

Doctrine

CURRENT ALSA
CENTER
PROGRAMS

The following programs are underway at the Air Land Sea Application (ALSA) Center:

▼ *Electromagnetic Spectrum Management*—Procedures for commanders in planning, coordinating, and controlling the electromagnetic spectrum in support of joint operations.

▼ *Electronic Warfare Operations in a Joint Environment*—General unclassified guidance for conducting joint electronic warfare; a pocket reference handbook.

▼ *AWACS Ground Based Air Defense Operations*—Joint early warning and air defense command and control requirements to facilitate planning and operating a contingency joint air defense network.

▼ *Integrated Combat Airspace C²*—Functions of service airspace management systems and how to integrate them for the safe, efficient, and flexible use of airspace.

▼ *Multi-Service Procedures for Forcible Entry Operations*—Planning and coordinating requirements as well as capabilities and limitations to facilitate a contested joint entry into hostile territory; ALSA held final Joint Working Groups to complete multi-service publication in October 1993; the Army has proposed adopting this multi-service publication as the initial draft of Joint Pub 3-18.

▼ *Army-Marine Corps Integration in Joint Operations*—Techniques and procedures for effectively and efficiently integrating Marine and Army units of Marine Expeditionary Force/corps-size and smaller when operating in a joint environment.

▼ *Procedures for Requesting Reconnaissance and Information in Joint Operations*—Basic background information about reconnaissance (RECCE) and standardizes procedures for requesting and using RECCE products compiled in an unclassified user-level procedures manual.

▼ *Single Channel Ground and Airborne Radio System*—Standard joint operational procedures for VHF-FM frequency hopping systems known as SINCGARS that provide procedures to effect interservice communication and operability.

▼ *Theater Air-Ground System*—Joint considerations affecting air-ground operations, service perspectives on using air and air support of respective service operations, and unique service airground systems that contribute to the theater air-ground system.

▼ *Foreign Humanitarian Assistance Operations*—Concepts, roles, responsibilities, and linkages between services and governmental as well as non-governmental agencies. See *JFQ*, number 2 (Autumn 1993), p. 116, for further details.

▼ *Joint Close Air Support (J-CAS)*—Standard procedures for close air support by both fixed- and rotary-wing aircraft for all ground forces; ALSA—the primary review authority—will deliver a final draft through the Marine Corps—the lead agent for the J-CAS joint publication project—to JCS and then the draft will enter the joint publication process. See *JFQ*, number 2 (Autumn 1993), p. 116.

▼ *Anti-Radiation Missiles (ARMS) in a Joint and/or Combined Environment*—Considerations for planning, coordinating, and conducting antiradiation missile employment in a joint or combined environment.

For further details on these programs contact: ALSA Center, 114 Andrews Street (Suite 101), Langley Air Force Base, Virginia 23665-2785 or call: (804) 764-5936/ DSN 574-5934 **JFQ**

Education

NEW SENIOR-LEVEL
COURSE

In response to congressional action the Armed Forces Staff College (AFSC) has replaced its five-week senior-level phase II Program for Joint Education (PJE) offering with a new twelve-week course offered by the Joint and Command Warfighting School. The curriculum incorporates information drawn from unified commands, Joint Staff, joint agencies, and military and civilian educational institutions.

The course emphasizes the application of skills acquired in phase I at the service colleges and begins

with a crisis action exercise intended to quickly coalesce individual seminars and create an appreciation of the complexities of joint force operations. This is followed by an overview of strategic synchronization including service warfighting philosophy and interagency operations with a focus on joint warfighting skills. Seminars analyze joint aspects of historical campaigns which culminates in group presentations (each student also prepares two short papers during the course).

Operational synchronization is then examined using case studies. In addition to traditional subjects such as crisis action and campaign planning, the course covers disaster relief, counterdrug operations, and peacekeeping, humanitarian, and limited objective operations. Over half a dozen exercises are conducted to supplement the case studies.

Next students focus on functional synchronization at the operational level which provides them with an in depth look at fire support, targeting, airspace control, deception, air defense, joint suppression of enemy air defense, C⁴I, logistics, and command relations from a joint perspective. The course ends with a week-long war game which emphasizes operational level decisionmaking.

