourth major area addressed in GNA focused on the organizational and functional responsibilities of the headquarters of the various military departments. In addition to mandating a reduction in the overall size of the headquarters elements, the legislation specifically attempted to strengthen the service secretaries in the policy and decisionmaking as well as financial management of day-to-day operation of the services, while charging them with seven specific functions (e.g., acquisition, auditing, comptroller, information management, inspector general for complaints/inquiries, legislative affairs, and public affairs) to support the operational requirements of the CINCs.

As further testament to Congressional determination to eliminate waste and duplication among the services, the legislation charged each of the service secretaries to appoint a single office to dispense the aforementioned seven function and further specified that these duties could not be delegated to nor duplicated in the service staffs. This was especially significant as GNA consolidated responsibility for all financial management of the military departments under the

service secretaries and stripped the service chiefs of much of that authority. In a sense, this reorganization redefined civil-military relations in the Pentagon and strengthened the role of the civilian service secretaries. This fundamental shift in the role of civilian leaders in managing DOD has been echoed for several years (Table 4-3).

Table 4-3
A Call for Change

By improving the quality of military advice, stronger joint military institutions should reinforce, not usurp, the ability of civilian leaders to manage the department of defense.

Harold Brown Secretary of Defense (1977-1981)	**Robert S. McNamara** Secretary of Defense (1961-1968)
Clark M. Clifford Secretary of Defense (1968-1969)	**Eliot L. Richardson** Secretary of Defense (1973)
Melvin R. Laird Secretary of Defense (1969-1973)	**James R. Schlesinger** Secretary of Defense (1973-1975)

Archie D. Barrett, "Defense Reorganization: A View from the House," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 179.

Creation of Joint Specialty Officers. The fifth and final major area addressed in the new legislation was joint officer personnel policy. Dr. Archie Barrett[14] provided much of the research that prompted Congress to create a new category of professional uniformed officers, the joint specialty officer (JSO), for "officers trained in and oriented toward the integrated employment of land, sea, and air forces, including matters relating to national security strategy, strategic planning and contingency planning, and command and control of combat operations under unified command."

This initiative (Title IV) resulted from the perception among many members of Congress that the services were not encouraging their most promising officers to apply for joint duty assignments (Table 4-4). General Herres, a strong supporter of GNA defense reform, warned:

> Title IV is very controversial. We got a lot of ideas on how we ought to
> manage personnel. Unfortunately, it's not going to have as positive an
> effect as thought, and I don't think it's going to achieve all the
> objectives. It's going to be very difficult to administer—very
> complicated—and it may create more problems than it solves.[15]

Table 4-4

Defense Organization—The Need for Change

**Senate Armed Services Committee
Staff Report—1985**

Officers knowingly champion service over broader security needs and believe themselves to be acting correctly.

The problem is more deep-seated than can be corrected by mere organizational realignments. The core of this problem is the basic attitudes and orientation of the professional officer corps.

Archie D. Barrett, "Defense Reorganization: A View from the House," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 185.

While the merits and shortcomings of that portion of the legislation (**Table 4-5**) continue to be debated,[16] the controversy, in my opinion, merits a separate and exhaustive study. The purpose of this study, however, is to focus on organizational changes that offer implications for command and control of military forces in the future.

Of course, many of the specific DOD changes resulting from GNA are not contained in the actual legislation. Compliance with the legislative intent produces the aforementioned results: a stronger Chairman, empowered CINCs, less duplication among service staffs, and overall improvement in command and control of military forces—the national objective.

Over the years, I have observed that many senior military officers believe that most of the changes would have taken place anyhow, because many of the concerns were first expressed by senior leadership in DOD. While that argument should not be dismissed, that path would have been uncertain and slow at best, given the gradual, evolutionary process change must face in any conservative bureaucratic organization such as the DOD.

It is important to emphasize, however, that there were serious internal criticisms of command relationships by Pentagon leadership. In many respects, General Jones, then Chairman of the JCS, fired the first shot that eventually produced GNA. Military leaders themselves had serious questions, which were being debated internally, and to acknowledge any less would be less than honest.[17] At any rate, GNA provided the philosophical foundation for sweeping changes in the nation's military forces—changes that would not be tested in earnest until the U.S. engaged in its first major regional conflict (MRC) of the 1990s some four years later.

Table 4-5
Joint Specialty

1. Policies, procedures, and practices for the effective management of joint duty officers

2. Nomination—Service Secretary

3. Selection—Secretary of Defense, with advice of JCS Chairman

4. Education and experience requirements for selection:
   - Joint education program
   - After completing such program, a full joint duty tour

5. One half of joint duty positions must be filled by officers who have, or have been nominated for, the joint specialty

6. 1000 critical joint duty positions must be filled by officers who have the joint specialty

7. Promotion policy objectives:
   - Joint specialty officers—not less than the rate for service headquarters staffs
   - Joint staff officers—not less than the rate for service headquarters staffs

John R. Locher III, "Defense Reorganization: A View from the Senate," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), 153.

Notes

[1] Barry Goldwater, U.S. Senate, "DOD Reorganization: Summary of the Problems," *The Armed Forces Journal International* (October 1985), Extra, p. 37.

[2] U.S. Senate Committee on the Armed Services, "Goldwater and Nunn Announce Conference Agreement on Defense Reorganization Bill" [press release] (Washington, D.C.: U.S. Senate, 1986), p. 1.

[3] U.S. Congress House of Representatives, "Making Continuing Appropriations for Fiscal Year 1987," *Conference Report to Accompany HJR 738* (Washington, D.C.: U.S. Gov't Printing Office, Oct. 15 1986), pp. 129-131.

[4] Don M. Snyder, "DOD Reorganization: Part One, New Imperatives," *Parameters* (September 1987), p. 89.

[5] James R. Locher III, "Defense Organization: The Need for Change," *Staff Report to the Committee on Armed Services, United States Senate*, Oct. 16, 1985 (Washington, D.C.: U.S. Gov't Printing Office, 1985).

[6] Anthony G. Oettinger, "Reorganization of the Department of Defense," Hearings before the House Subcommittee on Investigations, House Armed Services Committee, United States House of Representatives, printed in *Congressional Testimonies July 1983–April 1990* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-92-3, February 1992), p. 84.

[7] Ibid., p. 85.

[8] All references in this chapter to specific wording in the legislation have been taken from the Goldwater–Nichols DOD Reorganization Act of 1986 (Public Law 99-433), Oct. 1, 1986.

[9] Snyder, p. 91.

[10] Ibid., p. 93.

[11] Ibid., p. 91.

[12] Ibid.

[13] Barry Goldwater, United States Senate, "Testimony Before the Senate on the Conference Bill on DOD Reorganization," *Congressional Record*, 132, 16 Sept. 1986 (Washington, D.C.: U.S. Gov't Printing Office, 1986).

[14] Archie D. Barrett, "Defense Reorganization: A View from the House," *Seminar on Command, Control, Communications and Intelligence, Guest Presentations, Spring 1987* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-88-1, May 1988), pp. 173-194.

[15] Robert T. Herres, General, USAF, "Strengthening the Chairman of the Joint Chiefs of Staff," *Seminar on Command, Control, Communications and Intelligence, Guest Presentations, Spring 1988* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-89-1, March 1989), p. 69.

[16] See, for example, the following: Terry J. Young, *Title IV—Joint Officer Personnel Policy: A Peace Dividend is Required* (Carlisle Barracks, Penna.: U.S. Army War College, 1992), pp. 13-37; Robert E. Gatliff and Mary C. Pruitt, *Title IV of the Department of Defense Reorganization Act of 1986: Hidden Impacts* (Maxwell Air Force Base, Ala.: Air University, 1988), pp. 1-44; David H. Milne-Smith, *Achieving Better Interface Between Land, Sea, and Air Forces—The Historical Evidence Does Not Support Legislation* (Maxwell Air Force Base, Ala.: Air University, 1991), pp. 1-25; and Dennis M. Savage, *Joint Duty Prerequisite for Promotion to General/Flag Officer* (Carlisle Barracks, Penna.: U.S. Army War College, 1992), pp. 21-25.

[20] Herres, p. 69.

Chapter Five

Storm in the Persian Gulf

*Let everybody understand that this battle is going
to become the mother of all battles.*

Saddam Hussein[1]

Saddam Hussein's words echoed throughout the world as he threatened a religious war leading to Armageddon. However, the Gulf War proved to be something less than Saddam Hussein had predicted, both for Iraq and for the United States. This chapter briefly explores the impact of the Gulf War and asks questions to be pondered by military planners and national policy makers in future wars. The discussion is guided by dividing the chapter into three broad sections: (1) an overview of the Iraqi invasion of Kuwait and the Coalition response, (2) implications of the separate but coordinated maritime strategy, air campaign and ground offensive, and (3) questions exploring the extent to which the Gulf War was traditional warfare, futuristic warfare or simply an anomaly in history.

The Persian Gulf War: An Overview

Iraqi invasion. When Iraqi forces invaded Kuwait on August 2, 1990, Saddam Hussein sought to absorb the vast resources of oil-rich Kuwait in minimum time and with minimum effort. Victory would have rendered him the most powerful combined economic and military power in the Persian Gulf region. Since Kuwait had little power to resist, the Iraqi invasion and seizure took less than thirty-six hours (**Figure 5-1**).

This short but fierce engagement was the final result of bitter and strained relations between Iraq and Kuwait. Saddam Hussein had sought to settle his unresolved border dispute with the emirate concerning ownership of Warbah and Bubiyan islands, as well as the issue of complicity between Kuwait and the West that had "cheated" Iraq out of billions of dollars in oil revenues. Those revenues were significant in the fall of 1990 as Saddam's war chest had been strained from his ongoing war against Iran.

However, Saddam Hussein's campaign to consume the small sovereign nation of Kuwait produced different results from those he may have anticipated. The Gulf War was a military disaster for Iraq (**Figure 5-2**). The war left Iraq in ruin, its people isolated economically and

diplomatically from the rest of the world, including most of the nations of Islam. President George Bush characterized the results quite differently from what Saddam Hussein had predicted:

> Tonight in Iraq, Saddam walks amidst ruin. His war machine is crushed. His ability to threaten mass destruction is itself destroyed...when his defeated legions come home, all Iraqis will see and feel the havoc he has brought...Saddam Hussein was the villain; Kuwait the victim...[but] the Kuwaiti flag once again flies above the capital of a free nation.[2]
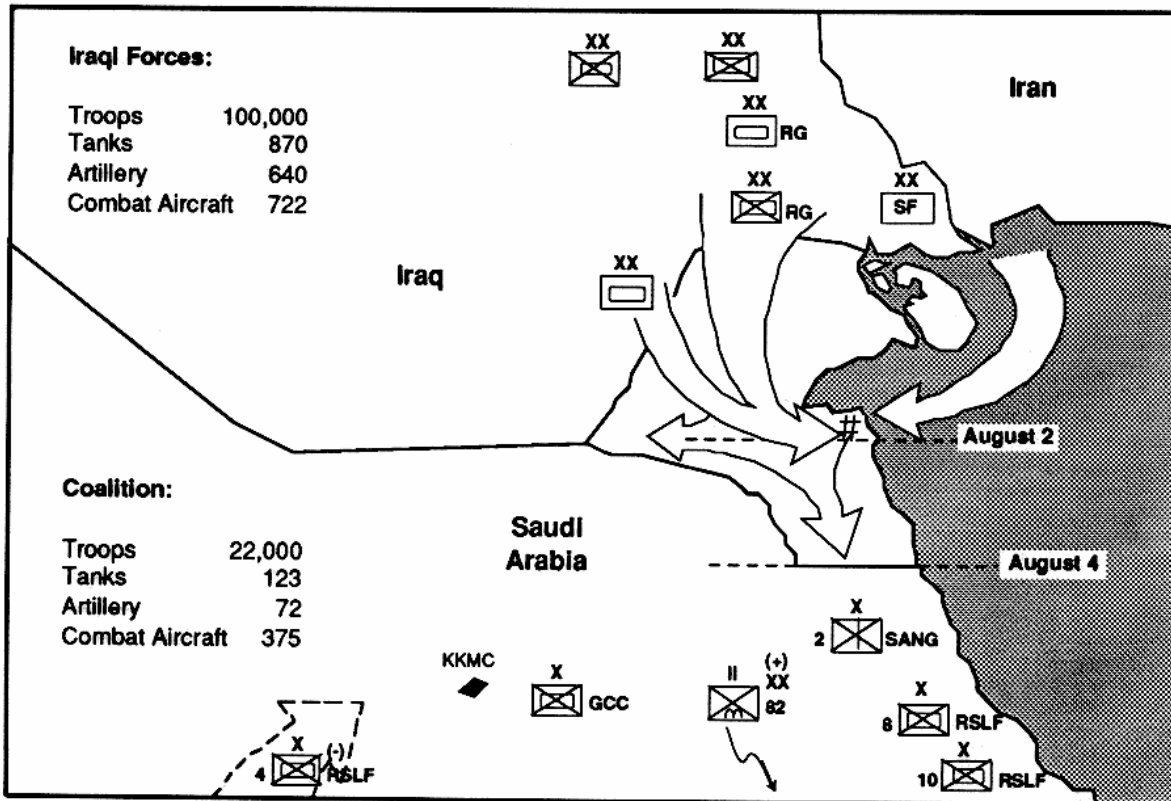
Paul R. Schwartz, "Coalition Command and Control in Desert Shield/Desert Storm," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1991* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-93-1, February 1993), 205.

Figure 5-1
August 2–7 Invasion

Questions on lessons learned. While President Bush's announcement was widely welcomed by the American public and by the world, the Gulf War produced questions about the future of warfare. This chapter explores many of those questions, which ask what the Gulf War did and did not do in an attempt to define the relevant issues for command and control in future wars.

Further, examining the scope of the Gulf War raises questions concerning rising expectations that Americans have of modern warfare. Was *Operation Desert Storm* a significant
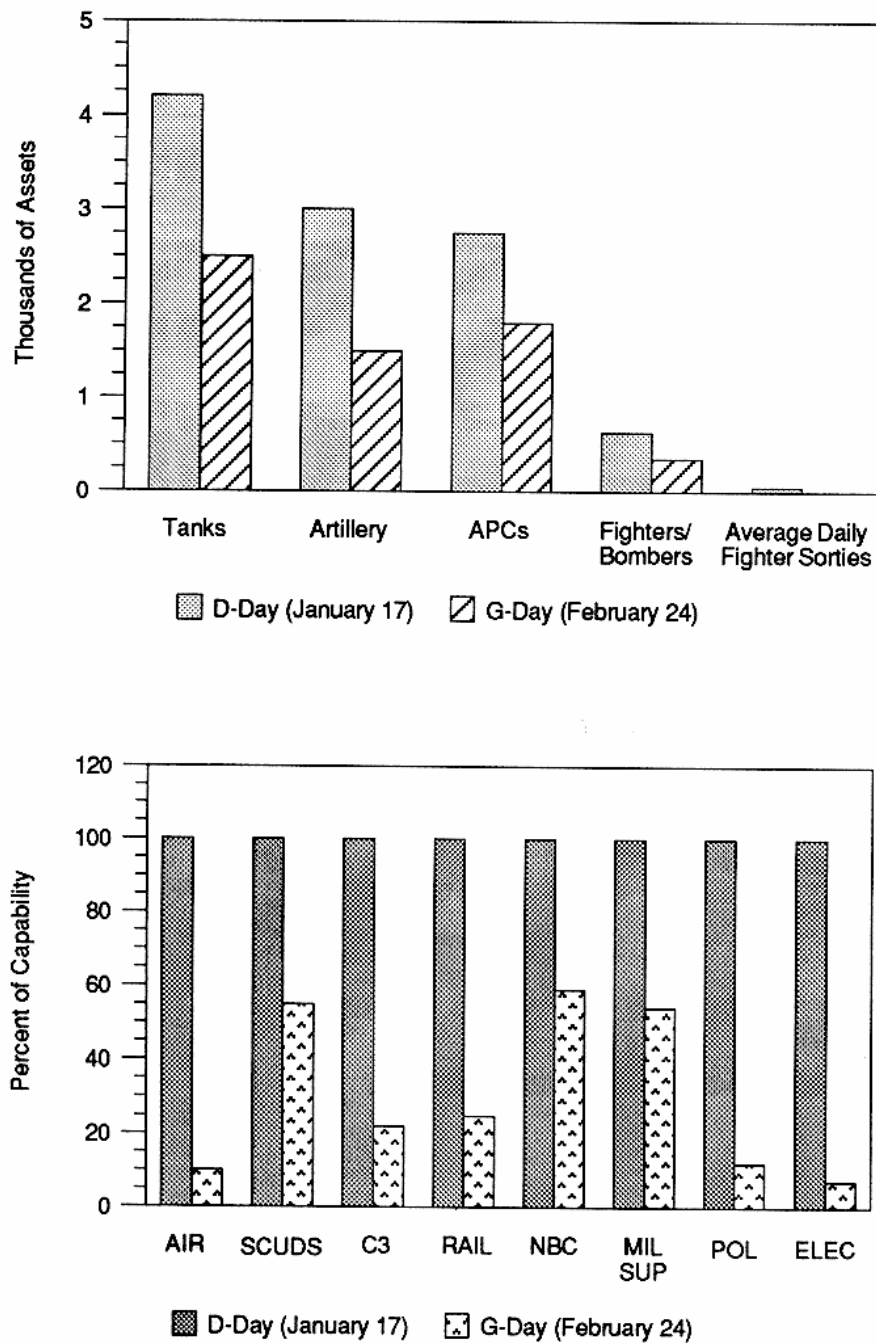
Paul R. Schwartz, "Coalition Command and Control in Desert Shield/Desert Storm," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1991* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-93-1, February 1993), 191.

Figure 5-2

Iraqi Combat Assets and Capabilities

test of the effectiveness of the Goldwater–Nichols DOD reorganization? If not, what command and control structures contributed to victory? Can such structures be depended upon to serve as the baseline for future coalition military operations? Future United Nations actions?

Coalition warfare. The "offshore" coalitions seen in the war present unique questions in themselves. In the aftermath of the Gulf War, the American people eagerly embraced the soldiers returning home from battle for many reasons. Some simply welcomed the American military victory as cause for celebration in itself. Others saw the quick victory as welcome relief that America can execute the military arm of its national policy without getting bogged-down in another Vietnam.

Would Americans have continued to support the liberation of Kuwait as vital to U.S. national security if the ground offensive had continued for several years...or even several months? A longer ground offensive would certainly have produced higher U.S. casualties and increased collateral damage, and increased casualties would have removed the impression of the Gulf War as a "sterile" war.

Technology. The Gulf War caused a somewhat widespread assessment that modern technology is the solution to the horrors of traditional warfare. But in another sense, was the application of technology in the Gulf War an accurate measure for the effectiveness of technology in future wars? Future wars may see adversaries possessing the same high-technology weapons from the world's arms market that America has—and the knowledge of how to use them.

Further, Iraq chose not to employ technology available to its forces, and much of its air force defected to Iran. An Iraqi air campaign of any magnitude would have changed the nature of the war and would have almost certainly have extended the war and increased casualties. Jamming, disrupted communications and counterintelligence—had the Iraqis used them effectively—would have produced similar results. Moreover, the prime adversary of the U.S. for more than four decades chose not to make its advanced technology available to Iraqi military forces. Although the former Soviet Union may not have been in any condition to intervene directly on the side of Iraq, its very absence cleared American military planners to concentrate on the war.