The new AFSC course also features visits to unified commands and Washington as well as mentoring by retired general and flag officers with expertise in joint matters. After twelve weeks of case studies, exercises, campaign analysis, guest lectures, wargaming, and—most importantly—learning from one's peers, graduates are better equipped to become joint warfighters. **JFQ**

NEW JOINT ESSAY
COMPETITION

The U.S. Naval Institute—a non-profit professional organization—has announced the creation of the Colin L. Powell Joint Warfighting Essay Contest. For information on the contest see the announcement on the next page.

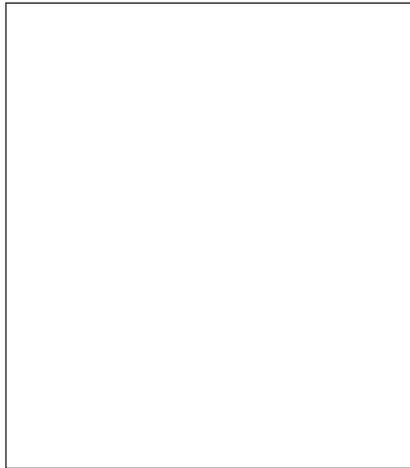
Colin L. Powell JOINT WARFIGHTING ESSAY CONTEST

SPONSORED BY THE U.S. NAVAL INSTITUTE

After four successful years, the Warfighting Essay Contest is turning "purple." The U.S. Naval Institute is pleased to announce the first annual Colin L. Powell Joint Warfighting Essay Contest.

In the words of the former Chairman of the Joint Chiefs of Staff, the competition seeks "those who are motivated to enter this contest not by a need to 'toe the policy line,' but who are devoted to the security of this great Nation."

Essays should be about combat readiness in a joint context—persuasive discussions of tactics, strategy, weaponry, combat training, or other issues involving two or more services.

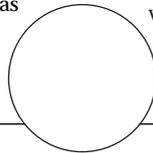


Entries may be heavy in uni-service detail, but must have joint application in terms of force structure, doctrine, operations or organization for combat. Interoperability of hardware and procedures may be discussed within the context of combat readiness. Essays are welcome from military professionals and civilians alike.

The Naval Institute will award cash prizes of \$2,500, \$2,000, and \$1,000 to the authors of the three best essays entered. Maximum length is 3,000 words, but shorter opinion pieces or "professional notes" (typically 2,000-word technical arguments) may also be competitive.

ENTRY RULES

1. Essays must be original, must not exceed 3,000 words, and must not have been previously published. An exact word count must appear on the title page.
2. All entries should be directed to: Colin L. Powell Joint Warfighting Essay Contest, U.S. Naval Institute, 118 Maryland Ave., Annapolis, MD 21402-5035.
3. Essays must be postmarked on or before 1 April 1994.
4. The name of the author shall not appear on the essay. Each author shall assign a motto in addition to a title to the essay. This motto shall appear (a) on the title page of the essay, with the title, in lieu of the author's name, and (b) by itself on the outside of an accompanying sealed envelope containing the name, address, telephone, social security number, and short biography of the essayist, the title of the essay, and the motto. This envelope will not be opened until the Naval Institute has made its final selections.
5. All essays must be typewritten, double-spaced, on paper approximately 8½" x 11". Submit two complete copies. (If typed on a computer, please also submit an IBM-compatible disk and specify word-processing software used.)
6. The essays will be screened by a panel composed of officers from the five military services who will recommend six essays to the Naval Institute's Editorial Board. The Editorial Board will award the three prizes.
7. The awards will be presented to the winning essayist at a special ceremony in July. The award winners will be notified by phone on or about 20 May 1994. Letters notifying all other entrants will be mailed by mid-June.
8. The three prize-winning essays will be published in *Proceedings*, the Naval Institute's magazine with a 120-year heritage. Essays not awarded a prize may be selected for publication in *Proceedings*. The authors of such essays will be compensated at the rate established for purchase of articles.



Documentation

THE BOTTOM-UP REVIEW

EDITOR'S NOTE: *The Bottom-Up Review* was an effort to define the strategy, force structure, modernization programs, industrial base, and infrastructure to meet new dangers and seize new opportunities in the post-Cold War world. The review was a collaborative effort of the Office of the Secretary of Defense, Joint Staff, unified and specified commands, services, and other DOD components. Numerous studies formulated issues for decisionmakers and provided the analytical underpinning for the process. The summary of the Report on the Bottom-Up Review which appears below covers force structure and was prepared by the staff of the Office of the Secretary of Defense. Other aspects of the report (such as overseas presence and force modernization) will be presented in subsequent issues of JFQ.

New Dangers, New Opportunities

The Cold War is behind us. The Soviet Union no longer exists. Events in recent years—the fall of the Berlin Wall, the Iraqi invasion of Kuwait, and the failed Soviet coup—underscore revolutionary change in the international security environment. Most striking in the transition from the Cold War is a shift in the dangers to U.S. interests which fall into four broad categories:

- ▼ dangers posed by nuclear weapons and other weapons of mass destruction
 - ▼ regional dangers
 - ▼ dangers to democracy and reform, in the former Soviet Union and elsewhere
 - ▼ dangers to our economic well-being.

The Armed Forces are central to combating the first two dangers and can play a significant role in meeting the other two. Predictions and conclusions about the nature and characteristics of these dangers will help mold our strategy as well as the



Tomahawk missiles aboard
USS Oklahoma City.

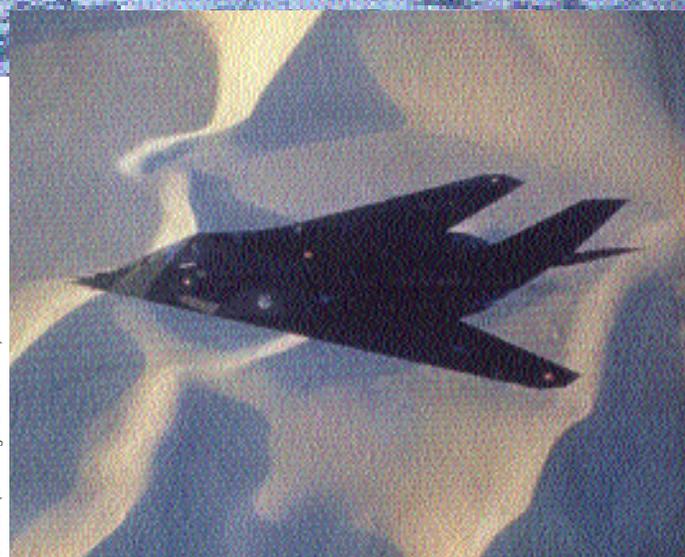
U.S. Navy (Robert McRow)

size and shape of future military forces.

New dangers bring new challenges, but they also create opportunities: realistic aspirations that, if goals are worthy, can mean a world of greater safety, freedom, and prosperity. The Armed Forces can contribute to this objective. In brief the new opportunities:

- ▼ expand and adapt existing security partnerships and alliances
 - ▼ promote new regional security arrangements and alliances
 - ▼ implement the dramatic reductions in nuclear arsenals reached in the Strategic Arms Reduction Talks (START) I and II treaties
 - ▼ protect and advance security with fewer resources, freeing excess resources
 - ▼ for investment in other areas vital to our prosperity.

Lockheed (Schulzinger and Lombard)



Engagement, Prevention, and Partnership

Despite these revolutionary changes in the security environment, the most basic goals of the United States have not changed—protection of American lives and personal safety, maintenance of political freedom and independence, and providing for our well-being and prosperity.

We also have core values to promote: democracy and human rights,

Force Enhancements to Halt a Short-Warning Attack

Persian Gulf Region		
	Today's Force	Future Force
Prepositioned Forces	1 Battalion Training Set 1 Maritime Prepositioning Ship (MPS) squadron 7 Prepositioning Ships	2 Brigade Sets ashore 1 Brigade Set afloat* 1 MPS squadron 7 Prepositioning Ships
	1 Carrier Battle Group (Tether)	1 Carrier Battle Group (Tether)
PHASE I Halt Invasion	FAIR Lack of heavy forces to help stop invader Insufficient prepositioning Limited antiarmor capability Limited anti-tactical ballistic missile (ATBM) capability	GOOD 3 heavy brigade sets of prepositioned equipment Increased early-arriving land-based and carrier aircraft and long-range bombers Improved antiarmor precision-guided munitions Improved ATBM capability
PHASE II Build Up Forces in Theater for Counteroffensive	FAIR Slow closure due to modest sealift capability	GOOD Airlift and sealift upgrades support rapid closure of heavy forces
Korea		
	Today's Force	Future Force
Prepositioned Forces	1 brigade-sized MEF 1 MPS Squadron	1 Brigade Set ashore 1 Brigade Set afloat* 2 brigade-sized MEFs (2 MPS Squadrons)
	1 Division (2 Brigades) 2.4 Fighter Wings 1 Carrier Battle Group 1 MEF	1 Division (2 Brigades) 2.4 Fighter Wings 1 Carrier Battle Group 1 MEF
PHASE I Halt Invasion	GOOD Substantial in-place forces Established command, control, communications, and intelligence (C ³ I) network Rapid reinforcement from Japan, Okinawa Limited ATBM capability	GOOD 2 heavy brigade sets of prepositioned equipment increased early-arriving land-based and carrier aircraft and long-range bomber improved antiarmor precision-guided munitions improved ATBM capability
PHASE II Build Up Forces in Theater for Counteroffensive	FAIR Slow closure due to modest sealift capability	GOOD Airlift and sealift upgrades support rapid closure of heavy forces