Strength of Iraq's military forces. While the eventual outcome of the war with a Coalition[3] victory was never seriously questioned by military analysts, the speed at which the Iraqi army's will to fight collapsed was surprising. By most comparisons, the Iraqi army was indeed formidable—rated as the fourth strongest standing army in the world behind the United States, the then U.S.S.R.]and China. Iraqi military forces were equipped with modern weapon systems of both Soviet and Western origin (e.g., high-quality artillery, front-line T-72 tanks, modern MiG 29 and Mirage F-1 aircraft, ballistic missiles, and a large and sophisticated ground-based air defense system) and had gained valuable combat experience during eight long years of war with Iran.

The invasion of Kuwait had demonstrated this combat proficiency. Although Saddam Hussein's assault forces met only light resistance in the small sheikdom, his forces mounted a complex, combined forces—air, land, and ground—operation. They staged successful joint operations simultaneously during both day and night military operations, again the hallmark of a well-trained and modern military force.[4]

Further, senior Iraqi military leaders had planned and executed corps-sized combat maneuvers. Iraqi forces had killed tens of thousands of Iranian soldiers in the preceding years using the same defensive strategy Saddam envisioned for Kuwait. His combat engineers, rated among the best in the world, had months to prepare and construct their defenses prior to actual hostilities against the West. They gradually strengthened their defense in depth to threaten Coalition forces with high casualties if attacked.[5]

This large standing force had a professional officer corps with potential to expand through nationwide mobilization. Their army had access to weapons of mass destruction and were experienced in the use of chemical weapons to support combat forces.[6] The combination of these threats enabled the United States not only to generate support for international sanctions through the United Nations, but also to gather military support from thirty-seven countries in an historically unprecedented coalition of nations.

Iraq's defeat. Why, then, did Iraqi forces collapse so quickly in the Kuwait Theater of Operations (KTO? The rapid Coalition victory called into question the accuracy of U.S. intelligence estimates of Iraq's military capability. Iraq's military strength may have been overestimated and the overestimates may have been publicized by the Bush administration to gain support from the American people for U.S. military intervention.

Some simply credit the supremacy of U.S.-led command, control and execution of military operations. They have argued that Iraqi defense forces would not have been incompetent against most opponents, but they were not prepared to confront the philosophy, doctrine and tactics of the Airland Battle presented by Coalition forces. Others have cited the unity, determination, and superior quality of U.S. and allied forces. However, the overwhelming size of Coalition offensive forces should not be overlooked. Further, throughout the conflict, Iraqi personnel actions were focused on political outcomes, lacked any real comprehension of military realities in the engagement, and underestimated the political will and resolve of Coalition forces.[7]

For the purposes of this report, answers to questions touching on the U.S. victory in Kuwait may not be as important as the questions themselves. Much has been written about the war already and many have been credited with that success. I was deployed with combat forces during the entire engagement of *Operation Desert Storm,* and this study is not intended to denigrate the Coalition victory in any way. In many ways, the American public needed a military victory in the Persian Gulf as reassurance that the Pentagon had overcome "blunders" of the past.

An effective command and control test? However, this report focuses on the fact that *Operation Desert Storm* was the first real measure of America's military command and control effectiveness in an MRC since the enactment of Goldwater–Nichols. In this sense, *Operation Desert Shield/Storm* became a stage to sort out America's ills of the past.

Did *Operation Desert Storm* (**Table 5-1**) indicate that U.S. military forces had overcome command and control difficulties that plagued military operations in the *Mayaguez* incident in 1975, throughout armed conflict in Vietnam and Southeast Asia, and in the aborted hostage rescue mission *Desert One* in Iran? Did war in the Persian Gulf resolve interoperability and joint training problems among America's military services so prevalent in the seizure of the *USS Pueblo* in 1968 and in Grenada in 1983? Did *Operation Desert Storm* adequately test the Unified Command Plan? Did Goldwater–Nichols provide the CINC, General Norman Schwarzkopf, the clear lines of command authority that were missing in the aftermath of the Beirut bombing in 1983?

Table 5-1
Lessons Learned

Substantial host nation support from Saudi Arabia was essential for success.

MODA quickly formed joint forces command to provide theater, corps division command and support stucture for 18-nation ground operations.

U.S. liaison and assistance teams at key command levels were essential.

Anti-fratricide measures must be established and stressed early.

Technically competent/qualified leadership.

Volunteer top quality force.

High tech weapons.

Air/land battle doctrine.

Clearly bad enemy—unambiguous goals.

Unified coalition.

Paul R. Schwartz, "Coalition Command and Control in Desert Shield/Desert Storm," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1991* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-93-1, February 1993), 205.

Lessons learned from *Operation Desert Storm* are valuable in a macroscopic sense. Look beyond the public outcry for victory in the Gulf War. Look beyond jointness. To what extent was the Gulf War typical of warfare in a traditional sense? To what extent was the Gulf War a precursor of new trends in warfare? To what extent was the Gulf War really an anomaly in the

history of warfare? These questions will be discussed in more depth in the third section of this chapter.

What follows is a review of the separate but unified maritime, air, and ground campaigns, which provides additional insight on these questions.

Maritime Operations, the Air Campaign, and the Ground Offensive

Maritime Operations. The United States Navy and Coalition partners ensured control of the seas from the very start of hostilities in the region. As the Coalition formed and strategic plans were developed to liberate Kuwait, naval forces engaged in primary mission support—sea control and power projection. Coalition naval units also enforced United Nations sanctions by inspecting ships and diverting them from ports in Iraq and Kuwait. Maritime interception efforts represented the first cooperation among Coalition partners and were essential in denying Saddam Hussein much-needed supplies and revenue from oil shipments. During the war in the Persian Gulf, the United States deployed more than 165 ships, including six carrier battle groups, in the Kuwait Theater of Operations which included the Persian Gulf, Arabian Sea, Red Sea and the eastern Mediterranean Sea. Coalition partners contributed more than sixty-five ships to naval operations in Southwest Asia. Naval supremacy was never seriously questioned.[8]

Maritime operations made an important contribution to the war, although in many respects the war for the high seas did not receive the same press coverage as did the air campaign and the ground offensive (**Figure 5-3**). The United States Navy benefited heavily from years of prior operations in the Middle East region. With no permanent U.S. installations in the area, forward presence was accomplished with naval deployments.

This "presence" had been accomplished by the U.S. Joint Task Force Middle East (JTFME) assigned to the Persian Gulf conducting routine training exercises with Gulf Cooperation Council (GCC) nations in the area in the years preceding Iraq's invasion of Kuwait. This also provided a major naval presence to protect the sea lanes for U.S. ships.

The eight forward-deployed JTFME ships in the Persian Gulf, accompanied by the *USS Independence* in the Indian Ocean and *USS D.D. Eisenhower* in the Mediterranean Sea, were the only U.S. combat forces in the KTO when Saddam Hussein directed the invasion of Kuwait on August, 1990. By August 7, 1990, all U.S. naval forces in the area were operating under control of the Commander-in-Chief of Central Command (CINCCENT), General Schwarzkopf of the U.S. Army—a testimonial to stronger command and control arrangements resulting from Goldwater–Nichols. Ultimately *Operation Desert Storm* assembled the largest naval force in a single theater of military operations since World War II.[9]

Once *Operation Desert Storm* was under way, Coalition maritime forces in the northern Persian Gulf,[10] including those used to liberate the first Kuwaiti territory and those prepositioned to provide the deceptive threat of an amphibious assault, forced Iraqi planners to focus on the sea

rather than the desert to the west where the ultimate Coalition offensive struck. Coalition naval forces essentially destroyed the Iraqi Navy in just three weeks, giving CINCCENT the added leverage of unobstructed naval presence and the threat of a credible amphibious assault staged under the protection of the *USS Missouri*. Naval supremacy provided Coalition ground forces with a solid protective flank on the Arabian Peninsula and served as reassurance to Coalition partners that Iraq could not exploit territorial waters and served notice to Iran not to intervene, especially during the Iraqi Air Force's exodus to Iran.[11]
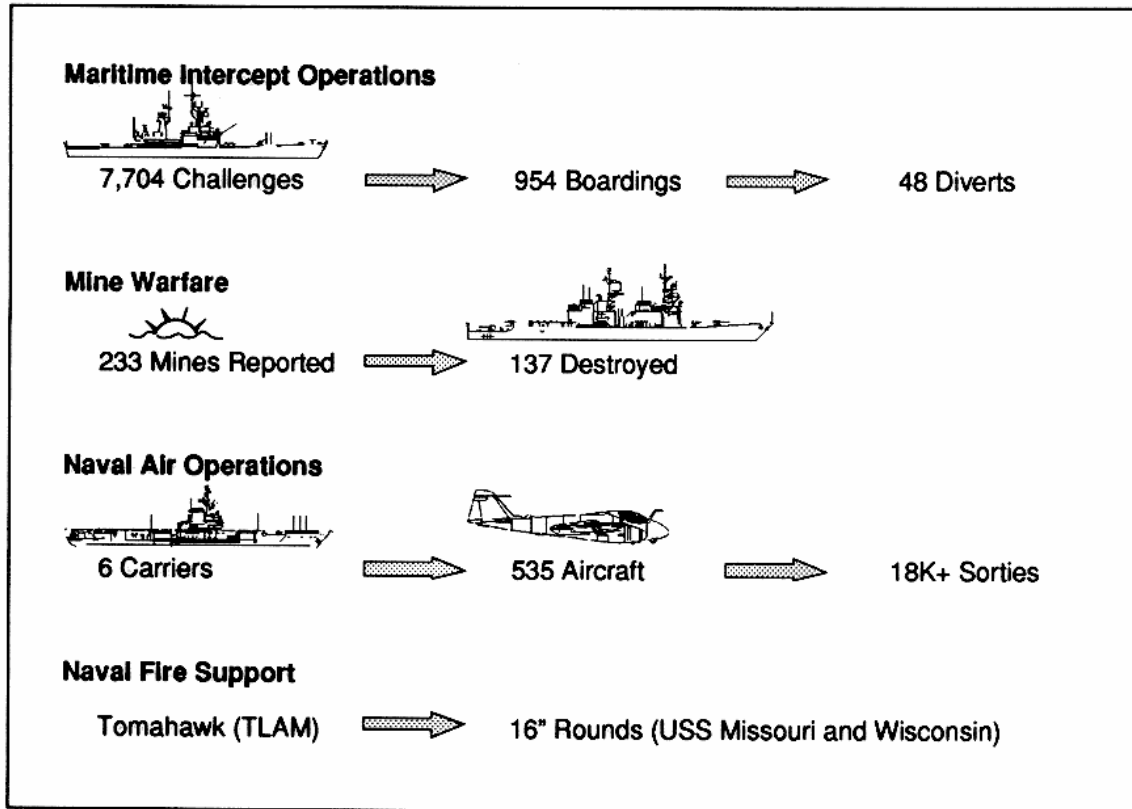
Maritime Intercept Operations

7,704 Challenges ⟹ 954 Boardings ⟹ 48 Diverts

Mine Warfare

233 Mines Reported ⟹ 137 Destroyed

Naval Air Operations

6 Carriers ⟹ 535 Aircraft ⟹ 18K+ Sorties

Naval Fire Support

Tomahawk (TLAM) ⟹ 16" Rounds (USS Missouri and Wisconsin)

Paul R. Schwartz, "Coalition Command and Control in Desert Shield/Desert Storm," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1991* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-93-1, February 1993), 193.

Figure 5-3
August 7 – February 28 "Naval Campaign"

Maritime operations, however, were not wholly free of the command and control issues well known to have occurred during other more ill-fated operations by the U.S. military. That naval surface operations were for the most part accomplished unencumbered, however, was largely due to the fact that Iraq really didn't have much of a navy: Iraq's naval presence consisted of a few surface craft and tankers, which were either sunk or otherwise rendered useless in the early days of the war.

Interoperability between Coalition air forces and U.S. naval air operations was another matter according to Major General Paul Schwartz:

> Naval air operations didn't even report for the first week. Look at how many sorties they flew—18,000 sorties. For the first several thousand of those sorties we didn't know where they were going in or when they were going. They were doing it off the Air Tasking Order (ATO), but there was no mechanism to have any feedback on what the Navy was accomplishing.... As I understand it, there's a tremendous communication equipment problem in the Navy on reporting into the Air Force channel...and they didn't particularly like to tell another service how well or how badly they were doing [BDA—Battle Damage Assessment].... There was a tendency for independent operation. They like to keep that stuff in house.[12]

Of course, "keeping stuff in house" was one of the fundamental issues cited for enactment of Goldwater–Nichols. The Navy's reluctance must have been equally frustrating for Air Force Lt General Charles Horner, the Joint Forces Air Component Commander (JFACC), who was responsible for producing a coordinated ATO:

> [it is] puzzling how nobody crashed massively while off the ATO...it was either the luckiest thing in the world, or some airspace coordination that [no one] was aware of, that they didn't get tangled up.[13]

Naval air operations suffered from mission specifications to meet service-unique requirements. For example, naval air orients on targets that are a threat to the fleet. During *Operation Desert Storm*, those targets were eliminated in the early days of the war leaving six carrier battle groups with the wrong equipment (e.g., F-14s) and the wrong ordnance to further support the principal strike of the Airland Battle. Many of the Navy's sorties were subsequently relegated to Combat Air Patrols (CAPs).[14]

Air Campaign. Maritime operations provided naval supremacy for the impressive air campaign that followed. President Bush summarized the effectiveness of air operations.

> Gulf lesson one is the value of air power...[it] was right on target from day one. The Gulf War taught us that we must retain combat superiority in the skies.... Our air strikes were the most effective, yet humane, in the history of warfare.[15]

President Bush's assessment of the air campaign has been shared by many. The air campaign in the Persian Gulf inflicted unprecedented damage on Iraqi armed forces, leaving some experts to say that it was the most successful air war since the beginning of manned flight.

Effectiveness. Coalition air forces[16] controlled the skies from the first moments of the air war. This was an essential element to victory, as it cleared the skies of any hostile airborne threat

to Coalition ground and naval forces, allowing CINCCENT freedom to prepare for the ground offensive and freedom from surveillance and aerial reconnaissance by hostile forces.

Coalition war planes destroyed forty-one enemy aircraft in air-to-air combat without suffering even a single confirmed loss to Iraqi fighters. Coalition air power crippled a highly sophisticated Iraqi air defense system in the early hours of the war and struck at the heart of the enemy's command and control systems the first night. In the course of flying more than a hundred thousand combat sorties, Coalition forces lost only thirty-eight fixed-wing aircraft.[17]

> By the end of the first day, the stage was set for the crushing defeat of the Iraqi military. By day two, we had control of the air, and by the fourth day, the Iraqi air force was virtually nonexistent.... As the objectives of the offensive air campaign were achieved more and more attention could be focused on preparation of the battlefield for the ground phase of the war.[18]

The air campaign constituted the first three phases of *Operation Desert Storm*. Phase I was the strategic air campaign. Phase II focused on elimination of Iraqi ground-based air defenses in the KTO. Phase III involved execution of air strikes against high-value Iraqi ground forces in the KTO, including the much-publicized Republican Guard Forces Command (RGFC) and the Iraqi Army in Kuwait. The Coalition ground offensive was the fourth and final phase of the concept of operations.[19]

Focus of the air campaign. The air campaign was specifically designed to exploit the recognized strengths of Coalition air power. JFACC identified Coalition air campaign strengths as (1) well-trained aircrews who began with a lessons-learned portfolio based on mistakes made in previous wars, (2) advanced technology weapon systems including stealth aircraft, precision guided munitions (PGMs) and cruise missiles, (3) superior command and control with unity of command focused on the JFACC, and (4) ability to conduct full-scale offensive air operations around the clock.[20]

Coalition air forces also exploited the enemy's weaknesses, including a rigid command and control network and a fortified defensive orientation that lacked flexibility and mobility. Air planners seized air superiority rapidly and paralyzed the Iraqi leadership's command structure with simultaneous air strikes against vital centers of gravity, including (1) the National Command Authority (NCA) in Baghdad, (2) nuclear, biological, and chemical (NBC) warfare capability and (3) its highly valued Republican Guard forces.[21]

Actually the air campaign in the Persian Gulf began far away in the southern United States even before the *Desert Storm* was underway. Aging B-52s armed with conventional air-launched cruise missiles (ALCMs) departed from home station in Louisiana on January 16, 1991 and delivered their payloads approximately two hours after the war began. The first offensive air

hostile fire began after midnight on January 17, 1991, when U.S. warships launched Tomahawk land attack missiles (TLAMs) against vital command and control targets in Baghdad.

While Tomahawk missiles were still in flight, helicopter gunships attacked early warning radar sites in southern Iraq. Stealth fighters had already passed over these sites en route to attack targets in western Iraq and Baghdad. Cruise missiles, and helicopter gunships accompanied by F-117A and F-15E fighters and British GR-1 Tornado fighter bombers, created gaps in Iraqi radar coverage and the enemy C^2 network for the non-stealth aircraft that followed. Lethal air strikes continued until key elements of Iraqi leadership command and control, strategic air defenses, and NBC warfare capabilities had been effectively neutralized. This coverage enabled Coalition forces to prosecute the remainder of *Operation Desert Storm* with virtually no enemy threat from the air.[22]

Psychological impact of the air campaign. The psychological warfare aspect of the air campaign was also significant in the events that followed during the ground offensive. It diminished the pride and confidence that years of experience had instilled in the Republican Guard and other Iraqi forces. The principal mission of the once-proud Iraqi air force became simply to survive, as indicated by the utter absence of all combat air operations early in the conflict and the desperate attempt by Iraqi pilots to flee for save haven in Iran. Further, exposed Iraqi troops in the KTO were subjected to aerial bombardment and attack by Coalition aircraft day and night, creating constant concern among Iraqi ground troops for their own safety and that of their families.[23] Worse yet, the highly trained and highly praised Republican Guard could do nothing to stop the air attacks.

In many respects, the Coalition air war victory was not so significant as the demonstration of the utter lethality that a combined joint operation can have on the enemy. Might the lethal impact of air power be the legacy of the highly successful air campaign in the Persian Gulf War?

> The joint force concept integrates all services into one coordinated plan.... Marine attack aircraft accompanied by Air Force suppression of enemy air defense assets and escorted by Navy fighters made for effective and lethal packages. Working together, the services were able to limit duplication of effort, minimize breakdowns in communication and fly 110,000 sorties without...air-to-air fratricide.[24]

Ground Offensive. *Operation Desert Storm's* final phase was the Coalition ground offensive with its now widely publicized left hook maneuver (**Figure 5-4**). The Coalition ground offensive witnessed friendly fire travel more than 250 miles in a hundred hours while capturing more than 73,700 sq km of hostile or occupied territory,[25] one of the fastest and most effective military maneuvers in the history of modern war. CINCCENT directed implementation of Phase IV of the battle plan on 24 February 1991 following more than 180 days of Coalition naval control of the high seas and thirty-eight days of aerial bombardment.

Figure 5-4
February 24–28: Allied Offensive

Objectives of the ground offensive. Each phase of the Gulf War had readily defined military objectives. Those of the Coalition ground offensive[26] were to expel Iraqi forces fromoccupied Kuwait, isolate and destroy the Republican Guard in their defensive fighting positions in the KTO, and restore legitimate government to Kuwait.

To meet these objectives, CINCCENT developed a four-part plan of battle for the ground offensive to meet these objectives. First, coalition forces continued to harass the Republican. Guard with aerial bombardment while maintaining air superiority throughout the theater. Second, they continued to maintain control of the coast to enhance the credibility of an amphibious assault. Third, the 1 Marine Expeditionary Force (1 MEF) and Arab Coalition forces initiated a supporting attack along the Kuwait–Saudi Arabia border to hold the forward-most Iraqi defensive divisions in place. Fourth, and simultaneously with the 1 MEF deception force, more than two hundred thousand U.S. soldiers augmented by French and United Kingdom divisions swept west of Iraqi defenses, striking deep into Iraq, severing lines of communication, and destroying the Republican Guard in the KTO.[27]

Command and control of the battle plan was executed seemingly flawlessly. By February 28, Coalition ground troops had routed the Iraqi army in the KTO, including the Republican Guard, who were fleeing or surrendering—tired, beaten, and shamed—in large numbers. In the end, the Iraqi army had lost its will to fight, had been outmaneuvered by a better-trained armed force, and had confronted a more modern concept of war—coalition warfare with combined air and land forces. The strength of the special Coalition's Combatant Command structure had withstood the test of the war and the reputed fourth largest army in the world was shattered (Figure 5-5).