*Brigade set would be positioned to "swing" to either region.

peaceful resolution of conflict, and maintenance of open markets. To protect and advance such enduring goals, America must pursue a strategy of political, economic, and military engagement internationally.

This strategy of engagement is defined by two characteristics, prevention and partnership. It advocates the *prevention* of threats to our interests by promoting democracy, economic growth and free markets, human dignity, and peaceful resolution of conflict, with priority given to regions vital to our interests. The new strategy will also pursue an international *partnership* for freedom, prosperity, and peace. To succeed the partnership requires contributions by our allies and depends upon our ability to establish equitable political, economic, and military relationships with them.

Developing a Force Structure

Four broad classes of potential military operations were used in the Bottom-Up Review to evaluate the adequacy of future force structure alternatives:

- ▼ major regional conflicts (MRCs)
- ▼ smaller-scale conflicts requiring peace enforcement operations
- ▼ overseas presence
- ▼ deterrence of attacks with weapons of mass destruction.

These types of operations allowed us to analyze the building blocks of the required forces. By combining and adjusting blocks to account for judgments about conducting simultaneous operations we determined the number and mix of active and Reserve forces needed to carry out our defense strategy. The balance of this summary will focus on the building blocks related to MRCs which we considered the most demanding operations.

Major Regional Conflicts

During the Cold War thwarting a global Soviet threat dominated defense planning. Now the focus is on projecting power to defeat potential aggressors in regions of importance to U.S. interests. These aggressors are expected to be able to field forces in the following ranges:

- ▼ 400,000–750,000 total personnel under arms
- ▼ 2,000–4,000 tanks
- ▼ 3,000–5,000 armored fighting vehicles
- ▼ 2,000–3,000 artillery pieces
- ▼ 500–1,000 combat aircraft
- ▼ 100–200 naval vessels, primarily patrol craft armed with surface-to-surface missiles, and up to 50 submarines
- ▼ 100–1,000 Scud-class ballistic missiles, some possibly with nuclear, chemical, or biological warheads.

For planning and assessment purposes we selected two illustrative scenarios that were both plausible and posited demands characteristic of conflicts with other potential adversaries. While various scenarios were examined, we focused on aggression by a remilitarized Iraq against Kuwait and Saudi Arabia, and by North Korea against the South. The scenarios should not be regarded as predictions of future conflict but rather as yardsticks against which to assess capabilities in gross terms. Each scenario examined forces in relation to critical parameters like warning time, threat, terrain, weather, duration of hostilities, and combat intensity. Overall these scenarios represented likely ranges of these parameters.

MRC Building Blocks

In planning a future force structure, we established force levels and support objectives that should enable us to win one MRC across a range of likely conflicts. Detailed analyses of possible future MRCs, coupled with military judgment about outcomes, suggest that the following forces will be adequate to execute our strategy for a single MRC:

- ▼ 4–5 Army divisions
- ▼ 4–5 Marine Expeditionary Brigades
- ▼ 10 Air Force fighter wings
- ▼ 100 Air Force heavy bombers
- ▼ 4–5 Navy Carrier Battle Groups
- ▼ Special Operations Forces

These forces constitute prudent building blocks for force planning. In a conflict response depends upon

the nature and scale of the aggression and on circumstances elsewhere in the world. If the initial defense fails to halt an invasion quickly, or circumstances in other parts of the world permit, decisionmakers might opt to commit more forces than listed above (for example, additional Army divisions). The added forces would help achieve a needed advantage over the enemy, mount a decisive counteroffensive, or achieve more ambitious objectives, such as complete destruction of an enemy's war-making potential. But analysis also concluded that enhancements to our forces, focused on ensuring an ability to conduct a successful initial defense, would reduce overall force requirements and increase responsiveness and effectiveness to project military power.