Reflections on the successful ground offensive. On victory in armed conflict, history is replete with evidence that the right military force, with the right leadership, the right doctrine, the right equipment, the right logistics support, the right training technically and culturally, and the right set of circumstances will prevail.

While the attainment of specific military objectives in this engagement has not been placed in doubt—nor should it—whether or not *Operation Desert Storm* remains historically as one of this nation's defining moments in military operations remains to be seen. Certainly, elements that might have led to failure were present. Did Goldwater–Nichols *fix* command relationships in the U.S. military, or will victory in the Gulf be recorded in history as the result of a unique set of circumstances?

Was victory the result of strong personal leadership, much like Eisenhower's in World War II? After all, in the Gulf War it was General Powell who had articulated specific objectives for the conflict ,drawing heavily on the nation's lessons learned from the war in Vietnam. He argued, and not without receiving criticism of his requests, for clearly defined and obtainable objectives and for amassing overwhelming force to achieve the objectives rather than reverting to the gradual

escalation used in Vietnam. Lessons learned from Vietnam may be seen as responsible for victory in the Gulf War as much as the organizational changes resulting from Goldwater–Nichols.

What if national political leadership had not clearly defined the military objectives and had still directed the military to prosecute the war with interference from the political process? What if national command authorities had not allowed military leadership to deploy forces of sufficient strength to overwhelm the enemy—one of General Powell's strongest concerns?

Could *Operation Desert Storm* have developed into a dreadful and protracted war of attrition—Saddam Hussein's objective—leading to political unrest in America? What did America do right in holding the Coalition forces and their host nations together? How long could a coalition of this nature last? What does *Operation Desert Storm* suggest about future wars?

Paul R. Schwartz, "Coalition Command and Control in Desert Shield/Desert Storm," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1991* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-93-1, February 1993), 189.

Figure 5-5
February 28 "Cease Fire"

Unraveling the multitude of interdependent circumstances that produced victory in the Gulf War will undoubtedly take years. Still, this conflict was important in the evolution of roles and missions for America's armed forces since it was the first real test for a restructured DOD in an MRC. In this sense, the Gulf War does offer insight for command and control considerations in future wars. Three of the lingering questions appear especially useful: (1) Was war in the Persian

Gulf typical of traditional warfare? (2) Was it an indicator of new trends in warfare? (3) Was it really just an anomaly?

The Gulf War: Traditional, Futuristic, or Anomaly?

Typical of Traditional Warfare? An exploration of the extent to which the Gulf War was typical of traditional warfare offers insight not only for the historical precedent, but also for implications for future warfare. While war in the Persian Gulf repeated the lessons of traditional historic warfare in many ways, six indicators provide the focus for the discussion in this section of **Chapter Five**.

Preparedness. Although intelligence reports had indicated the need for increased concern in the region during 1989–90, Saddam Hussein's invasion of Kuwait shocked the world. In announcing the initial deployment of U.S. forces to Saudi Arabia, President Bush described circumstances that suggest those that have typically provoked the onset of warfare between nation states throughout history:

> Less than a week ago, in the early morning hours of August 2d, Iraqi
> armed forces, without provocation or warning, invaded a peaceful
> Kuwait.... This aggression came just hours after Saddam Hussein
> [president of Iraq] specifically assured numerous countries in the area
> that there would be no invasion. There is no justification whatsoever for
> this outrageous and brutal act of aggression.[28]

The President's reaction brings to mind the Japanese attack on Pearl Harbor. Saddam Hussein's empty promises to his Arab neighbors in the Middle East remind us also of the pledges Adolf Hitler made some fifty years ago as he set out to plunder Europe. Both recall the dangers of ignoring advance warnings suggested in political discourse.[29]

In 1990, the U.S. did not have the forward military presence to immediately respond to this aggression. Why did Iraqi forces halt the invasion at the Kuwait–Saudi Arabia border when they were encountering only minor resistance and the remaining kingdoms on the peninsula— including Saudi Arabia—had little ability to stop them? What new world order would have resulted if Iraqi forces had marched all the way to Oman? Under those circumstances, might an Arab Coalition been effective or even possible?

Just as the Gulf War exemplified the U.S.'s historical ill-preparedness to respond to major armed invasions, it brings into focus the question of just how vital Southwest Asia is to the national interest. The long-term stability of that region was clearly at risk when Iraqi forces invaded Kuwait. Traditionally, America has viewed the delicate balance of power and alliances in the Middle East as vital to stability of the world economy. The prospect of Saddam Hussein's forces controlling the vast oil reserves of Iraq and Kuwait—and potentially Saudi Arabia and the smaller emirates—was unacceptable to the world in 1990 and suggests the intensity of continued

interest in that region. If quick victory had not been obtained, would Americans have reassessed the importance to U.S. national interests of the independence of Kuwait?

The invasion was seen by U.S. and world leadership as an immediate economic and military threat that did not allow the U.S.—or other nations—time to reassess long-term interests:

> Iraq's objectives, frustrated for eight years in Iran, were achieved in five hours in Kuwait. Emboldened by this quick success, Iraq may very well have expanded its aim to include Saudi Arabia, Bahrain, Qatar, or the United Arab Emirates. In fact, citing the amount of weaponry and ammunition seized on the Saudi border after the war, some military experts are convinced Saddam's intentions did not end with Kuwait.[30]

Stakes. Second, the Gulf War was typical of major traditional warfare in that the stakes were high. The cost of not responding to unprovoked and blatant invasion of one sovereign nation by another has often been higher than the ultimate cost of war. Again, President Bush described the stakes for America and the world:

> The stakes are high. Iraq is already a rich and powerful country that possesses the world's second largest reserves of oil and over a million men under arms. It's the fourth largest military in the world. Our country now imports nearly half the oil it consumes and could face a major threat to its economic independence. Much of the world is even more dependent upon imported oil and is even more vulnerable to Iraqi threats.[31]

Was President Bush's assessment of the threat posed to U.S. national interests accurate, or can it be compared to President Reagan's call for American intervention in Grenada to protect so-called vital U.S. interests there? The aftermath of the Gulf War may determine that one of the long-term legacies of that war will be an American public that demands more information from national intelligence estimates and relies less on an American president's assessment, which may by influenced by other political considerations. Certainly, any future adversaries this nation may face in the Middle East region will have learned from Saddam Hussein's mistakes, making the stakes then even higher for American combat forces.

Alliances. Third, war in the Persian Gulf was typical of traditional warfare in that the U.S. did not go it alone. Traditionally the U.S. supports warfare through alliances—even if what other nations give is only token support based on shared principle.

Alliances were certainly the means for survival during World War II, and the U.S. has continued that policy. However, just as in Korea and Vietnam, the U.S. provided the bulk of the manpower, firepower and logistics to sustain operations in the Gulf War. The Gulf War was different, however, because no long-standing alliance was ever formed to secure the long-term peace.

The Coalition process was used to resecure the area for a limited time for a specific military objective. Given the United States's long support for Israel and given that the U.S. at that time neither recognized nor dealt with the Palestine Liberation Organization (PLO), it was simply impractical to have an alliance in place at the beginning of the Gulf War.

Coalition forces, then, were linked and united more by necessity than by history or common culture. The Coalition required constant, special handling as described by General Homer:

> Operating as a coalition was essential in keeping the war from becoming a United States–Iraq conflict. Continuous coordination was necessary to make sure that all coalition members' training, communications and objectives were compatible. However, in the war's aftermath, it [was] the potential for a stable atmosphere in the region that remain[ed] the real benefit of the coalition.[32]

Scope. Fourth, the Gulf War was a traditional war in its scope. It was waged against the armed forces of a nation state that defined the enemy and the theater of operations, an area later designated at the KTO. One army fighting another over a clearly defined, yet disputed, piece of land is traditional warfare in the strictest sense. What might have changed if Saddam Hussein had resorted to state-sponsored terrorism instead of an armed assault against Kuwait? Would a Coalition with Arab states have been practical?

On Clausewitz. Fifth, traditional theory of armed conflict applied in the Gulf War. Employment of military forces in the Persian Gulf was an extension of political resolve—to achieve political goals and political objectives. Of course, this aspect of the war was equally true for Iraqi forces. Many of the traditional principles of war espoused by Clausewitz still apply. The Gulf War witnessed the same "fog of war"—uncertainties of weather and terrain, and confusion caused by inadequate or incomplete knowledge of the enemy or disconnects in interoperability among forces—that this nation has experienced in every major conflict in its history.

> First and most serious was the weather, the nemesis in war and peace. The worst weather in the region in 14 years, twice as bad as forecast, forced 40 percent of the [air] missions in the first 10 days to return with their bombs and thus set the air campaign back by at least one week...the bulk of the air forces were capable of only daytime strikes. Of all the new wonder weapons, only the cruise missile could operate independent of the weather, for the other guided weapons required good visibility.[33]

Leadership. Sixth, the U.S. assumed the leadership role in the world community, a traditional role for the U.S. in armed conflict since World War II. The historic national policy of the U.S. regarding human rights required a response. Iraq's invasion of Kuwait was a blatant violation of international law. Many have argued that failure to respond to that aggression would have been tantamount to abrogation by the U.S. of its world leadership role.[34]

Vietnam also lingered in the minds of many. Did the U.S. possess the political will and national resolve to risk the high costs of human suffering and casualties that are a natural part of war? Would the American public support the use of military force to stabilize oil reserves in the Middle East? America set the record straight in *Operation Desert Storm.*

> [Saddam Hussein] underrated U.S. resolve. Saddam's model for dealing with the United States apparently was the Vietnam War. He seemed convinced that a small, determined, and well-armed country could wear down the U.S. commitment by threatening or inflicting significant U.S. combat casualties. Saddam boasted that his country was experienced in war [with Iran] and accustomed to casualties. He believed the United States would become distracted from the conflict and that a large domestic anti-war movement would develop to challenge U.S. national policy. He expected the U.S. population to be unwilling to make significant sacrifices on behalf of Kuwait.[35]

Was Saddam Hussein's theoretical construct so incredibly wrong or did his military tactics fail to support his national objective—protract the conflict long enough to have U.S. and world opinion falter or let age-old Arab-West cultural differences split the coalition? Certainly military instruments (e.g., an Iraqi air campaign, jamming, communications interruptions, terrorism, special forces) were available to him—any combination of which could have delayed the eventual Coalition victory. Whether these instruments could have prolonged the conflict to the point that public support soured will never be known, because the bulk of U.S. forces was never in any real danger. Still, the U.S. had planned for and had prepositioned medical facilities in the Persian Gulf region to accommodate thirty thousand casualties.

Overwhelming victory for Coalition forces could have indicated that Saddam Hussein had failed in his assessment of U.S. resolve. However, in another sense did *Operation Desert Storm* really provide the opportunity to test U.S. resolve or did new technology and the successful Airland Battle shorten the war in such a way that anti-war sentiment did not have time to grip America? Under similar circumstances, would Americans support a future protracted war in the Middle East for oil—or for any other political objective?

To say that Saddam Hussein's assessment of political resolve in this country was entirely wrong ignores the facts in the summer of 1990. Recall that Senator Sam Nunn, Chairman of SASC and one of the most influential members of Congress on defense matters, voted against the use of military force. Further, Senator Paul Simon warned:

> It is too easy here, or in the Oval Office, in an antiseptic kind of situation to say we are going to make a decision that will cost thousands of lives, tens of thousands of lives, not just Americans but Iraqis, and a lot of innocent people.[36]

A New Trend in Warfare? Just as *Operation Desert Storm* reflected traditional trends in warfare, so Senator Simon's warning clearly indicated how the Gulf War may prove to be an indicator of new trends in warfare. The following discussion delineates seven possible new trends.

(1) Senator Simon's statement indicated Congress's ongoing interest in the conduct of military operations. While civilian oversight and control of military forces continues as an issue of national interest, his statement also indicated one impact that new technologies may ultimately have on Americans' willingness to accept the most bitter cruelty of war—casualties. Although America tolerates an alarming amount of crime and violence on its streets, it views war differently. Some have suggested that Americans have an unrealistic expectation (based on emerging technologies) that wars should be fought essentially without casualties—not only among friendly forces but among the enemy as well.[37] The emerging reality of war should not be totally unexpected. The use of propaganda by successive administrations has led the American public to expect few casualties.

This expectation by the American public that warfare should be waged with few if any casualties was manifested in the Gulf War and may be a predictor of what national command authorities should expect in future wars, especially peripheral wars where U.S. national security is not at stake or where the stakes are questionable. Americans have come to expect a full accounting of friendly casualties (e.g., operations at Khafji); they have come to find collateral damage for the most part unacceptable (e.g., Tomahawk cruise missile that struck a hotel in Baghdad en route to attack an Iraqi nuclear facility); and they even require explanation of enemy deaths to determine if they were avoidable (e.g., intense interest in the number of Iraqi dead after the war).

In this analysis, should *Operation Desert Storm* be used as a yardstick to measure casualty rate success or failure? It would be unfortunate if it were to become the standard by which Americans judge casualty rates in war. That would, in Senator Simon's words, make for an "antiseptic" approach to the harsh realities of war. As harsh as the Vietnam war was, casualties in that conflict were only a fraction of what the U.S. experienced in the two World Wars.

(2) The Gulf War may be a predictor of future trends in warfare because it will be remembered as the time when air and space power held center stage. General McPeak, Air Force Chief of Staff, explained this recent evolution or revolution in air power:

> early air power theorists envisioned that airpower would be the decisive factor in war by attacking directly a nation's will to fight...and maintain forces in the field. All that would be left for friendly ground forces to do was march in and occupy the territory. [Their] vision has never been realized. [While they spoke of] core strengths of air power—speed, range, flexibility—[they] ignored...core weaknesses—lack of persistence, reliance on fixed, vulnerable bases, ineffectiveness at night. Our actual

experience up to the end of World War II showed that... we would need
to [concentrate] on precision and lethality. The atom bomb [in World
War II was] perfect from the standpoint of lethality, but for good reasons,
we chose not to use it in Korea, Vietnam, and many lesser
engagements.... So, even though air power played an important role in
Korea and Vietnam, it still was not decisive.... In Desert
Storm...execution began to catch up with theory...Speed, range, and
flexibility were finally seen to be joining up with precision and
lethality...this does not mean that we could avoid the four day ground
war [or] that ground troops or naval vessels are obsolete. But it means
that air power has come of age...speed, range, flexibility, precision, and
lethality are finally united into a decisive whole. The first doctrinal
lesson of Desert Storm is [that] no form of military power—land, sea,
air—has been employed effectively without first controlling the skies.
Because the Coalition established air supremacy early, we were able to
roam at will over Iraq, while at the same time our own ground forces
operated underneath an air sanctuary. This was a priceless advantage.[38]

By almost any standard, the air campaign in the Persian Gulf was impressive and the
lethality of air power in that conflict should need no confirmation. Still, it fell short according to
one report that stated that Iraq had been bombed back to the stone age.[39]

You may fly over a land forever; you may bomb it, atomize it, pulverize
it and wipe it clean of life—but if you desire to defend it, protect it, and
keep it for civilization, you must do this on the ground, the way the
Roman legions did, by putting your young men into the mud.[40]

Fehrenbech's assessment of overdependence on a single function within the military may
provide useful cautions for the role of air power in future conflict. Would the striking air power
victory have been as evident in the Balkans? Would the confidence of America's mostly
inexperienced (in combat) air warriors have been degraded if faced with a strong enemy on the
offensive?

(3) Coalition forces in the Gulf War benefited greatly from control of the high ground—
space. Space offered unprecedented strategic and tactical advantages, and the exploitation of
space assets for command and control in future wars is certain. Desert Storm validated space as a
force multiplier of the greatest magnitude—worldwide global coverage, low vulnerability, and
autonomous operation.

The Gulf War was the first war in history that integrated the exploited space capabilities—
communications, navigation, surveillance, targeting and weather. The Global Positioning System
(GPS) provided precise navigation that was critical to every phase of the order of battle. Defense
Support Program (DSP) satellites relayed early warning of Scud attacks, thereby minimizing their
impact as an instrument of terrorism, and the Defense Meteorological Satellite Program (DMSP)

provided weather data directly to field commanders. Field commanders had more real-time information than in any previous armed conflict.[41]

> [on information dominance in *Desert Storm*] Information supplied by space systems, AWACS, and Joint STARS gave commanders a current, comprehensive view of the battlefield and the capability to redirect forces against time urgent targets...[but] for all of our advances in C^3I, it still takes hours, even days for target data to reach crews...[we need] to develop the tightest possible loop between intelligence and operations. Best of all would be to pump intelligence directly into the cockpit...[that way] while enroute crews get real time data from a variety of collection platforms [and can] respond very rapidly to mobile targets or emerging threats.[42]

(4) Just as *Operation Desert Storm* established dependence on the operational capabilities of space as a new trend in modern warfare, high technology systems and "smart" munitions are firmly established as a trend of the future. America entered the Gulf War with the procurement baggage left over from $7,000 coffee pots of the 1970s and many believed that high-technology weapons were overpriced, overdesigned, and—most important—didn't work. The Gulf War changed all that.[43]

> The number one hardware lesson of the Gulf War is the revolutionary impact of stealth. Stealth restores surprise to the tactical engagement. And surprise, if you can achieve it, conveys almost overwhelming operational advantages. The ambush is nearly always effective, even on TV. Stealth meant that, once again, aircraft can ambush targets. [Lesson two is precision.] During *Desert Storm* precision had a simple meaning: hitting the aimpoint.... As we field combat forces of the future, stealth and precision must be first order requirements. Virtually everyone in the Pentagon has signed up to this fundamental notion. The next generation of fighter aircraft will certainly feature stealth. Also, all the services are working together on even more capable precision guided munitions. *Desert Storm* was different.... Stealth meant that any target could be attacked—we decided when. Precision meant that fewer sorties were needed to destroy targets.[44]

It should be stressed again that the unique geopolitical environment was especially significant in the outcome of the conflict. It is highly unlikely that future major regional conflicts will be fought with the level of disinterest shown by Russia in the Gulf War. The absence of any real threat of a veto in the U.N. Security Council left diplomatic efforts essentially unencumbered. Russia's position was also critical in a strategic sense. The absence of any real threat from Russia on the theater flank or from Russian forces staging in Western Europe provided strategic planning relief that enabled Coalition forces to concentrate all efforts against Iraq.

High technology, despite the obvious tactical advantages it offers, comes at a price not only in terms of weapons procurement, but also in the high cost of experience and training that can promote dependency on those technologies. What does this suggest for systems reliability as military procurement relies more and more on off-the-shelf technologies? What does it suggest about interoperability and interdependence of alliances and coalition partners? Also, future wars may see adversaries possessing the same high-technology weapons from the world's arms market—and the knowledge of how to use them.

(5) The Gulf War reinforced the need for rapid global mobility as a critical objective of U.S. national security strategy. Fortunately, the U.S. has not engaged in armed conflict on its native soil since the Civil War. If this strategy prevails—as it did in *Desert Storm*—this trend should not change in future warfare.

Because the international security environment is ever-evolving, the world will continue to see Persian Gulf-type hostilities, in which violence erupts at unpredictable locations in far and distant lands—with little or no notice. Can the U.S. realistically expect a future enemy to allow U.S. forces four months to develop a logistics lifeline and prepare for battle?

Many conflicts will be instigated by leaders like Saddam Hussein who violate human rights, disrupt world order, ignore international law and national sovereignty, and destroy the environment. In some conflicts, vital national interest security interests of the U.S. may not be at stake. In others, this nation's national security interests, perhaps even its sovereignty as now known, may be at risk.

As more and more of America's armed forces come home and overseas commitments are reduced, the availability of U.S. forces forward-based on location when such conflicts break out is less and less likely. That can only mean that the U.S. is most likely to have much less time to respond than what we experienced in the Gulf War. The ability to respond rapidly to changing threats and to project force globally on short notice to secure national objectives will continue to be a principal element promoting deterrence for would-be aggressors.

Operation Desert Storm demonstrated the criticality of strategic airlift to achieve global reach and project force rapidly to achieve national security objectives. As the only nation with the ability to project the massive firepower required to confront something like Iraq's invasion of Kuwait, the United States must maintain a rapid deployment capability. What does this situation suggest about the need to modernize America's aging strategic airlift fleet?

(6) General Horner credited America's victory in the Gulf War to years of joint planning, joint training and joint exercises—critical elements likely also to affect the outcome of future wars.

> Our aircrews entered the conflict having trained as they were expected to
> fight. Regional exercise scenarios gave us the opportunity to closely

> analyze our potential adversaries. Knowing the enemy gave us the
> opportunity to exploit his weaknesses. Annual and biannual
> exercises...paved the way to realistic and pragmatic expectations....
> Deployments into the desert gave us an understanding of the effects of
> heat, sand and dust on our personnel and equipment and allowed us to
> make adequate preparations to overcome the elements.[45]

Joint training was equally critical for reserve components, and—as the nation continues to reduce its military forces and entrust the reserve components with increasing numbers of active-duty missions—the trend toward joint training is likely to continue in future wars. While General Horner has cited the brilliant performance of Coalition forces on the battlefield as evidence that the Total Force program is on track,[46] others have cited shortfalls in reserve component training as a legitimate concern in future wars.[47]

(7) Finally, as the first "Goldwater–Nichols War," *Operation Desert Shield/Storm* clearly demonstrated the effectiveness of centralized command and control with clear lines of communication and combatant commanders in charge:

> [a] doctrinal lesson from the Gulf concerns centralized management...the
> theory [that] has by and large been ignored in practice.... In Vietnam, the
> Air Force and Navy had responsibility for operations in separate
> geographic areas in the north, and the Strategic Air Command retained
> control of B-52 strikes. In the mid-1980s [Goldwater–Nichols] fixed that
> [and] vested all of the responsibility for the theater air campaign in a
> single joint commander...working for a unified CINC. The JFACC
> concept was used in the Gulf War...[and] I believe the results speak for
> themselves.[48]

Former Secretary of Defense Dick Cheney also praised the effectiveness of the Goldwater–Nichols Department of Defense Reorganization Act of 1986 in providing the command arrangements and the jointly trained military leadership necessary to prevail in this major war.

> Command arrangements were challenged by the deployment of such a
> large force in a relatively short period of time, the creation or expansion
> of staffs at various command levels, the melding of forces of many
> different nations and of different services into an integrated theater
> campaign. The result was a coordinated [combat] operation of great
> speed, intensity and effectiveness. The [services] provided excellent
> military advice on the proper employment of their forces and fielded
> superbly trained and equipped forces [so that] General Schwarzkopf got
> everything he required to prosecute the campaign successfully.... The
> nation was well served.... It was a magnificent team effort.[49]

The Gulf War tested both the roles and missions of the CINCs of the Unified and Specified Commands, as well as their relationships with the military services and the service components of their commands, a principal concern that resulted in Goldwater–Nichols.

The difficulty of managing complex relationships among the forces was compounded by great cultural differences and political sensitivities among Coalition partners. Organizational problems were solved by creating an innovative command arrangement involving special parallel international commands (Figure 5-6). General Schwarzkopf commanded forces from the western countries and served as overall CINC. Forces from the Arab and Islamic nations were placed under command of Saudi Lieutenant General Khalid bin Sultan bin Abdul-Aziz.[50]

Although this unique command relationship unquestionably worked in the Gulf War, its success should not be attributed solely to the Goldwater–Nichols Act. Goldwater–Nichols did not address how coalitions should be managed, and command arrangements in the Gulf War should not be viewed as a template for the future. Did the command model and leadership style reflect more the need in World War II to survive the battle, rather than the less effective command and control arrangements observed in the Iranian hostage rescue mission, *Desert One*, or the debacle that followed the terrorist bombing of the Marine barracks in Beirut?

An Anomaly? Military establishments have historically been criticized for being well prepared to fight the "last" war, but ill-prepared to confront the challenges of new acts of international aggression. Change is the only constant in world events. Future circumstances will be different from the past making the prospect that future wars will be different a certainty. Even if Saddam Hussein stays in power in Iraq and directs another invasion to capture and occupy Kuwait, that conflict would differ from *Operation Desert Storm*. All wars are unique.

Still, the Gulf War's uniqueness seems to rest on three principal factors. First, and perhaps foremost, the conflict occurred at a peculiar historical moment. The diplomatic landscape was different from anything this nation had experienced since World War II. *Operation Desert Storm* was sandwiched precisely between the collapse of the Warsaw Pact and the downsizing of large U.S. military forces required by the Cold War.

Unique world diplomatic landscape. On the one hand, this circumstance saw the U.S. with fully trained, full-strength units, robust from the defense build-up of the 1980s, that were available to deploy to the Middle East. The U.S. could move the Army's VII Corps from Germany to Saudi Arabia, because the Soviet threat to Western Europe had greatly diminished.[51] Further, deployments and operations benefited immensely from a worldwide system of fully operational U.S. and allied military installations in Europe which existed largely because of the Cold War. Much of the strategic airlift so critical to *Operational Desert Storm* transited through well-equipped bases at Rheinmain in Germany and Torrejon in Spain.[52] The U.S. military drawdown will reduce both the size and quality of the nation's military forces, including much of the NATO staging capacity, as Congress trims both endstrength and training and maintenance budgets.

On the other hand, at the onset of the Gulf War the U.S. was dealt a free hand on the world political stage. For the first time in more than fifty years, the U.S. was not preoccupied with its

principal adversary—the Warsaw Pact nations—because those nations were themselves totally focused on more pressing domestic issues. One has only to look at Korea and every military engagement since to see the diplomatic quagmire which that bipolar struggle created. Absent a political stalemate with the former Soviet Union, the U.S. was able to build a consensus of
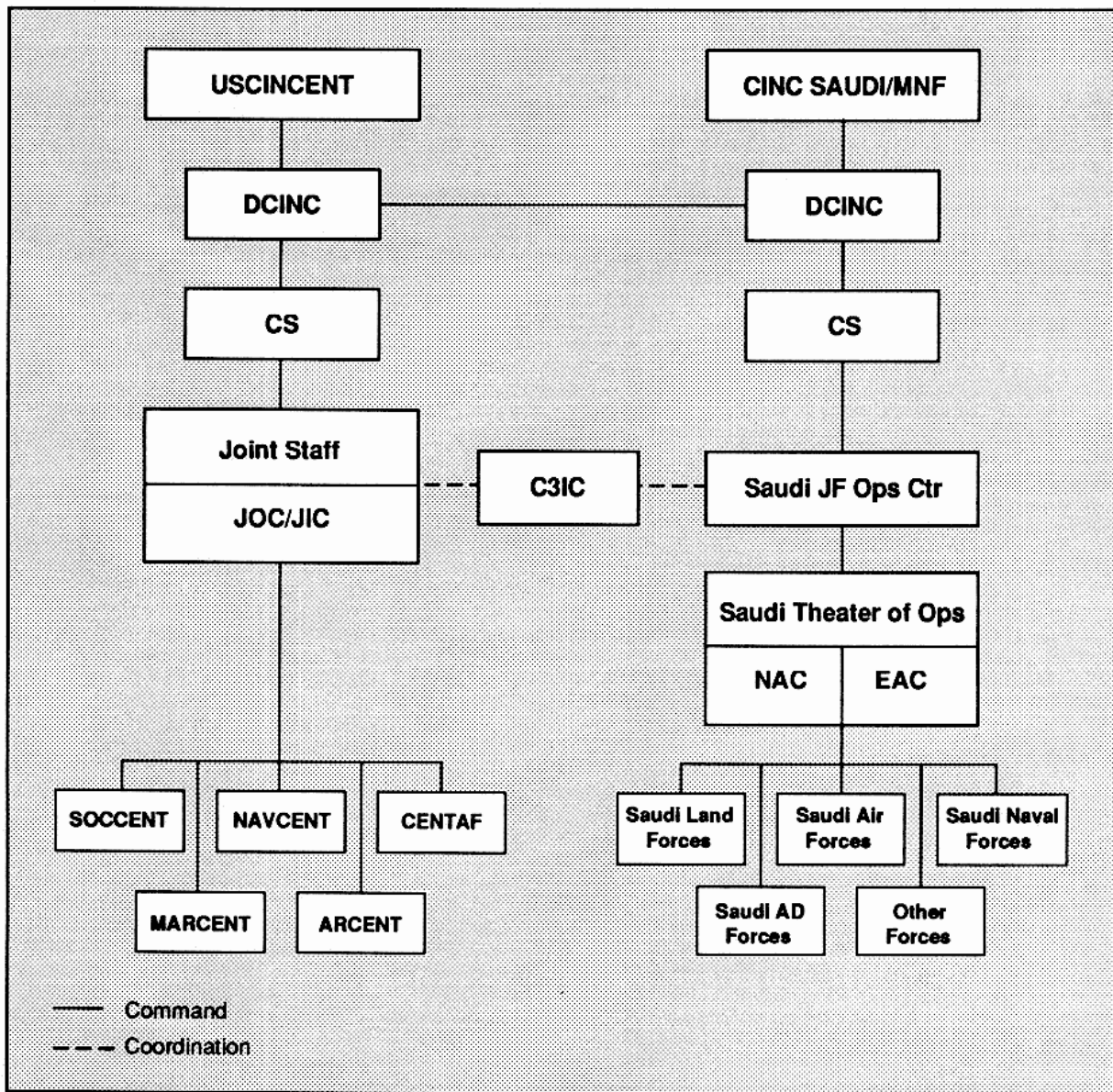
Source: Paul R. Schwartz, "Coalition Command and Control in Desert Shield/Desert Storm," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1991* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-93-1, February 1993), 197.

Figure 5-6
Allied Command Structure

support both in the United Nations (without the threat of a Soviet veto in the Security Council) and in the Middle East with a Coalition force supported by Arab leaders.

Iraq's grand miscalculations. Second, the Gulf War may prove to be an anomaly because of Saddam Hussein's ineptness both as the recognized leader of his nation's military forces and as an observer of the changing political climate. Future U.S. Presidents will face adversaries that have learned from Saddam Hussein's mistakes.

As commander-in-chief of Iraq's military forces, Saddam Hussein was illiterate in the art of modern warfare. While even the most casual observer would be aware that he failed in a tactical sense, his greatest failure was in doctrine. His forces were trained and prepared to fight a protracted, linear order of battle. The simultaneous barrage of air, land and sea forces which are part of modern U.S. Airland Battle doctrine overwhelmed his troops, broke their will to fight, and ultimately resulted in the Coalition victory.

Saddam Hussein's concept of operations also proved a failure. He had seized the initiative with the surprise invasion of Kuwait, and he had a military force capable of dominating most if not all of the smaller Arab emirates as well as Saudi Arabia had he continued the assault. This situation would have presented major logistics and staging problems for U.S. forces. Indeed, the question arises whether a coalition of Arab forces would have even been possible under those circumstances.

Instead, he chose to halt his forces at the Kuwait–Saudi border and dig in with a defensive posture that promised a lengthy war of attrition, which he determined would undermine the political resolve of the American public. While some could argue that conceptually he may have been correct about the willingness of the American public to support another distasteful experience like Vietnam, he failed in a military sense to recognize the movable fortress concept in modern military tactics.[53] No commander would engage in a direct frontal assault against entrenched enemy forces in heavily fortified positions if other tactical options are available. Of course, CINCCENT recognized the vulnerability of the rigid defensive posture and engaged Iraqi forces on the ground with a rapidly mobile, multifaceted ground offensive and the now famous "left hook," which totally overwhelmed the enemy and brought the world's fourth-largest army to its knees in just a hundred hours. Can future U.S. presidents realistically expect any adversary to employ such nonsensical strategy?

Time to stage Coalition forces. Worse yet, Saddam Hussein forfeited the critical advantage of time, namely, the more than four months that he allowed his forces to remain dug in while Coalition forces established one of the best sustained and longest combat logistics lifelines in the history of modern warfare. Iraqi troops were already tired from their long and inconclusive war with Iran, and the number of desertions suggests that they were not prepared for another major war. Saddam Hussein found himself with few military options and allowed Coalition forces to prosecute the war on their terms.

Those four months during which Iraqi forces sat in their bunkers and watched the enemy prepare for war are unique in modern warfare. U.S. forces were allowed to stage in the KTO

without disruption (**Figure 5-7**). Careful staging with a logistics lifeline stretching throughout Europe enabled the U.S. to deploy and sustain an overwhelming military force, a critical objective insisted upon by General Powell. This careful staging minimized American casualties, further solidifying public support for the war.
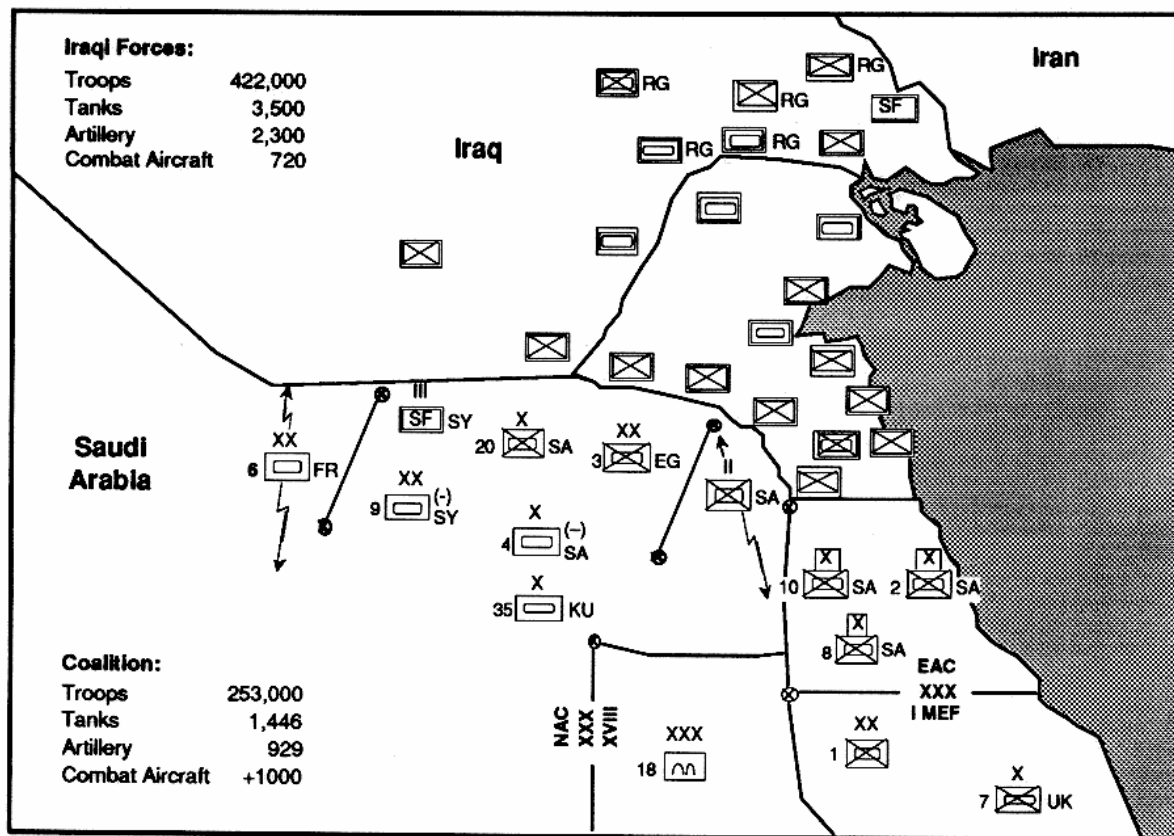
Paul R. Schwartz, "Coalition Command and Control in Desert Shield/Desert Storm," *Seminar on Intelligence, Command, and Control, Guest Presentations, Spring 1991* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-93-1, February 1993), 183.

Figure 5-7
November 10: Allied Defensive Posture

Chemical weapons. Saddam Hussein chose to engage Coalition forces in the strictest conventional sense. He had biological and chemical agents available in his arsenal and his combat forces were experienced in their use. Had he used countervalue and guerrilla warfare, the outcome in the Persian Gulf might have been considerably different. In World War II, the U.S. demonstrated that it could prevail in a conventional war. Despite Goldwater–Nichols, the U.S. military has yet to demonstrate that it can win a major regional conflict in unconventional warfare—against guerrilla warfare or terrorism. Like Vietnam, such conflicts, which are easily protracted, pose the greatest threat to American public support.[54]

Alienated world opinion. In a political sense, the Gulf War may have been an anomaly particularly in Saddam Hussein's gross underestimation of world opinion and U.S. political resolve. He managed to alienate most of the Arab world with his disregard for the environment, national sovereignty, and human rights.[55] Worse, he underestimated the resolve of the U.S. national command authorities to confront aggression. He failed to view the U.S. as a nation eager to erase an embarrassing legacy and image caused by failure in Vietnam, Iran, Lebanon, and Grenada.

Saddam Hussein also failed to understand the impact that the breakup of the Warsaw Pact could have on U.S. options to resolve the conflict. This greatly reduced prospects of a protracted engagement in and of itself.

Forfeited control of the skies. Finally, the Gulf War may prove to be an anomaly in the application of air power. Saddam Hussein started with a credible air force, rated by some as the sixth best in the world. His pilots had been combat tested in the eight-year war with Iran. Still, he chose not to use the air arm of his military force despite proof in modern warfare that control of the skies is paramount for victory. Instead, his forces remained in place as sitting ducks for the massive Coalition air campaign.

Not only was the air war uncontested, but the air campaign was also staged over desert terrain ideally suited for mobile armor and air power and largely free of noncombatants. How effective would new high-technology weapons be in the mountains of eastern Europe or the jungles of the Pacific rim? How would U.S. pilots perform under pressure from highly trained aggressor air forces in these environments?

Most important, it takes time to organize, train and equip effective fighting forces. As already mentioned, *Operation Desert Storm* occurred at a peculiar time in American history. General Homer said it best:

> [The] National Command Authority...was willing to ensure that the
> military had the best possible equipment and weapons and the freedom to
> act, creating an unprecedented synergistic effect. The equation was
> simple: the right national leadership, concrete national objectives, well-
> trained and motivated airmen and the right equipment to do the job.[56]

Notes

[1] Nicholas Phythian, quoting Iraqi President Saddam Hussein, "Saddam Warns Iraqis to Prepare for War, Vows No Retreat," *Reuters*, Sept. 21, 1990.

[2] President George Bush, "Address Before a Joint Session of Congress on the Cessation of Hostilities," reprinted in full in *Military Review* (September 1991), pp. 87-90.