U.S. Force Structure: 1999

Army

- 10 divisions (active)
- 15 enhanced-readiness brigades (Reserve)

Navy

- 11 aircraft carriers (active)
- 1 aircraft carrier (Reserve/training)
- 45–55 attack submarines
- 346 ships

Air Force

- 13 fighter wings (active)
- 7 fighter wings (Reserve)
- Up to 184 bombers (B–52H, B–1, B–2)

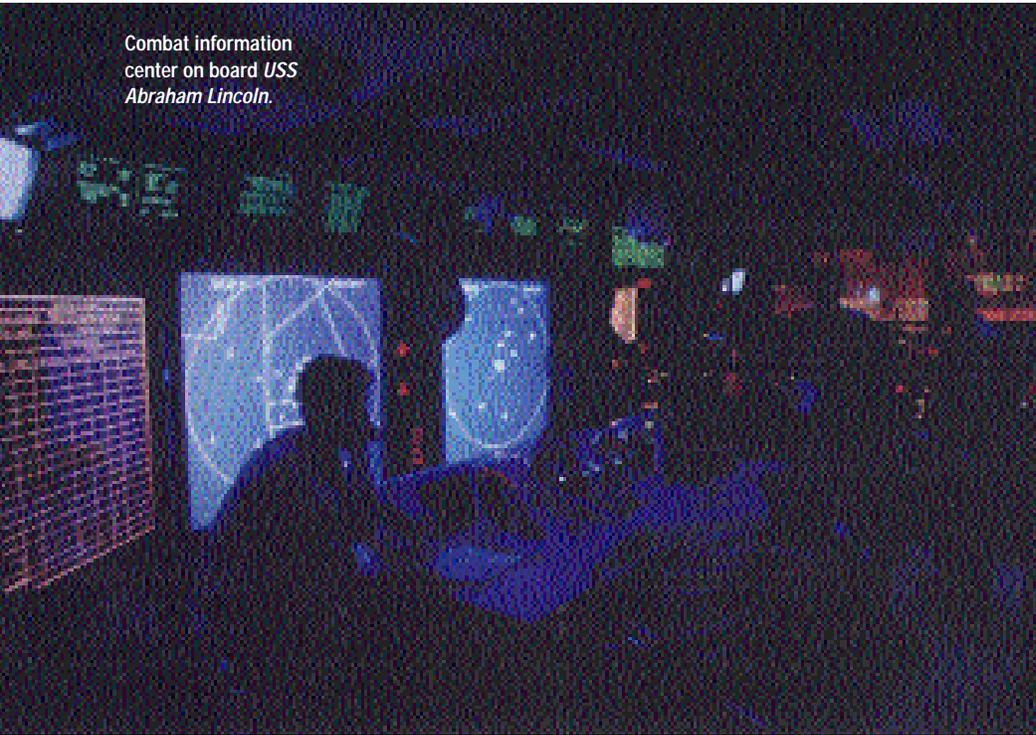
Marine Corps

- 3 Marine Expeditionary Forces
- 174,000 personnel (active end-strength)
- 42,000 personnel (Reserve end-strength)

Strategic Nuclear Forces (by 2003)

- 18 ballistic missile submarines
- Up to 94 B–52H bombers
- 20 B–2 bombers
- 500 Minuteman III ICBMs (single warhead)

Combat information center on board *USS Abraham Lincoln*.



U.S. Navy (Tracy Lee Distas)

forces includes only combat force elements. Clearly, several types of support capabilities would play essential roles in all phases of an MRC. These capabilities include, but are not limited to: airlift; sealift; prepositioning; battlefield surveillance; command, control, and communications; advanced munitions; and aerial refueling. We must ensure that we provide sufficiently in these areas to meet the needs of our strategy. Second, certain specialized high-leverage units or unique assets might be dual tasked, that is, used in both MRCs. For example, certain advanced aircraft—such as B-2s, F-117s, JSTARS, and EF-111s—that we have purchased in limited numbers due to their expense would probably need to be shifted from the first to the second MRC.

Enhancements to Support Strategy

As mentioned above we have already undertaken or are planning a series of enhancements to improve the capability, flexibility, and lethality of the Armed Forces, geared especially toward buttressing our ability to conduct a successful initial defense in major regional conflicts. Enhancements include improving strategic mobility (through more prepositioning and improving airlift and sealift), strike capabilities of aircraft carriers, the lethality of Army firepower, and the ability of long-range bombers to deliver conventional smart munitions.

Strategic Mobility. Plans call for substantial enhancements to our strategic mobility—most of which were first identified in the 1991 Mobility Requirements Study or MRS. First, we will either purchase and deploy the C-17 or purchase other airlifters to replace aging C-141 transports. Since the development of the C-17 has been troubled we will monitor it closely, but significant, modern, flexible airlift capacity is essential to our defense strategy. A decision on the C-17 will be made after the completion of a current review by the Defense Acquisition Board. Second, we plan to store a



SEAL Team desert patrol.

U.S. Navy (Mike Poche)

effectively to defend interests in another. Second, fielding forces sufficient to win two wars simultaneously provides a hedge against the possibility that a future adversary—or coalition of adversaries—might one day

Fighting Two MRCs

In this context, we decided early in the review that the United States must field forces sufficient to fight and win two major regional conflicts nearly simultaneously. This is prudent for two reasons. First, we need to avoid a situation in which the Nation in effect makes simultaneous wars more likely by leaving an opening for potential aggressors to attack their neighbors, should our engagement in a war in one region leave little or no force available to respond

confront us with a larger-than-expected threat. In short, it is difficult to foretell precisely what threats we will confront ten to twenty years from now. In this dynamic and unpredictable post-Cold War world, we must maintain military capabilities that are flexible and sufficient to cope with unforeseen threats.

For the bulk of our ground, naval, and air forces, fielding forces sufficient to provide this capability involves duplicating the MRC building block described above. However, in planning our overall force structure, we must recognize two other factors. First, the foregoing list of

Force Options for Major Regional Conflicts

Strategy	OPTION 1 Win One Major Regional Conflict	OPTION 2 Win One Major Regional Conflict with Hold in Second	OPTION 3 Win Two Nearly Simultaneous Major Regional Conflicts	OPTION 4 Win Two Nearly Simultaneous Major Regional Conflicts Plus Conduct Smaller Operations
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 Battle Groups	10 Carrier Battle Groups	11 Carrier Battle Groups 1 Reserve carrier	12 Carrier Battle Groups
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	14 active fighter wings 10 Reserve fighter wings
			Force Enhancements	

brigade set of heavy Army equipment afloat; ships with this material would be positioned in areas from which to respond on short notice either to the Persian Gulf or to North-east Asia. Other prepositioning initiatives would accelerate the arrival of heavy Army units in Southwest Asia and Korea. Third, we will increase the capacity of surge sealift to transport forces and equipment rapidly from the United States to distant regions by purchasing additional roll-on/roll-off ships. Fourth, we will improve the readiness and responsiveness of the Ready Reserve Force through various enhancements. Finally, we will fund efforts to improve “fort-to-port” flow of personnel, equipment, and supplies in the United States.

Naval Strike Aircraft. The Navy is examining a number of innovative ways to improve the firepower aboard its aircraft carriers. First, the Navy will improve its strike potential by providing a precision ground-attack capability for many F-14s. It

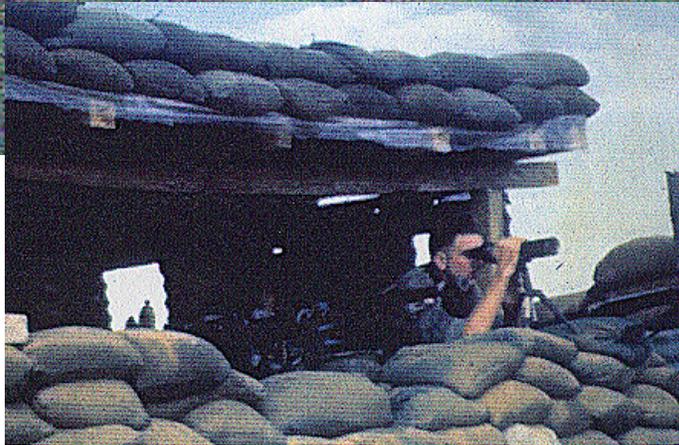
also will acquire stocks of new “brilliant” antiarmor weapons for delivery by attack aircraft. Finally, the Navy plans to develop the capability to fly additional squadrons of F/A-18s to forward-deployed aircraft carriers that would be the first to arrive in response to a regional contingency. These additional aircraft would increase the striking power of carriers during the critical early stages of a conflict.