[3] Coalition refers to those nations allied with the U.S. for the specific purpose of expelling Iraqi combat forces that occupied Kuwait. Coalitions differ from alliances inasmuch as they tend to be more loosely structured and routinely focus on a single objective. Alliances tend to result in agreements to promote the allies' security in a particular region for an unspecified period of time. The Coalition referenced during *Operation Desert Shield/Desert Storm* was a loose and sometimes fragile alliance with an unusual combination of member nations representing the West and most of the Islamic world. This unusual alliance demonstrated one of Saddam Hussein's greatest miscalculations in the war. He seriously underestimated the impact of his occupation of Kuwait on his Arab neighbors in Egypt, Syria, and Saudi Arabia. Throughout the war, he called for Arab unity, attempting to define the war as another Arab-Israeli dispute to split the Coalition. Israel's demonstrated resolve to remain out of the conflict, even when its citizenry was subjected to Scud missile attacks, was fundamentally damaging to his argument. Further, Saddam's invasion of Kuwait upset OPEC's balance of power and therefore became unacceptable to Iran, Syria, Egypt, and Saudi Arabia.

[4] James W. Pardew, Jr., "The Iraqi Army's Defeat in Kuwait," *Parameters* (Winter 1991–92), p. 19.

[5] Department of Defense Final Report to Congress Pursuant to Public Law 102-25, *Conduct of the Persian Gulf War* (Washington D.C.: U.S. Gov't Printing Office), p. ii.; hereafter cited as the DOD Final Report to Congress.

[6] Pardew, p. 17.

[7] Ibid., p. 21.

[8] DOD Final Report to Congress, p. 251.

[9] Ibid., p. 250.

[10] Coalition naval forces included units from fifteen nations: Saudi Arabia, the U.S., Canada, Greece, the Netherlands, Norway, Australia, Poland, the U.K., France, Belgium, Spain, Denmark, Italy, and Argentina. Again, the Coalition brought together unlikely partnerships such as naval forces from Argentina and the U.K.

[11] DOD Final Report to Congress, p. 306.

[12] Paul R. Schwartz, "Coalition Command and Control in Desert Shield/Desert Storm," *Seminar on Intelligence, Command, and Control, and Guest Presentations, Spring 1991* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-93-1, February 1993), p. 192.

[13] Ibid., quoting Anthony G. Oettinger.

[14] Ibid., p. 194.

[15] President George Bush, remarks in a speech on *Operation Desert Storm*, May 29, 1991, quoted in the DOD Final Report to Congress, p. 117.

[16]Twelve nations provided air forces for the Coalition. Represented in the air campaign were air assets from Saudi Arabia, the U.S., the U.K., Canada, France, Italy, New Zealand, Bahrain, the United Arab Emirates, Oman, Qatar, and Kuwait.

[17] DOD Final Report to Congress, p. iii.

[18]Charles A. Horner, General, USAF, "The Air Campaign," *Military Review* (September 1991), p. 24.

[19]Final Report to Congress, p. 118.

[20]Horner, pp. 16-27.

[21]DOD Final Report to Congress, p. 118.

[22]Ibid., p. 119.

[23]Pardew, p. 20.

[24]Horner, p. 22.

[25]Schwartz, p. 195.

[26]Twenty-six nations provided forces to support the Coalition ground offensive, including Saudi Arabia, the U.S., the U.K., France, Kuwait, Egypt, Bangladesh, Senegal, Czechoslovakia, South Korea, the Philippines, Romania, Singapore, Syria, the United Arab Emirates, Oman, Qatar, Bahrain, Morocco, Pakistan, Niger, Afghanistan, Poland, Hungary, Sierra Leone, and Sweden. Support from eight Arab nations should have been a clear signal to Saddam Hussein that even his Arab neighbors legitimately condemned the occupation of Kuwait.

[27]DOD Final Report to Congress, p. 312.

[28]President George Bush, "The Deployment of US Armed Forces to Saudi Arabia," a "Presidential Address to the Nation," reprinted in *Military Review* (September 1991), pp. 82-83.

[29]Thomas D. Morgan, "Air Raid, Pearl Harbor. This Is No Drill," *Military Review* (December 1991), p. 94.

[30]Thomas R. Dubois, "The Weinberger Doctrine and the Liberation of Kuwait," *Parameters* (Winter 1991-92), p. 26.

[31]President Bush, "The Deployment of US Armed Forces to Saudi Arabia," p. 83.

[32]Horner, p. 21.

[33]Kenneth P. Werrell, "Air War Victorious: The Gulf War vs. Vietnam," *Parameters* (Summer 1992), p. 47.

[34]Dubois, p. 26.

[35]Pardew, p. 18.

[36]Paul Simon, U.S. Senate, "Selected Quotes from Congressional Debate," reprinted in *Military Review* (September 1991), p. 95.

[37]Harvey M. Sapolsky, "War Without Killing" (Cambridge, Mass.: Massachusetts Institute of Technology, Defense and Arms Control Studies Program, Sept. 19, 1992), pp. 1-28.

[38]Merrill A. McPeak, General, USAF, "Air Power: Lessons Learned From Desert Storm," a speech for Air War College graduates at Maxwell AFB, Ala., June 7, 1993, pp. 1-4.

[39]Nora Boustany, "Baghdad Is a Ghost Town," *The Washington Post*, Jan. 19, 1991, pp. A1, A21.

[40]T.R. Fehrenbach, *This Kind of War*, quoted in DOD Final Report to Congress, p. 311.

[41]Donald B. Rice, Secretary of the Air Force, "Reshaping for the Future," U.S. Air Force White Paper presented before the U.S. House of Representatives—House Armed Services Committee in February 1992, published in *Toward the Future: Global Reach—Global Power* (Washington, D.C.: U.S. Gov't Printing Office), p. 53.

[42]McPeak, p. 2.

[43]Werrell, p. 49.

[44]McPeak, p. 3.

[45]Horner, pp. 18-19.

[46]Ibid., p. 21.

[47]Lawrence D. Richardson and Abbott A. Brayton, "Reserve Force Training After the Gulf War," *Parameters* (Summer 1992), pp. 77-85.

[48]McPeak, p. 3.

[49]Dick Cheney, Secretary of Defense, "The High Quality of the U.S. Armed Forces," remarks printed in the DOD Final Report to Congress, p. xx.

[50]Ibid.

[51]For a comprehensive review of events that led to break-up of the Soviet Union, see Gladys D. Ganley, *Unglued Empire: The Soviet Experience with Communications Technologies* (Norwood, N.J.: Ablex Pub. Corp., 1996).

[52]DOD Final Report to Congress, p. vi.

[53]Ralph Peters, "The Movable Fortress: Warfare in the 21st Century," *Military Review* (June 1993), pp. 62-71.

[54]Werrell, p. 52.

[55]William M. Arkin, Damian Durrant, and Marianne Cherni, *On Impact: Modern Warfare and the Environment—A Case Study of the Gulf War*, a study prepared by Greenpeace for the Fifth Geneva Convention on the Protection of the Environment in Time of Armed Conflict (London: Greenpeace International, May 1991), pp. 1-16.

[56]Horner, p. 17.

Chapter Six
Implications for Command and Control

[on change] *Change, we must remember, with all its difficulties, is inescapable. Our fears over even very minor shifts in custom are usually quite beside the point. Civilizations might change far more radically than any human authority has ever had the will or the imagination to change them, and still be completely workable.*

Ruth Benedict, 1934[1]

If any single measure has historically characterized the United States it is change. The United States began, more than two hundred years ago, as a struggling experiment in democracy. Successful adaptation to change has enabled a handful of colonies to emerge as one of the all-time great nations of the world.

However, that world has seldom been peaceful, and this remains true today. The U.S. emerged from the Cold War as a sole superpower in a world filled with global security tensions, global calls for human rights, and a global economy that is changing international geopolitics and the nature of armed conflict. Significance challenges face the U.S. as a result of social, geopolitical, and economic unrest...and greater global interdependence.

Although the end of the Cold War promised hope for world peace, the harsh realities of economic despair among many of the new democracies has resulted in re-emerging nationalism, ethnic suppression, religious extremism, and terrorism. Communism as we have known it may be temporarily dead, but it may be re-emerging in a different form and presenting new challenges for U.S. national security. Although the end of the Cold War significantly reduced the threat of a global nuclear confrontation between East and West superpowers, lesser wars are exploding in virtually every sector of the globe at an increasing and alarming rate, as is the threat of nuclear proliferation. The growing numbers of U.S. ground forces committed to these "lesser conflicts" clearly reinforces the impression that the world is still a very dangerous place.

Are America's armed services prepared to meet those challenges in the new world order? Was *Operation Desert Storm* an adequate test of command and control improvements resulting from the Goldwater–Nichols legislation? Can lessons learned from a conventional campaign be used adequately to predict how America's military will perform in low intensity conflict or respond to state-sponsored terrorism? Are America's armed services now structured effectively to meet the potential demands of the ever changing geopolitical scene?

Future command and control relationships, then, may be just as dynamic as the tide of forces that have changed the global picture. Technological superiority has become a fundamental element for determining victory in future armed conflict.

But technological supremacy comes at a cost, and there is already a national debate on this subject. The military, like other government agencies and corporate America, has faced the harsh realities of downsizing to meet fiscal realities. Much as the Post Office Department—the single largest employer next to DOD in the U.S.—experienced in the 1970s, DOD has engaged in a top-to-bottom review to redefine its fundamental roles and missions.[2]

This chapter explores these issues by asking questions in four general areas: (1) Did Goldwater–Nichols answer the mail for DOD's command and control and interoperability questions? (2) What does the changing world order mean for evolving roles and missions? (3) What implications does the changing geopolitical scene have for the future of coalition warfare? (4) Is it time for the military and the nation to look beyond *jointness*, to accept joint interoperability of military forces as a fundamental prerequisite to modern warfare and focus on more pressing fiscal and technological challenges?

Did Goldwater–Nichols Answer the Mail?

Given that Congress went to great lengths to address the organizational issues that plagued Pentagon effectiveness in Vietnam, Iran, Lebanon, Grenada, and other less publicized military missions and exercises, it seems important to explore what implications Goldwater–Nichols holds for future armed conflict. This appears especially significant as the importance of joint command and control interoperability among the services increases with each new armed conflict (**Figure 6-1**).

In this section, these issues are briefly discussed in nine areas: (1) the healthy nature of inter-service competition, (2) balance among overlapping missions, (3) the roles and missions debate, (4) interoperability requirements, (5) difficulties in combat operations, (6) the DOD's resource allocation process, (7) hollow force warning signs, (8) excess depot maintenance capacity, and (9) civil-military relations.

Healthy service competition. Competitive tensions among the military services may not be entirely counterproductive to the nation's best interest. Informed military personnel from each of the services often highlight the vulnerabilities of another service's proposed weapons acquisition program both doctrinally and operationally in an effort to gain the upper hand for one of their own pet projects. Much of this information is intentionally leaked to Congress, competitors in the defense industrial sector, and the press. In a sense, this stimulates debate, which, theoretically, should produce sound logic for acquiring new systems—and identify choice alternatives both for the defense establishment and the American people.

The issue is not as simple as some would suggest: that power-hungry generals and admirals are attempting to sacrifice the nation's interest to their own. Collusion, turf battles, and other symptoms of overlapping responsibilities are not always the enemies of effectiveness. Some

would argue that debate sparked by the Billy Mitchells of history has been healthful for the nation.[3]
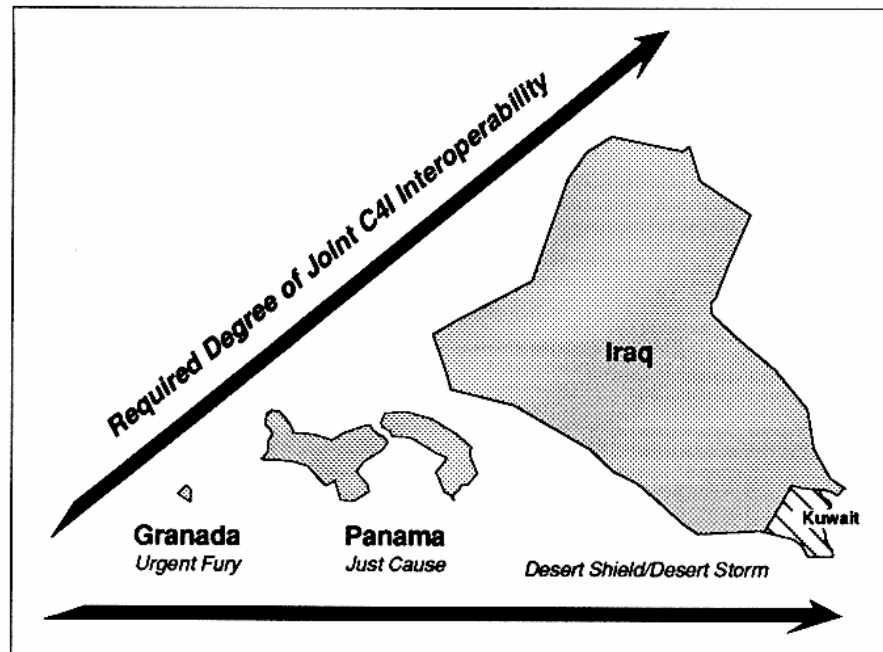
Source: Albert J. Edmonds, C4I For the Warrior (JCS Publication, 12 June 1993), 2-3.

Figure 6-1
Recent Military Campaigns

Unfortunately, in many respects, healthy debate in the halls of the Pentagon is seldom viewed as legitimate concern over roles and missions from the military doctrine perspective. Instead, it is often reported in the press and viewed by members of Congress as service bickering or parochialism.

A call for balance. Should this debate be encouraged rather than penalized? After all, most debate son issues of national security strategy and U.S. foreign policy have elements of wisdom on both sides of the table. The military services are capable of different and sometimes overlapping missions, which may well serve the nation best. Each of the military services is able to offer the government strategic and operational options.[4] Again, this flexibility has been critical to endurance of this nation's democratic principles. Anthony Oettinger summed up the complexity of the debate on this issue:

> If one were indefinitely wise and the world were indefinitely arrangeable, then maybe you could define totally non-overlapping subresponsibilities. But in the real world that strikes me as impossible, and, therefore, even if angels were in the organization they would end up fighting over ill-

defined turf. It seems that folks tend to overlook that act and believe that it requires either malice or stupidity or both for people to fight, and [they don't realize] that it's inherently impossible to define non-overlapping responsibilities.[5]

Roles and missions debate. As the nation struggles to downsize its military forces to meet post-Cold War economic and military objectives, this debate over roles and missions continues to rage. It appears to have had little impact on *Operation Desert Storm*, the first real test of Goldwater–Nichols.[6]

Evidence is not hard to locate. What about U.S. Navy concerns following *Operation Desert Storm* that they did not get a large enough piece of the action? Does this bring back memories of the Teheran rescue attempt and *Operation Urgent Fury* in Grenada? Was this the reason for the decision to use Navy Tomahawk missiles to destroy an Iraqi nuclear facility on the outskirts of Baghdad following the war? Was this the best approach, knowing now the public reaction to the damage caused to Iraqi civilians in a hotel near the city?

Further, as the downsizing debate continues, the Air Force Chief of Staff, reflecting on the air campaign in the Gulf War, was quoted as saying: "There is too much fighter force in the nation...not in the Air Force."[7] Even before the war the debate over the supremacy of air power raged. An Air Force Chief of Staff (General Dugan) was relieved of duty for saying, among other things, that the Air Force alone could produce victory if the nation were forced into war in the Persian Gulf.[8]

Not to be left out of the controversy, the Navy has promoted its Maritime Strategy as if it were the National Military Strategy.[9] Also, the Marines have promoted themselves over the Army as the nation's contingency force of choice, while the Army countered with creation of light infantry divisions to supplement Marine capabilities.[10]

However, beyond this "healthy debate" there remain questions surrounding the need for further DOD reorganization. The Air Force met the downsizing problem head-on by merging 13 major commands into 10 newly oriented commands in the Department's most sweeping organizational changes since air power became a separate service in 1947. This resulted in a reduction of major command headquarters' staffs and support forces for a downsized Air Force.

The Navy also reorganized its staffs. Especially significant in the Navy restructure plan, however, was an effort to create a new Navy staff that, for the most part, mirrored the JCS organizationally. The Navy's initiative offers further implications for expediting paperwork through the headquarters, as well as joint training and exercising, and interoperability in combat operations.

Why have all the military services not followed the Air Force's lead in substantially reducing headquarters staffs and empowering local commanders? Why have the other services

not followed the Navy's lead in creating a headquarters staff which mirrors the JCS staffs and theater command organizations?

Compatible organizational structures are essential to effective interoperability in combat, both with other U.S. military forces and those of our partners in alliances and coalitions. The more compatible organizational structures are, the easier all else becomes in training and in combat. Of course, interoperability is true essence of flexibility.[11]

Taking restructuring initiatives further to issue new doctrine that addresses the post-Cold War world, DOD, JCS, the Air Force, the Navy, and even the United Nations have each published new perspectives to rethink old doctrine.[12] This is a significant change, since doctrine is one of the four essential pillars of joint service interoperability (i.e., doctrine, training, communications and compatible structures) necessary for victory in combat—and so lacking in military failures of the past.[13]

Interoperability problems among the services, highlighted by failures in Grenada at the very time Congress was considering legislation to reorganize the DOD, were a major force that resulted in Goldwater–Nichols. The consistent finding in congressional deliberations was that all future U.S. military operations would occur in the joint service arena—making interoperability a critical test of the effectiveness of Goldwater–Nichols.[14]

Improved interoperability needed. However, if interoperability effectiveness is the scoring measure for Goldwater–Nichols, U.S. military forces demonstrated in *Operation Desert Storm* that they passed—but were not honor students. The scope and complexity of combined military operations in the Gulf War demonstrated both progress that had been made by the services in joint interoperability and areas that still require attention. Although the magnitude of the successful joint deployment should be appreciated, there were operational problems that merit review.

Even though General Horner praised the effectiveness of the JFACC concept as critical to the successful air campaign[15]—and it was—the Center for Naval Analysis identified several air campaign interoperability problems between the Navy and Air Force, including JFACC operations, intelligence support, and data-link connectivity.[16] The JFACC distribution systems for the ATO were especially weak. The Computer Assisted Flight Management System (CAFMS) used extensively to develop and transmit the ATO was not compatible with the Navy's on-ship communications systems, requiring shuttle flights to distribute the ATO to aircraft carriers in the Persian Gulf.[17]

Interoperability problems with intelligence support among the services also hampered combat operations. Ineffective communication among intelligence officers and their operational counterparts encumbered joint planning efforts as did the lack of any agreed upon system for Bomb Damage Assessment.[18]

Serious data-link connectivity problems also existed among land, air, and sea assets. Data-link mismatches required hardware workarounds to establish effective communications between Naval vessels and the Airborne Warning and Control System (AF E-3A AWACS) platform. This may have been caused, in part, by the Navy's failure to participate in the U.S. Army Forces Command's Joint Systems Training Exercises (JSTE) that test, among other things, inter-service data-link communications.[19]

Difficulties in combat operations. There were other operational difficulties as well. The Navy refused to relinquish over-water combat air patrols (CAPs), although Air Force AWACS maintained a better overall tactical picture of the Persian Gulf. Confusion also existed over operating procedures to be employed by the Air Force F-15 High Value Unit CAPs supporting Navy EA-6B tactical jamming units on air strikes into Iraq, since the tactics had previously not been exercised. Further, some joint airborne refueling operations, a procedure seldom exercised in peacetime operations by some of the services, were conducted without radio communications.[20]

Such combat operations interoperability problems have been the norm for decades and are likely to continue if adequate training/exercising resources are not validated by the Joint warfighting capabilities process during peacetime. What does this imply for future command and control interoperability effectiveness as fiscal realities continue to squeeze the operations and maintenance (O&M) accounts in each of the services? Does this not also suggest the need to continue perfecting joint operations doctrine?[21]

As more and more pressure is placed on the O&M accounts, some have asked if Goldwater–Nichols went far enough in enhancing the command and *control* of the warfighting CINCs. Neither Goldwater–Nichols nor the original Packard Commission Report recommended any changes in the Pentagon budgeting process, although there was considerable concern expressed in Congress. Should the CINCs have greater influence in resource allocation?

Resource allocation. Goldwater–Nichols addressed the question indirectly. The legislation made CJCS the senior military advisor to the President and the Secretary of Defense and required that office to submit an independent, biennial assessment of the service Program Objective Memorandum's (POM) ability to meet objectives of the National Military Strategy. By empowering the CJCS and inviting CINC participation, legislators believed that the resulting POM would satisfy requirements of the national strategy.

However, the legislation did not require that development of the national strategy, which is a philosophical document, be fiscally constrained. The national strategy that demands U.S. military forces be prepared for anything from global thermonuclear war to conventional war in two major regional conflicts to counterinsurgency and counterterrorism in a conceptual sense ignores fiscal constraints in a practical sense, because fiscal realities are not integrated as part of the national strategy building process as it now functions.[22]

The result has been totally predictable. Budget submissions tailored to meet requirements of the national strategy have always exceeded resources. This has forced the military services to "prioritize" their "requirements" to meet the national strategy, an enigma in and of itself. As might be expected, that planning process asks too much of the services, which have legitimate concerns with budget shortfalls in their sphere of responsibility—air, space, land, sea—that may ultimately impact America's ability to wage and win war. This is the origin of what is widely reported as service parochialism when, in effect, the process is flawed from origin, because the services are being required to perform more missions than fiscal realities will support.

Ultimately, the DOD has to balance the checkbook. The result is that prioritization often does not occur realistically, and a common perception of the national strategy is not possible. The Navy builds requirements based on its maritime strategy *From the Sea*,[23] which views global requirements being the same at both ends of the spectrum of conflict—the sea. The Air Force views conflict from a *Global Reach-Global Power*[24] perspective, which requires strategic lift for not only U.S. military forces, but for most U.S. allies, with the ability to project firepower in a rapidly moving air campaign anywhere in the world within 24 hours. The Army structures forces to fight the Airland Battle[25] and assumes that the other services will provide not only strategic and tactical lift, but also sustainment of Army troops on the ground throughout any engagement.[26] The format encourages service and DOD comptrollers to seek short-term business solutions to long-term mission requirements.[27]

One approach to this perennial budget-cycle problem would be the development of a Joint POM by the JCS. This question should be explored from two perspectives: (1) Does the JCS have the resources—time and manpower—to develop a Joint POM unilaterally? (2) Would a JCS-developed Joint POM eliminate the philosophical confrontation between the needs of strategic global modernization and the need to fight tomorrow's regional conflict?

First, the JCS is relatively small compared with the staffs of the military departments. For the most part, JCS has functional representation and expertise from the services only in critical occupational specialties. Many of the program areas—regardless of size in terms of budget requirements—have only superficial representation from the services and receive broad-brush review. The hard-core number crunching and technical requirements are hammered out by the much larger service staffs—where the resident technical expertise is—and prioritized before reaching the JCS, although this has diminished somewhat over the years.

To develop a JCS staff capable of providing the expertise necessary to develop a Joint POM would in effect simply displace the staffs of the military departments or duplicate them. Would centralized management improve the process? With budgets heading south, is it practical to suggest growing the JCS staff—and consequently increasing the number of personnel assigned to the Pentagon—which would require congressional approval? Would the nation be better served?

Further, the issue of confrontation between the military departments and the CINCs should be re-examined. Is it entirely unhealthy? Does the debate produce a better end product given budget constraints, or does it just simply represent more parochialism? General Herres reflected on this very question:

> There was a lot of pressure to obliterate the gap...[to give] the CINCs their own budgets...and that would have emasculated the military departments, creating the utmost in disaster. There's a reason for having military departments. The services have vast logistics systems to manage. Somebody's got to do that, and the CINCs can't.... We needed a situation where [the CINCs] could exert more influence over the services, and I think we've struck a good balance now. They [the CINCs] don't have their own budgets...but there is the opportunity to exert influence without controlling what the services do. The CINCs still are the operational commanders, and that is their primary purpose. I think the [resulting balance] is pretty good.[28]

At stake also are the conflicting roles and missions of the CINCs and the military departments. The military departments concern themselves with future military capabilities and future force structure, which requires long-range planning and development of replacement weapons systems that ultimately must compete with the CINCs' priorities for tomorrow's battle. However, this argument holds that the CINCs—who may next year transfer to another AOR or staff position—have no interest in long-range planning. General Herres added:

> In the Air Force, there are guys worried about...what kind of airplane we will need to replace the Advanced Technology Bomber (ATB), if you can believe that we need to be thinking that far ahead—and we do. We have to have people thinking that far ahead because the lead time on developing and exploiting those technologies is that long. The argument is that the CINCs are not going to be worried about that institutional preservation. I argue 'How do you know that?' You can't tell me that CINCPAC isn't worried about the Posture of the Pacific in [ten years]. He's worried about that just as much as the Chief of Staff of the Air Force is worried about the posture of the Air Force in [ten years]. In the past, he hasn't been forced to think about that as much, because it didn't matter; he couldn't exert all that much influence anyway. But now [Goldwater–Nichols has given him] more influence...more responsibility...and so he does worry about [planning].[29]

Does the status quo in the PPBS process strike the delicate—but needed—balance that General Herres described? Are there indications in the CINCs' O&M accounts that suggest the military services are returning to the hollow force of the 1970s? Secretary of Defense Dick Cheney commented on force readiness during the Gulf War:

> The units that we deployed to the Gulf contrast meaningfully with the same units a decade ago. Among our early deployments to Saudi Arabia

following King Fahd's invitation were the F-15 air superiority fighters of
the 1st Tactical Fighter Wing.... Within 53 hours of the order to move, 45
aircraft were on the ground in Saudi Arabia. Ten years ago, that same
wing failed its operational readiness exam; only 27 of 72 aircraft were
combat ready—the rest lacked spare parts.[30]

Hollow force warning signs. However, that deployment occurred at the beginning of the
Gulf War in August 1990, with spare parts and logistics support reflecting an otherwise
unexpended defense buildup of the 1980s. Since some have charged that U.S. military forces are
returning to the hollow forces of the 1970, a special DOD board was appointed by the Secretary
of Defense in June 1993 to evaluate the extent of the problem. According to Secretary Aspin:

> We know the problems. We know we're being forced to reduce. We
> know money for spares is being reduced. We know the operations
> accounts are being reduced.[31]

But concerns over a return to those days of military failures and national disasters brought
about in large measure by inadequately funded O&M readiness accounts in the 1970s are rampant
in the Pentagon. During the largest force reduction in more than fifty years, the problems of
depleted readiness accounts can be masked by the mass exodus of troops and organizational
movements.

The Air Force became so concerned that its Chief of Staff designated 1994 as the "U.S. Air
Force's Year of Readiness"—with major studies underway to determine how they stand. General
McPeak said:

> The Clinton administration [plan] would push the service lower than any
> previous public estimate...its lowest personnel level in five decades...The
> next phase of force-structure cuts as outlined in the administration's
> bottom-up review would take a heavy toll.... The high operational tempo
> of USAFE, ACC, and AMC has led to concern among service officials
> about their ability to fulfill continuing mission requirements.[32]

The implications of General McPeak's warning could have a profound impact on the future
warfighting capability of the Air Force. War planes can essentially fly around the clock. It takes
two components to keep them in the air: (1) spare parts and (2) highly trained and motivated
people to fly, maintain and support them. Does the CSAF warning indicate that the spare parts
logistics lifeline is being depleted at a faster rate than it is being replenished? Does it indicate that
the military services are losing too many experienced technicians too rapidly during the force
reduction or that remaining personnel are beginning to suffer from diminishing morale and
fatigue? General McPeak added:

> The end product, the sole reason the Air Force exists, is to put fire and
> steel on target. That's what readiness is all about...studying readiness
> may help avoid the 'bad old days' of the hollow armed forces.... [The

Year of Readiness] is both a logical extension of the [Secretary of the Air Force's] principal concern, a quality Air Force for today and tomorrow.[33]

The Air Force's warning has been echoed in other areas as well. Admiral Charles Larson, CINCPAC, testified before Congress this year that "we are standing on the brink of a degradation of readiness."[34] He was joined by the Army Chief of Staff who testified that "In the case of the Army, we are at the razor's edge."[35] The Commandant of the Marine Corps reinforced the Army's concern: "I think we are on the same razor's edge."[36]

Some members of Congress have entered the debate. Senator John McCain (R-Ariz.), a former naval aviator himself, warned:

> The costly reservoir of preparedness amassed during the 1980s military spendup, which secured the smashing 1991 victory over Iraq is beginning to evaporate. In spite of the efforts of our services, we are going hollow. We are losing the combat readiness and edge that is an essential aspect of deterrence, defense and the ability to repel aggression.[37]

HASC has also sponsored hearings on the matter. Representative James Talent (R-Mo.) described the decline of U.S. military forces in the 1970s:

> the greatest symbol of...which was the [1980] crash in the desert of the helicopters designed to rescue our hostages in Iran.... It will happen again unless we change course...it will happen because we are not funding the defense budget...at levels necessary to maintain the readiness of our forces.[38]

Excess depot maintenance capacity. While the military services may find that they do not have the spare parts needed to sustain readiness in future years, they have more than sufficient depot maintenance capacity (where the services repair large weapons systems: aircraft, tanks, ships, etc.) to handle the reduced demands of the new base force. In fact, the military services are being required to operate large maintenance repair facilities (depots) at less than capacity. This has prompted many to suggest that reduction of depot maintenance is long overdue, or that the services need to consolidate and centralize this essential function in a Joint Depot Command.[39]

The military services operate twelve primary aviation depots to meet DOD depot maintenance requirements.[40] Excess capacity is a significant problem. One report indicated the five Air Force depots alone could service all fixed-wing aircraft depot maintenance requirements for not just the Air Force, but the Navy and Marine Corps requirements as well. Further, the Army's single rotor-winged aircraft depot has the capacity to serve all of its needs and could also meet Navy and Marine requirements at a single location.[41] The CJCS has concluded that the military departments now have as much as 50 percent more depot maintenance capacity than they will require this century.[42]

While at face value the issue of depot maintenance capacity appears to be another case of service parochialism to save installations from closure, there is a deeper and more far-reaching reason why the services have not solved this over-capacity problem—employment. Each of the aircraft maintenance depots individually represents the single largest employer in each of their congressional districts, and some are even the single largest employer in the state. Is this a case where the military establishment is being made the whipping boy, while the real problem of government waste is being sustained by pork from Congress?

Civil-military relations. The Pentagon is working on other GNA-type issues. For example, one of the provisions of the legislation was designed to strengthen the office of the service secretaries of the military departments, especially in oversight of the business and financial arrangements of the departments. Yet, when the Secretary of Defense completed a "top-to-bottom" review of all service programs and requirements in early 1993, the service secretaries did not participate. The new administration did not encourage acting service secretaries to participate, and the review was held before new appointments were confirmed by the Senate. This process caused some to criticize the Clinton administration for endangering proper command and control of military forces:

> The principle of civilian control of the military is being eroded by inordinate delays in the appointment of secretaries of the military departments. Such delays are part of the fallout of the Clinton team's desire for the correct gender/ethnic mix in management positions...but weeks and months of delay allow the Pentagon to get used to the idea that military departments can run perfectly well without civilian secretaries. If these civilians are unnecessary during the formative months of a new administration, the question of why have them at all is bound to arise.[43]

Many of these restructure initiatives with pressure to reduce the military forces further have renewed discussions on the desirability of having a single, unified military service. Some have suggested that Goldwater–Nichols did not go far enough, implying that the most effective fighting force for the nation would be achieved by eliminating service autonomy and parochialism.[44]

Although the military services focus on administrative and logistics functions in their organize, train, and equip roles, it would be difficult to separate them from operational matters in the strictest sense. A new centralized organization with functional responsibilities for administration and logistics could be established, similar to the Defense Logistics Agency—but decentralization has been used most frequently for recent changes in roles and missions.

Would centralization improve the process? The vast size of such a centralized or unified force could create more bureaucratic difficulties than those caused by inter-service rivalry. The

Canadians implemented a centralized system and the pitfalls were widely reported before they returned to a system that recognized the value of individual service departments.[45]

> Back in 1947, there was a lot of argument about unifying the armed forces because it meant doing something that was very difficult for the American people to accept: having one person in charge of all our armed forces. Never in the history of our country had one person other than the President been in charge of all our armed forces. The Constitution says the President is the Commander-in-Chief, and it clearly was intended that there be only one Commander-in-Chief of all our armed forces.... How are we going to accept having somebody below the President in charge of all our armed forces? There is not much enthusiasm for its being a military person.[46]

As many expected, the final report card on the effectiveness of Goldwater–Nichols after nearly a decade of debate is still mixed. Some have shouted praises for its organizational effectiveness and cite the Gulf War to prove that it is working. Others have been more cautious and refer to recognized interoperability problems during that conflict. The real test will be whether the legislation is sufficient to withstand 1970s-style budget cuts facing DOD and the ever changing global geopolitical environment which could result in fighting a near-equal foe.

New Roles, Missions for the Post-Cold War World

The ever-changing geopolitical environment has had a profound impact on the changing roles and missions of U.S. military forces. The synergistic effect of four essential ingredients of the changing times, i.e., the end of the Cold War, post-Cold War fiscal realities, Goldwater–Nichols, and the impending need to respond to regional conflicts like the Gulf War, Somalia, and Bosnia, has renewed interest in DOD roles and missions.

This section examines DOD's changing roles and missions in three areas: (1) historic changes in DOD reorganization, (2) the SecDef Bottom-Up Review, and (3) nontraditional missions including peacekeeping operations.

DOD reorganization. In his last report on roles and missions to the Congress in 1993, General Powell advanced a triangular approach to assessing needed changes in the department: develop a new national military strategy, establish a dynamic base force flexible enough to accommodate changes in the world order yet responsive to the new national strategy, and thoroughly review DOD's roles, missions, and functions to ensure alignment between the new national strategy and the base force.[47]

Historic changes in DOD organization and programs resulted as part on this ongoing in-house review. First, DOD stood-up the new joint U.S. Strategic Command as the combatant command for America's nuclear arsenal. Who could have ever convinced General Curtis LeMay that America would one day retire the old Strategic Air Command (SAC) flag in this manner?

This preceded another historic change in the Unified Command Plan (UCP), all forces under the Army's Forces Command, the Navy's Atlantic Command, the Air Force's Air Combat Command, and the Marine Corps' Marine Forces Atlantic were merged under a single unified CINC for protection of the Continental U.S. (CONUS). The new unified command, U.S. Atlantic Command, was created in Norfolk, Virginia, on October 1, 1993.[48] With this change, there are no more single-service, "specified" commands reporting directly to the President and Secretary of Defense. All forces now serve in combat under one of the unified commanders.[49]

Second, remaining nuclear weapons have been realigned within the Department. The Army and Marine Corps that have maintained a nuclear arsenal since the 1950s have eliminated or transferred those weapons to the Air Force and Navy. All tactical nuclear weapons have been removed from ships, submarines, and land-based naval aircraft. Further, all land-based strategic bombers and 450 Minuteman II ICBMs have been removed from 24-hour alert.[50]

Third, the U.S. signed the Chemical Weapons Convention Agreement in Paris in January 1993, renouncing the use of chemical weapons. This means that U.S. military forces should no longer need to procure, train with, and maintain chemical weapons. Existing weapons stockpiles are being destroyed.[51]

Finally, DOD examined roles and missions based on experiences gained in *Operation Desert Storm*. This close examination resulted in renewed emphasis on strategic airlift, improved combat logistics, better intelligence support for the warfighter, and revisions in joint doctrine and training (e.g., two major joint exercises—Ocean Venture and Tandem Thrust—now used to test joint training and interoperability among soldiers, sailors, airmen, and marines using the JFACC concept of command and control of air assets learned from the Gulf War).[52]

This review of DOD roles and missions also resulted in significant changes in military installation infrastructure. More than 170 Army, Navy, Air Force, and Marine activities have been recommended for closure, mergers, or realignment. The final results will depend more on the domestic political situation than on DOD requirements. DOD has consolidated "common support" areas among the services: commissaries, hazardous waste clean-up, operation of common-user ocean terminals, medical materiel, postal service, and domestic disaster relief operations into a single function.[53]

However, Congress has taken a critical look at these changing roles and missions to guard against change for change's sake. In the Senate, Senator Nunn questioned as early as 1989 whether the current changes underway at the Pentagon were thoroughly analyzed and tied to the changing national strategy. He charged that the Five-Year Defense Plan (FYDP) contained "five big blanks…a threat blank…a strategy blank…a dollar blank…a force structure blank…and a program blank."[54]

As DOD grappled with the changes needed to address the emerging national security agenda and the new world order, the U.S. House of Representatives, under the leadership of then Chairman of the HASC, Les Aspin, developed the philosophical framework that would ultimately drive the new national security strategy under a new administration. He identified five situations in the new world order that were sufficiently important to U.S. national interest that Americans would likely support the use of military forces to secure them. These included: countering regional aggressors like Saddam Hussein in Iraq, combating the proliferation of mass terror weapons by rogue nations like Iraq or North Korea, fighting terrorism, restricting drug trafficking, and peacekeeping/civilian disaster relief.[55]

It was interesting to note that the Aspin conceptual study which eventually found its way into the halls of the Pentagon, was originally disputed by CJCS in testimony before the Senate. General Powell said:

> I believe [Aspin's study] is fundamentally flawed in a number of ways: its methodology is unsound, its strategy unwise, and the forces and capabilities it proposes unbalanced. Moreover, even using Mr. Aspin's own methodological approach, there are a number of errors in the study which, if left uncorrected, generate force requirements far beyond those he proposes.[56]

As the debate continued, Senator Nunn remained displeased with the Aspin study and commissioned seven private citizens to examine functional overlaps among the services and the need for additional cost savings. His displeasure was increased by a study released by the Congressional Research Service which pinpointed overlap in "four U.S. Air Forces."[57]