Army Firepower. The Army is developing new smart submunitions that can be delivered by the Army Tactical Missile System (ATACMS), the Multiple-Launch Rocket System (MLRS), and standard tube artillery. In addition, the Longbow fire control radar system will increase both the effectiveness and the survivability of AH-64 Apache attack helicopters. We also are examining prepositioning more ATACMS and MLRS and having Apaches self-deploy from their overseas bases so that all would be available early in a conflict.

Air Force Long-Range Bombers and Munitions. There will be Air Force enhancements in two areas. First, we plan to modify B-1 and B-2 long-range heavy bombers to improve the ability to deliver smart conventional munitions on attacking enemy forces and fixed targets. Second, we will develop all-weather munitions. For example, the Air Force is developing a guidance package for a tactical munitions dispenser filled with antiarmor submunitions for use in all types of weather. This will dramatically increase our capacity to attack and destroy critical targets during the crucial opening days of a short-warning conflict.

We have also initiated improvements in the readiness and flexibility of Army National Guard combat units and other Reserve component forces to make them more readily available for MRCs and other tasks. One important role for combat elements of the Army National Guard, for instance, is to provide forces to supplement active divisions should

Troops boarding helicopter during Just Cause in Panama.



Marine looking out over Beirut.

the ability to prevail in the most stressing situation we may face—two major regional conflicts occurring nearly simultaneously.

In addition, the force structure provides sufficient capabilities for strategic deterrence and defense. It also provides enough forces, primarily Reserve component, to hold in strategic reserve and utilize if and when needed. For example, Reserve forces could deploy to one or both MRCs, if operations don't go as planned. Alternatively, they could serve as backfill for overseas presence forces redeployed to an MRC.

Structures and Mixes

In the analysis that supported the review, four force structure options were investigated. The options were designed to meet successively more demanding regional defense strategies. Option 3—a force structure adequate to win two nearly simultaneous MRCs—is, in broad terms, the approach chosen.

Option 1 would require the fewest resources, allowing us to reduce the defense budget and redirect excess funds to other national priorities. But, in providing only enough assets to fight one major regional conflict at a time, this option would leave us vulnerable to a potential aggressor who might choose to take advantage of the situation if virtually all our forces were engaged in a conflict elsewhere. At a minimum, this option would require us to scale back or terminate certain existing mutual defense treaties and long-standing commitments, with a corresponding reduction in our influence in those regions where we choose to abandon a major leadership role.

Option 2 would free additional resources for other national priorities, but is premised on the risky assumption that, if we are challenged in one region, respond to the aggression, and then are challenged shortly afterwards in another region, a sizable block of remaining forces will have the stamina and capability

more ground combat power be needed to deter or fight a second MRC. In the future, Army National Guard units will be better trained, more capable, and more ready. If mobilized early in a conflict, brigade-sized units could provide extra security and flexibility in the event a second conflict arose while the first was still going on. There are also plans to increase the capability and effectiveness of Navy/Marine Corps Reserve air assets by introducing a Reserve/training aircraft carrier.

Overall Force Structure

On the basis of a comprehensive assessment of defense needs, the review determined that the force structure, which will be reached by about the end of the decade, can carry out our strategy and meet our national security requirements.