Despite the new debate, the original Aspin study provided the conceptual framework for his widely reputed "bottom-up review" of all DOD programs and systems when Aspin became the Secretary of Defense the following year. In what some have called the most comprehensive analysis of DOD requirements in this century (**Figure 6-2**), Aspin identified three objectives. First, develop the right combat forces for the times. The new national defense strategy called for a smaller U.S. military than needed during the Cold War, but not just a smaller version of the Cold War forces—combat forces were tied to new missions and threats. Second, he pledged with the president to maintain the combat readiness levels available during *Operation Desert Storm* and guard against returning to the hollow forces of the 1970s. Of course, this pledge has received considerable attention and has become the focus of major congressional interest. Third, he directed a "rethinking" of how DOD spends its money. He emphasized the strategic implications of the relationship between a strong defense and a strong economy.[58]
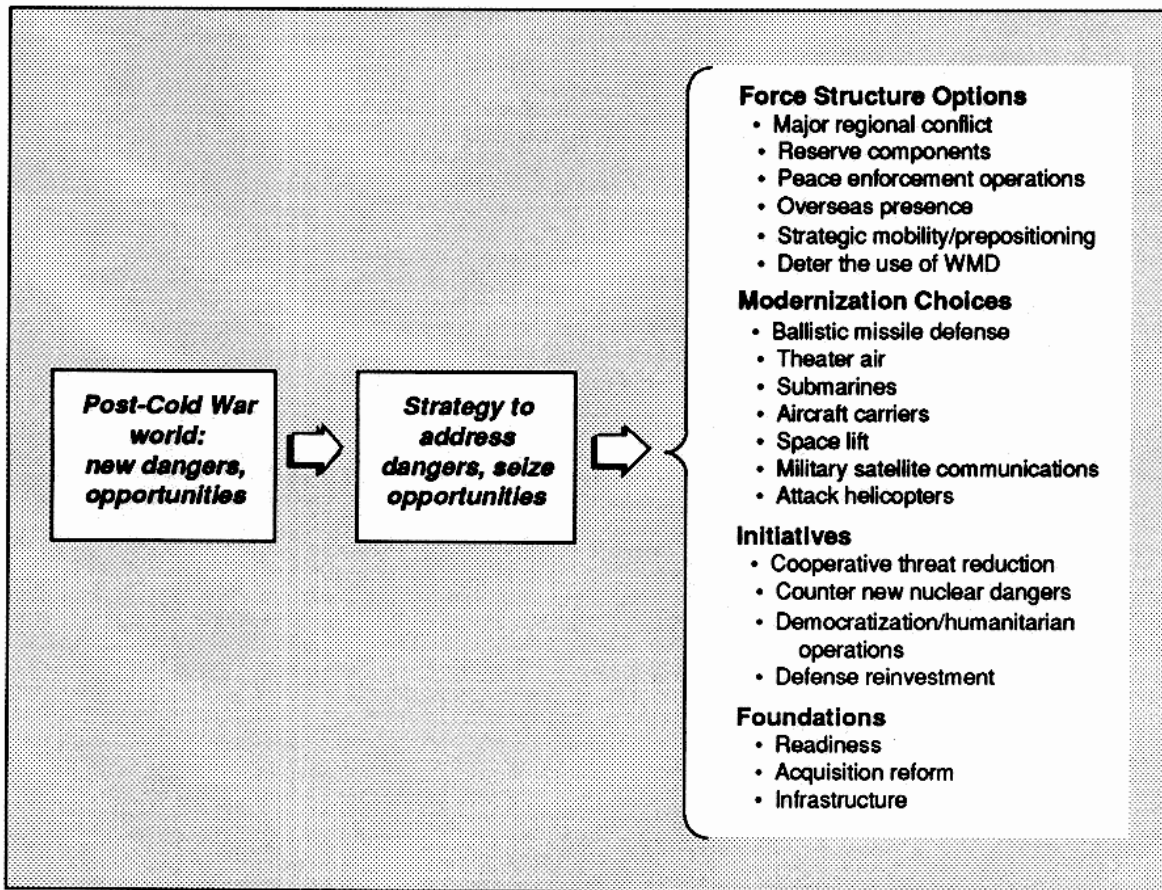
Figure 6-2
Bottom-Up Review: Analytic Process

The Bottom-Up Review. The Bottom-Up Review, when completed, identified four major threats to world peace: (1) Proliferation of nuclear weapons and other weapons of mass destruction in rogue nations, such as Iraq, Iran, or North Korea, as well as remaining delivery systems in the former Soviet Union; (2) regional dangers involving large-scale aggression, as in Iraq's invasion of Kuwait, as well as ethnic and religious internal conflicts and state-sponsored terrorism; (3) dangers to developing democracies, reform, and civil order in the former Soviet empire and the developing world; and (4) dangers of a weak economy from lack of domestic prosperity, international competitiveness, and environmental security.[59]

The methodology used in the analysis was, of course, critical to the outcome. It identified nine assumptions impacting requirements during the Cold War and in he new world (**Table 6-1**), which were the essential drivers in both Cold War Force Planning and planning for new world regional challenges. Further, the study analyzed force options in major regional conflicts with the military forces necessary to prevail in any of the options (**Table 6-2**).

Table 6-1

Assumptions

| Issues	Cold War	New World
Threat Forces	Soviet Empire	Iraq, Korea?
Warning Time	One to two weeks	One day a year
Coalition	Known	Depends on the issue
Conflict Environment	Europe/heavy force	Tropics to desert
Mobility Factors	Crossing the Atlantic	Global
Risk	Nuclear threshold	Spread of conventional and WMD dangers
Maintenance and Support	Robust	Right-sized to force structure
Sustainability	Years	Months
Base Structure	Robust	Right-sized to force structure

Source: Secretary of Defense Les Aspin, Bottom-Up Review Briefing, Pentagon, Washington, D.C., 31 Aug. 1993, 9.

The Bottom-Up Review also highlighted conflict dynamics (**Figure 6-3**) envisioned for the MRC 2 Option (winning two nearly simultaneous regional conflicts) and the campaign phases predictable for that option. Because the study recommended that the U.S. settle on this option, Secretary Aspin outlined a comparative analysis of U.S. force structure changes in FY 90, FY 93, and the Bottom-Up Review (**Table 6-3**).

Unlike some DOD studies, the new review offered specific changes in modernization programs and readiness efforts in the form of twelve force enhancements and seventeen targeted program cuts (**Table 6-4**).

Nontraditional missions. At the very time Secretary Aspin had the Pentagon "upside-down" working the Bottom-Up Review, one of his founding principles—support of peacekeeping operations—was already being tested. One of the principal tenets of Goldwater–Nichols was strengthening the theater CINCs' command and control of military forces. In the post-Cold War era, the emergence of lesser conflicts placed new demands on peacekeeping operations for the UN. Following *Operation Desert Storm*, UN peacekeeping appeared to be a growth industry. Implications for command and control of U.S. forces became profound as American soldiers faced deployments under the operational command and control of foreign general officers.

What will Americans tolerate in these new hard-to-define missions in previously unknown places in the world? As the American public watched television coverage of American servicemen being killed in the seemingly continuous hostilities against insurgents in the southern part of Mogadishu, Somalia, strong pressures developed in Congress and in the public to withdraw American forces, and the President ultimately declared a policy which ensured just that.
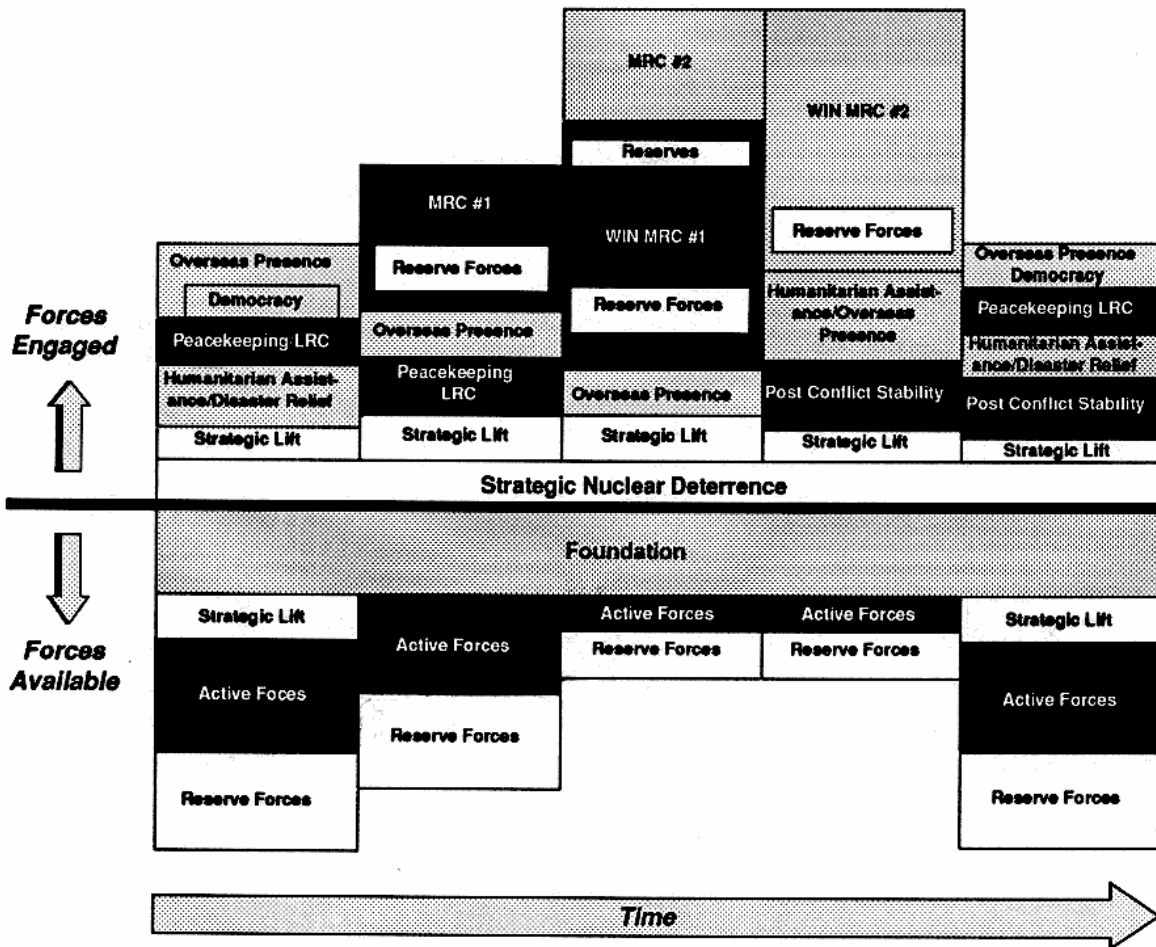
Secretary of Defense Les Aspin, Bottom-Up Review Briefing, Pentagon, Washington, D.C., 31 Aug. 1993, 12.

Figure 6-3
Conflict Dynamics

Critics claimed that the original focus of the intervention—humanitarian aid in *Operation Restore Hope*—had been transformed into nation-building.[60]

This presented a dilemma for the UN and for the Clinton administration, which eventually reversed its campaign position on the use of American military forces in international peacekeeping organizations. Secretary General of the United Nations Boutros Boutros-Ghali indicated in a special report, An Agenda for Peace, that pressures on the UN to respond to international hot spots were mounting in the aftermath of the Cold War. He cited 279 vetoes in the Security Council since 1945 that had reduced the need for UN peacekeeping forces. Since May 1990, there had been no vetoes, and the need for UN peacekeepers has skyrocketed.[61]

Further, his report indicated that thirteen peacekeeping operations were established between the years 1945 and 1987—and thirteen additional UN peacekeeping operations since 1987. More

Table 6-2
Major Regional Conflict Force Options

Forces	Strategy			
	1 Win One Major Regional Conflict	**2** Win One Major Regional Conflict With Hold in 2nd	**3** Win in Two Nearly Simlutaneous Major Regional Conflicts	**4** Win in Two Nearly Simlutaneous Major+ Regional Conflicts
Army	• 8 Active Divisions • 6 Reserve Division Equivalents	• 10 Active Divisions • 6 Reserve Division Equivalents	• 10 Active Divisions • 15 Reserve Enhanced Readiness Brigades	• 12 Active Divisions • 8 Reserve Division Equivalents
Navy	• 8 Carrier Battlegroups	• 10 Carrier Battlegroups	• 11 Carrier Battlegroups • 1 Reserve/training Carrier	• 121 Carrier Battlegroups
Marine Corps	• 5 Active Brigades • 1 Reserve Division	• 5 Active Brigades • 1 Reserve Division	• 5 Active Brigades • 1 Reserve Division	• 5 Active Brigades • 1 Reserve Division
Air Force	• 10 Active Fighter Wings • 6 Reserve Fighter Wings	• 13 Active Fighter Wings • 7 Reserve Fighter Wings	• 13 Active Fighter Wings • 7 Reserve Fighter Wings Force Enhancements	• 14 Active Fighter Wings • 10 Reserve Fighter Wings

Source: Secretary of Defense Les Aspin, Bottom-Up Review Briefing, Pentagon, Washington, D.C., 31 Aug. 1993, 14.

than 528,000 military, police, and civilian personnel have served in these operations. The UN has launched more than sixteen of these peacekeeping operations in the last five years. 1993 saw more than 80,000 UN troops supporting thirteen operations, with an additional 40,000 planned this year. The cost of these operations has been enormous: more than $8.3 billion during the period.[62]

> The cost between the costs of United Nations peacekeeping and the costs of the alternative, war—between the demands of the Organization and the means provided to meet them—would be farcical were the consequences not so damaging to global stability and to the credibility of the [UN].[63]

Despite the Secretary General's call for the world community to respond, the Clinton administration had to face a disgruntled public at home—and the U.S. Congress. The administration reversed its campaign pledge, and UN Ambassador Madeleine Albright reassured Congress that the U.S. had no plans to substitute elusive goals of global collective security for battle-proven defense through unilateral and collective action.[64]

Why did Congress and the American people act so quickly to confront the new President? Four observations merit consideration. First, Americans react strongly to American troops being killed in foreign lands where the national security stakes for the U.S. are at best difficult to explain.

Table 6-3

U.S. Force Structure

Forces	Fiscal Year 1990	Fiscal Year 1993	Bottom-Up Review
Army:			
Active Divisions	18	14	10
National Guard Division Equivalents	10	6 (+2 Cadre)	5+
Navy:			
Aircraft Carriers	15+1	13+0	11+1
Active/Reserve Airwings	13/2	11/2	10/1
Ships	546	443	346
Air Force:			
Active Fighter Wings	24	16	13
Reserve Fighter Wings	12	12	7
Marine Corps:			
Active Endstrength	197,000	182,000	174,000
Reserve Endstrength	44,000	42,000	42,000
Strategic Nuclear Forces:			
Ballistic Missile Subs	34	22	18
Strategic Bombers (PAA)	301	201	Up to 184
ICBMs	1000	787	500

Source: Secretary of Defense Les Aspin, Bottom-Up Review Briefing, Pentagon, Washington, D.C., 31 Aug. 1993, 18.

When reporters televised coverage of Somali crowds desecrating the body of a dead U.S. soldier in Mogadishu, any pleas to continue a U.S. presence in Somalia for "humanitarian" purposes were made in vain.

Second, Somalia was just one of three international conflicts on center stage at once— Somalia, Bosnia, and Haiti[65]—while U.S. armed forces continued to be involved in the nasty cleanup actions against Saddam Hussein. Each of these conflicts had the potential to escalate into a major quagmire for U.S. military forces. If history has taught anything, we should realize how strongly U.S. public opinion fears bogging down in another Vietnam-type conflict, where the mission are ill defined, the military goals and objectives are unclear, the outcome and endpoint to conflict are unspecified, the potential for protraction and escalation of the conflict is great—and the potential for losing the war is also great.

In this sense, Congress and the American people sent a clear message—mission creep is unacceptable. What started in Somalia as a truly American humanitarian effort to airlift food and medicine to starving children had become an ill-defined nation-building action to hunt down and capture the Somali warlord Aidid. Congress, responding to public opinion, was reasserting

Table 6-4

Bottom-Up Review: Force Enhancements vs. Program Cuts

Enhancements: 12

- Army prepositioned equipment
- Readiness in Army National Guard
- Initiatives to meet new dangers
- Precision strike F-14, F-22, B-1, B-2
- Joint Advanced Strike Technology Program for next generation aircraft
- Sized support forces needed for recommended national strategy

- USMC endstrength
- Develop V-22
- Submarine base
- Aircraft carrier base
- DOD acquisition reform
- Ballistic Missile Defense

Cuts: 17

- 2 Army divisions
- 3 Air Force fighter wings
- 1 Navy air wing
- 1 aircraft carrier
- 55 surface ships and submarines
- 115,000 additional DOD civilians
- 160,000 active duty military
- Cancel F-16 after FY94
- Cancel F/A-18C/D after FY97

- 1 reserve Army division
- 4 reserve Air Force wings
- 1 Navy reserve air wing
- Base infrastructure
- Carrier force reduced-11
- Cancel A/FX
- Cancel MRF
- Retire A-6

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specific roles and missions for U.S. military forces. The implications are that operations outside the conventional functions of the armed forces, like nation building, will be closely scrutinized by the Congress, and the likelihood of support is limited.

Representative Ike Skelton, a senior member of the House Armed Services Committee who actively engaged in drafting the original Goldwater–Nichols legislation, voiced concern over the potential impact these peacekeeping missions could have on the nation's new national military strategy that calls for American forces to fight and win two major regional conflicts simultaneously.

> We may have a win-win strategy, but we are in fact drawing the Army down to a win zero capability. Peacekeeping missions can not only undermine the first "win" of the new strategy, they could undermine the military's capability to conclude even one major regional contingency with dispatch.[66]

But Somalia was not unique in this regard. The proper roles and missions for the military services have experienced scrutiny for more than a decade now. Others have criticized the use of military force in such conflicts as *Operation Just Cause* in Panama in December 1989.[67] Former

U.S. Ambassador to the UN Jeane Kirkpatrick also charged the administration with confusion on what constituted proper roles and missions for the military:

> The purpose of military forces is to deter and defeat enemies. Forces so trained can perform other useful functions and have done so throughout history.... Other functions performed by the military, should be spill functions which the military is capable of providing, because they have been well organized, trained, and equipped to perform their military functions of defending their country. I too believe that someone somewhere in the U.S. Government should encourage democracy, promote respect for human rights and strengthen American competitiveness. But...to me...the Clinton/Aspin team [is] confusing these worthy goals with the mission of the U.S. armed forces.[68]

Also at issue is the fact that the ever-declining defense budget has experienced ever-increasing expenditures for "other-than-readiness" items.

> Funding the increasing number of peacekeeping operations, humanitarian assistance and disaster relief efforts, and democratization programs also has been disjointed and often has been provided at the expense of other DOD programs. In Fiscal Year 1992, an estimated $42 million was absorbed in the Services' regular operations and maintenance... appropriations for incremental costs of DOD support for various UN peacekeeping operations. Additionally, DOD absorbed costs for...Kurdish relief efforts, Haitian relief, and Mt. Pinatubo disaster relief efforts in the Philippines. The new Global Cooperative Initiatives Appropriation of $448 million in the FY 94 budget [has] been requested as a two year appropriation. However, while these funds would be available for two years, program requirements are expected to require obligation of the entire appropriation annually.[69]

This OSD guidance to the services was significant. The internal memo, in effect, directed the military departments to expect requirements of $224 million annually for other-than-readiness missions. These requirement expenditures were above and beyond the O&M expenditures requested in the DOD budget—a request that Congress reduced even before the administration notified the services of the additional requirements. As always, the CINCs and the services will salute and execute the OSD guidance as best they can, but ultimately someone must pay actual dollars to defense contractors throughout the country who provide the spare parts that sustain readiness. For now, the services will continue to deplete readiness reserves required for wartime effectiveness. This is precisely the course of action the nation took in the 1970s, which resulted in the hollow force and military failures.[70]

Others have charged that traditional military objectives no longer dictate U.S. defense policy. The Pentagon has shifted its focus to missions that don't involve war—such as unemployment. The redesign of the shrinking defense establishment has incorporated a proactive

industrial policy. For example, the Pentagon agreed to procure an additional Seawolf nuclear submarine costing $2.4 billion, although the Secretary of Defense himself acknowledged that it was not needed for the nation's defense. This caused then CJCS General Colin Powell to warn: "we never want to lose sight of this basic underlying principle of the armed forces of the U.S.: we're warriors."[71]

Third, to some extent restraints placed on President Clinton for actions in Somalia were simply power politics as usual. Republicans initiated the proposals to limit presidential authority in placing U.S. troops under foreign control, but public opinion fanned the flames on Capitol Hill. In the Senate, the final vote was 96-2 approving a nonbinding resolution that the President consult with the Congress prior to placing U.S. troops under foreign command.[72]

The overwhelming support, however, was ironic, since the concept of American troops being placed under foreign command was anything but new. After all, U.S. soldiers had served under combatant command of foreign commanders no fewer than fifteen times this century. Some 2,000 soldiers served under British command during the Boxer Rebellion in China in 1900, and three battalions of Americans joined with the British and five other nations against the Bolsheviks in 1918. In World War I, more than two million U.S. forces fought under the command of British and French commanders. Likewise, in World War II American units were assigned combat duty with British commanders in Italy, France, the Netherlands, and the China–Burma–India Theater.[73]

Fourth, the actions taken by Congress to limit the President's ability to commit troops under foreign command were realistically a wake-up call for President Clinton. Voters badgering Congress were sending a clear message to the President.

Most analysts have agreed that the 1992 presidential elections were not decided on international issues. President Clinton was elected to offer change on the economic home front. However, early in his presidency he dispatched 300 U.S. troops to Macedonia to serve under the command of a Scandinavian officer. He was contemplating action in Haiti while some reports indicated that the ousted president was not fit to rule if allowed to return to his native land. In Somalia, the Clinton administration had refused additional arms for deployed servicemen despite the request of CJCS, and some speculated that the denial had been politically based.

> President Clinton seems ready to permit—indeed, encourage—the use of American military forces around the world as a snap-in, snap-out replacement for diplomacy. Worse yet, he seems prepared to use unaccountable UN bureaucrats—who wouldn't recognize a "vital national interest" or "clearly defined military objective" if it were printed on their inflated paychecks—to "legitimize" his use of force. The "command structure" in Mogadishu is such that national contingent commanders seek approval from authorities in their capitals before carrying out the orders of their nominal superiors in the field. Moreover,

the troops under their command are suffering from an identity crisis. Are they part of a police force or a military force? The confusion is justified.[74]

In Somalia, UN troops came primarily from Pakistan and Italy. When U.S. Rangers needed fire support, the UN troops could not help. In a classic case of command and control disorder, the Italian forces needed to clear their actions through Rome prior to supporting the Rangers.

These actions were making many Americans uneasy with a president who had not established himself as an accomplished commander-in-chief. The President was also carrying, rightfully so or not, some political baggage for having avoided military service in Southeast Asia and for initiating some socially proactive personnel programs for military service. Congress and the American people were indicating that while they were willing to see his proposals for changing the direction of the national economy, they did not have full faith and trust in his ability to oversee the roles and missions of U.S. armed forces, and there were limits on how much they would tolerate the lives of their sons and daughters being placed at risk in areas that many Americans did not view as vital to U.S. national security interests.

> The attempted masculinization of the United Nations via an injection of American military hormones goes beyond Somalia. President Clinton has twisted arms at NATO to provide for air strikes in Bosnia to help end the siege of Sarajevo. He has deferred, though, to UN Secretary General Boutros Boutros-Ghali to approve the targets and order the strikes, evidently believing the latter is rather less a Secretary than a General.[75]

Further, these actions also indicated that some senior members of Congress perceived the President as lacking a full appreciation for some of the battle-proven success formulas and statutory base[76] in military command and control. For example, less than a decade prior to President Clinton's actions in Somalia, the Congress had engaged in one of the most historic reorganizations of the Defense Department ever (Goldwater–Nichols) in an attempt, among other things, to clarify command and control structures that had been blamed for failures in Vietnam, Iran, Lebanon, and Grenada.

Coalition Warfare: Myth or Reality?

What does all this imply about the American public's expectations from national command authorities in clearly defining goals and objectives of the national defense strategy? What implications are relevant for the future of alliances and coalition warfare?

When Americans think of "coalition" they tend to assume that the coalition would be somewhat like General Schwarzkopf's organization in the Gulf War. The U.S. had ultimate CINC responsibility, host nation [Saudi Arabia] support was extensive, and command and control arrangements were coordinated rather than integrated (e.g., two separate and distinct command

and control centers were in operation throughout the war—one for U.S. and NATO forces and a second for Saudi Arabia and other Islamic nations in the Coalition).[77]

However, the Coalition command and control arrangements U.S. forces served under in the Gulf War may have little or no bearing on future coalition warfare. Depending on the size of deployed U.S. forces, geopolitical variables, or ethnic and cultural differences, the U.S. may or may not serve as the coalition leader or share in that leadership. If a major regional conflict erupted in the Pacific Rim region, can we assume that the U.S. or Japan (for example) would ultimately determine the outcome of coalition command and control arrangements? Since, that leadership role is certainly not guaranteed, what would be the reaction of the American people if U.S. military forces were assigned a supporting role?

What are the personnel policy implications for U.S. servicemen and women assigned to coalitions? We've experienced the reaction of the American public to soldiers killed in Somalia. What about implications short of death, where American forces may be assigned under the command of another nation? While unlikely, it may be prudent to examine the future possibility that a foreign government/commander might undertake disciplinary action on forces under his command either for failure in executing coalition policy or failure on the battlefield. Are Americans prepared for what "could be a natural outgrowth" of coalition warfare?

Some of these less-publicized problems did surface with American servicemen and women during *Operation Desert Storm*, and Saudi officials did at times want to exercise their national prerogative. However, since General Schwarzkopf was the Unified CINC, host nation officials had no jurisdiction over U.S. forces and were forced to defer to the American commanders. What are the implications of an American soldier being subjected to the rulings of an Islamic fundamentalist court/trial if coalition command and control procedures do not contain safeguards for American military forces at the outset?

Martha E. Maurer, a National Defense Fellow at Harvard University's Program on Information Resources Policy, examined the impact that coalitions have on command and control.[78] Starting with the definition of "command and control"[79] provided in DOD's own *Department of Defense Dictionary of Military and Associated Terms* (Joint Pub 0-1), she found that each element of the JCS definition, when analyzed against the implications of coalition operations, presents a profound series of unanswered questions that need to be explored for each coalition contingency. Using Maurer's methodology:

The exercise of authority
Who defines the limits of authority? Who is the authority?

and direction
What and who establishes the direction...legally, morally, and militarily?

by a properly designated commander

Who properly designates the commander? What type of command is it—single service, joint, unified, United Nations/host nation, or coalition command?

over assigned forces

What is the composition of those forces? What is their composition, skill level, training—especially in joint matters? How are they equipped? Is their equipment interoperable?

in the accomplishment

How is the path of accomplishment developed or chosen?

of the mission.

What defines the mission? When is the mission over? How do you avoid mission creep? Who evaluates or what determines mission success or failure?

Command and control functions are performed...

Are procedures, intent, and methods the same or different from each other?

through an arrangement of personnel,

What is the organization? How many from each coalition partner? What geopolitical, cultural, ethnic and religious differences exist? Are special sensitivities present? How well trained are they? How do they conduct military operations? Are they previous allies or new, temporary partners? Does each partner maintain his own logistics lifeline? What are the logistics and equipment shortfalls? Is available equipment and systems mission ready...and by what standards? Do supply requirements differ? What are supply expectations for all parties? Are current inventories suited for the mission at hand? Does the enemy operate the same or similar systems or equipment? Where is it located...and is any prepositioned in theater? Is it all compatible?

communications,

Interoperability is the big question. What languages are involved? What support infrastructure exists or can be provided? Is host nation support extended equally to all partners? What is the variety of protocols and standards? What variation of capability exists? How much communications security is needed?

facilities,

Where are these located? Any restrictions on their use? What are the capacities and limitations? How accessible are they for immediate mission requirements? Who controls the needed facilities?

and procedures

How disparate are operating procedures among the coalition partners? How difficult

will it be to enact common procedures? Who initiates the action—host nation, coalition leader or other partner? Who determines when procedures need changing? How are changes operationalized?

which are employed by the commander

Again, what is the command arrangement? Combatant command only? How will commands be distributed? Based on geopolitical considerations or best suited for the mission? Will a single commander be acceptable to all coalition partners? If the commander is not American, what are the implications that Congress and the President must consider in gaining public support in the United States?

in planning,

Who are the mission planners? Who is the leader of plans and operations? What is the make-up of the mission planning cell? Are strategic doctrine and tactical doctrine talents given appropriate consideration? Are planning styles among the coalition partners compatible? How much time is there to plan? If plans must be changed rapidly to meet the needs of a dynamic conflict, who sources the changes and how are they enacted?

directing,

How will command directives be distributed? Who has authority to issue directives? Will all parties in the coalition accept his/her direction? Are responsible individuals in theater for each coalition partner who can relay the direction for lower echelon forces?

coordinating,

What new channels of communication must be established? Will services be provided across established group lines? Are forces maintaining unit integrity or integrated with each other? Again, what are the interoperability implications?

and controlling forces and operations in the accomplishment of the mission.

What distinctions are made between operational control and administrative control? Who decides? Are there hidden agendas which could prove harmful either to the mission or to U.S. military personnel? What dictates when the mission has been completed? Who withdraws forces first and who secures the peace? What agreements have been prepared for post-conflict management in the theater of operations? How is accountability measured? Are there follow-on considerations for peacekeeping or policing actions? Does the host nation have sufficient forces to maintain the peace? What implications are there for civilians, hostages, casualties, POWs, MIAs, war criminals?[80]

While exploring these questions may prove critical to the outcome of future coalition warfare, the conceptual framework is not new. The political and military constraints that the Duke of Wellington and Prussian Field Marshall Gebhard Blucher had to resolve before facing Napoleon's forces at Waterloo[81] were not unlike the coalition considerations that confronted General Schwarzkopf and Saudi Lieutenant General Khalid bin Sultan bin Abdul-Aziz in the Gulf War.

Future warfare is most likely to involve coalition warfare. As such, Americans can rightfully expect that the U.S. defense establishment should already be deeply engaged in the type of forward-looking planning that involves joint /coalition warfare.[82] A review of coalition warfare arrangements since 1941[83]—in World War II, in Korea, in Vietnam, in NATO and during the Gulf War—underscores the complexities and varieties of command arrangements inherent in coalition warfare.[84] With the unique features of the Gulf War including its timing at a pivotal point in history, Americans would be ill advised to feel "experienced" in coalition warfare. This is unquestionably a growth industry.

Beyond Jointness

Given the new dynamics of armed conflict imposed by the post-Cold War world order, the U.S. must now look beyond jointness for new solutions to the age-old problems discussed in this report. Joint interoperability must be a constant requirement fundamental to future warfare. Every service Chief as well as CJCS has stated that future military operations in this country will be joint military operations commanded by the unified CINCs with soldiers, sailors, airmen, marines, and coast guards trained in joint operations. This nation can no longer afford the duplication of systems and stovepipe service arrangements that led to failures in military operations in the 1970s–80s.

The complex and rapidly changing environment of tomorrow's battlefield environment suggest that the U.S. now focus on those issues beyond joint interoperability that threaten the success of future military operations. Three of those concerns are significant for implications on command and control discussed in this section: (1) Fiscal considerations restraining rapid transition from service-unique command and control systems purchased in decades past to new joint interoperability systems employing the full spectrum of horizontal and vertical battlespace, (2) Limitations imposed by DOD's acquisition policy in acquiring emerging technologies, and (3) The cultural paradigm among U.S. military forces that may be preparing combat forces to fight and win the last war, but may be rendering them ill-prepared for future warfare.

Fiscal restraints. The first significant consequence for DOD is the large number of systems (involving vast quantities of hardware and software) which are service-unique and which cannot realistically be replaced due to the high cost of replacing them. These systems were designed at the services' requests and purchased by the individual services in decades past prior to current initiatives to procure only interoperable systems. As such, the evolution to a truly joint

interoperable command and control system for all DOD forces is being constrained by the high cost of replacing these service-unique systems.

The Joint Staff (J-6) is working to replace those systems that pose the greatest threat to joint interoperability among command and control elements, but that process is expensive and slow. Meanwhile, Lt. General Albert J. Edmonds, J-6 Director until 1995, has embarked on an ambitious effort to replace these "legacy" systems with systems already proven by one of the services which can be adapted for each of the services with minimum alteration and workarounds required. Further, he has turned to commercially available and affordable systems that meet 80 percent of DOD's mission requirements in an effort to replace the legacy systems as soon as fiscally practical with the latest technology where the research and development has already been completed by the private sector.[85]

While many in DOD have expressed optimism in off-the-shelf technologies as a ready fix for replacing command and control systems in a rapidly changing technological environment, Dr. Barry M. Horowitz, President and Chief Executive Officer of The MITRE Corporation, said that the military must change the way it thinks about procuring new systems:

> I believe [that the] fundamental point [is] that the military's orientation is requirements first and cost second. The rest of the world, almost without exception, deals with cost and requirements concurrently.[86]

He also cautioned against absolute reliance on off-the-shelf products to meet DOD mission requirements:

> [on new management in DOD] They're going to force you to all commercial stuff. I don't feel that's the right answer. I feel it has a part in the answer, but that's not the right answer. But, their feeling is the way you really get this down to zero is you go to all commercial stuff, and they're to push it to the wall on that topic. I think that cost and need have to be dealt with concurrently. They can't be dealt with sequentially. The current [DOD] requirements process deals with them sequentially.[87]

> Still, Lt. General Edmonds' initiative to procure commercial systems that satisfy 80 percent of the DOD mission requirement with plans to tailor the system once procured appears to tackle the problem of a cumbersome acquisition process head on.[88]

Limitations imposed by a cumbersome process in acquiring new technologies constitute the second significant threat to achievement of effective joint command and control of U.S. military forces in future wars. As mentioned in **Chapter Five**, one of the lessons learned from the Gulf War was that information dominance can be the overwhelming force multiplier in war. Information technology has become the lifeblood of modern warfare and promises to become even more vital in future years, especially in space-based systems.

Acquisition reform. However, technology can be a two-edged sword when commercially reliable systems change at a rate of every eighteen months in some cases and the acquisition process takes nearly a decade for major systems in most cases. This is especially significant given rapid advances in command and control technologies that off-shore systems may offer potential adversaries and new investments being made in space technologies by other nations.

Dr. Thomas P. Quinn, Deputy Assistant Secretary of Defense for C³I Acquisition until 1994, emphasized that cumbersome DOD directives designed for oversight of major systems— both weapons and automated information systems—while providing protection for the public trust, also unavoidably, in their current form, result in additional cost and schedule creep in an already lengthy acquisition process. DOD's acquisition process, unless reformed, will continue to take ten to twelve years from initial milestones to operations capability.[89]

Shifting paradigms. Just as the DOD acquisition process is ill equipped to respond to the rapidly changing dynamics of modern warfare, some have charged that a shift in the military paradigm for warfighting is also needed to meet the special challenges almost certain to confront U.S. military forces in future wars. John Rothrock, Director of the Stanford Research Institute's Center for Global Security Planning, has said that restructuring military forces requires comprehensive reflection on the shifting political, economic, technological, and cultural paradigms that are shaping the future in which America will have to defend its interests.[90]

> Today, not just economics, but recent sudden and drastic changes in global politics and technologies unanticipated even five years ago (let alone fifty) call for a comprehensive assessment of what the American military must be and what it must do. Merely shrinking the military's size while maintaining its same organizational and functional geometry won't do. [New global security competition] calls for new national security thinking and new military forces that are structured less against measures of direct power and more for effective geopolitical and military leverage.[91]

Despite America's superpower status by any traditional measure of national power, the greatest strategic problems facing the United States in the post-Cold War era are the loss of controlling influence over changing world events and diminished clout when attempting to influence disputes around the globe. Both Iraq with Saddam Hussein remaining in power and the frustrating quagmire in Bosnia are reminders that America is only one player on a very large and changing world stage.[92]

> Most of the leverages we enjoyed relative to the Cold War (e.g., deterrence and our economic, political, and military superiority to the Communist alternative) are simply irrelevant to the post-Cold War era. Unfortunately, this irrelevance includes much of the military capability, doctrine and structure we have developed at such great cost and with such great Cold War success since 1947. The fact is that in just about any

conceivable future scenario that would require American military involvement, the enemy will have less to lose strategically in any engagement than we will. The result is a sort of leverage that promises to be increasingly available to most potential adversaries and which could be nothing short of ruinous for American goals of world stability and peaceful change.[93]

In order to address these new threat realities, Secretary of Defense William J. Perry has outlined a new vision for U.S. military forces that would require a major restructuring and downsizing of defense forces under a cooperative security regime, with three objectives. First, the U.S. should significantly reduce the size of its ground and naval forces to deal with credible military threats to its territory, to provide a reconstitution capacity for U.S. forces if another superpower threat emerged, and to maintain the capability to respond to requests for assistance from multinational military forces. Second, the U.S. should maintain the capability to provide a core strategic intelligence element to assess changes in world threats and to support treaty verification/compliance. Third, the U.S. should maintain a reconnaissance strike force available for multinational military actions whenever diplomatic and economic sanctions fail.[94]

As America begins now to structure these forces that will take shape early in the next century, the issues discussed briefly in this report are concerns for today. Serious consequences threaten vital U.S. national interests if Pentagon planners and members of Congress continue to focus on these issues as "out year" problems to be dealt with by future administrations and a future Congress. This approach would be equivalent to Scarlett O'Hara's remark, "I'll think about that tomorrow."

Notes

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[5]Archie Barrett, "Politics and the Military," *Seminar on Command, Control, Communications, and Intelligence, Guest Presentations, Spring 1985* (Cambridge, Mass.: Harvard University Program on Information Resources Policy, I-86-1, April 1986), p. 69. Dr. Oettinger's comments were made and recorded during Dr. Barrett's presentation.

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[14]Vincent K. Brooks, "Knowledge Is the Key: Educating, Training, and Developing Operational Artists for the 21st Century" (Fort Leavenworth, Ks.: U.S. Army Command and General Staff College, 1992), p. 1.

[15]Charles A. Horner, General, "The Air Campaign," *Military Review* (September 1991), p. 20.

[16]John M. Quigley, "Joint Tactical Training and Interoperability" (Newport, R.I.: Naval War College, November 1991), p. 8.

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[36]Ibid., quoting Carl E. Mundy, General.

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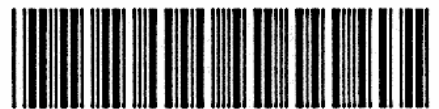
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Acronyms

1 MEF	1 Marine Expeditionary Force
ALCM	air-launched cruise missiles
ATB	Advanced Technology Bomber
ATO	Air Tasking Order
AWACS	Airborne Warning and Control System
BDA	Battle Damage Assessment
CAFMS	Computer Assisted Flight Management System
CAP	Combat Air Patrol
CINC	Commander-in-Chief
CINCCENT	Commander-in-Chief of Central Command
CJCS	Chairman of the Joint Chiefs of Staff
CONUS	Continental U.S.
DMSP	Defense Meteorological Satellite Program
DOD	Department of Defense
DMSP	Defense Meteorological Satellite Program
DSP	Defense Support Program
EUCOM	European Command
FY	fiscal year
FYDP	Five-Year Defense Plan
GCC	Gulf Cooperation Council
GNA	DOD Reorganization Act of 1986 known as the Goldwater–Nichols Act
GPS	Global Positioning System
HASC	House Armed Services Committee Staff
JCS	Joint Chiefs of Staff
JFACC	Joint Forces Air Component Commander
JOPS	Joint Operational Planning Systems
JSO	Joint specialty officers
JSTE	Joint Systems Training Exercises
JTFME	Joint Task Force Middle East
KIA	killed in action
KTO	Kuwait Theater of Operations

MIA	missing in action
MRC	(Congressional) Military Reform Caucus
MRC	major regional conflict
NBC	nuclear, biological, and chemical warfare capability
NCA	National Command Authority
NGA	National Command Authority
O&M	operations and maintenance
PLO	Palestine Liberation Organization
POM	Program Objective Memorandum
PPBS	Planning, Programming, and Budgeting System
RGFC	Republican Guard Forces Command
SAC	Strategic Air Command
SACEUR	Supreme Allied Commander, Europe
SASC	Senate Armed Services Committee
SOF	Special Operations Forces
TLAM	Tomahawk land attack missile
UCP	unified command plan
VCI	Viet Cong infrastructure