This force structure will be adequate for both overseas presence in peacetime and a range of smaller-scale operations. It will also give us

U.S. Army (Chuck Rogers)

DOD

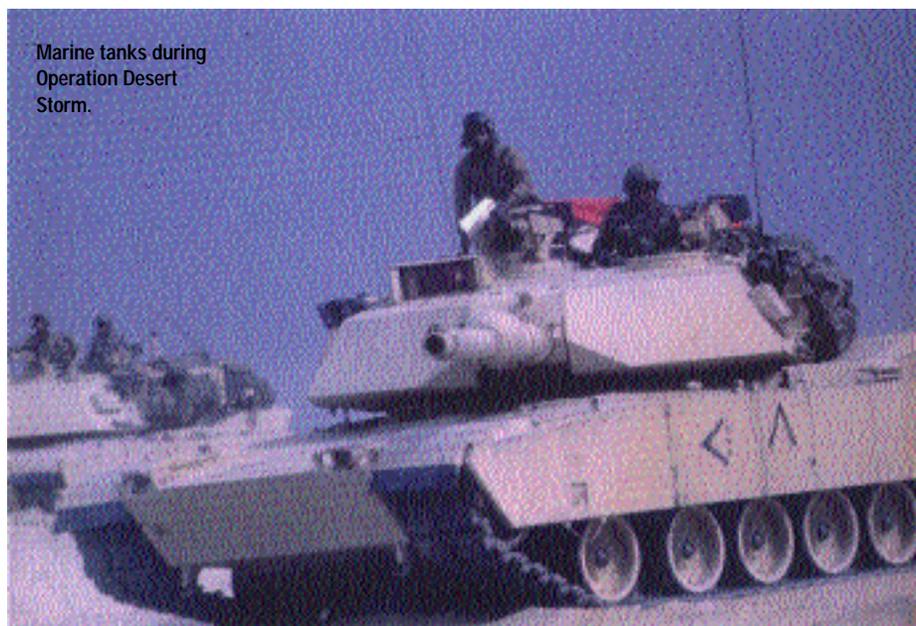
to defeat the first adversary, and move to another region (possibly several thousand miles distant) and defeat another adversary. This option might provide sufficient military strength in peacetime to maintain American leadership, but it would heighten the risk associated with carrying out a two-MRC strategy in wartime.

Option 3 provides sufficiently capable and flexible forces to position the United States as a leader and shaper of global affairs for positive change. It would allow us to confidently advance our strategy of being able to fight and win two major regional conflicts nearly simultaneously. However, it leaves little of the active force structure to provide an overseas presence or to conduct peacekeeping or low intensity operations if we had to fight more than one MRC. If such tasks became necessary—or either MRC did not evolve as anticipated—then we might have to activate significant Reserve forces. Also key to option 3 is the ability to carry out our strategy through a series of critical force enhancements described earlier, including further repositioning of brigade sets of equipment, increased stock levels of antiarmor precision-guided munitions, and more early arriving naval air power.

Option 4 would allow us to fight and win two MRCs nearly simultaneously while continuing to sustain some other overseas presence and perhaps an additional peacekeeping, peace-enforcement, or intervention-type operations. However, maintaining forces of this size would require significant additional resources thereby eliminating any peace dividend the American people may expect as a result of the end of the Cold War. Yet the analysis showed that, despite this larger investment, option 4 would provide only a small increment of increased military capability.

Alternative Mixes

Each strategy and force structure option was tested by weighting various mixes in favor of land, sea, or air contributions. The analysis indicated that, under some circumstances, emphasis on certain types of



Marine tanks during Operation Desert Storm.

U.S. Marine Corps (Michael D. Masters)

forces or capabilities could help offset the loss of certain other capabilities or forces. For example, additional ground forces might be able to compensate for the loss of some air contributions when dealing with guerrilla or insurgency threats in thick and constrained terrain, or where an enemy is not technologically advanced. Alternatively, substituting air power for some ground forces might be supportable in cases where terrain is open; an enemy is highly dependent upon key industries, resources, or utilities; or heavy armored forces are engaged in some other conventional conflict. Even among air components, certain environments or circumstances favor the use of land-based versus sea-based air forces or vice versa.

Nevertheless, while the analysis indicated that a structure geared toward particular types of forces might enhance overall capabilities under specific conditions, it would also create serious vulnerabilities under other circumstances. Given the great uncertainty as to where, when, and how future crises might occur, anything but a carefully balanced force will risk ineffectiveness, high casualties, or a failure to meet objectives. The conclusion was that the balanced force structure we selected is

the best choice for executing our defense strategy and maintaining the flexibility needed to deal with the wide range of dangers.

The Right Force for the Times

In sum, the force structure that emerges from the Bottom-Up Review represents the most appropriate mix and balance of capabilities while reflecting the Nation's need for more resources to devote to investments in future competitiveness. In a world of new challenges, opportunities, and uncertainties, this force—together with planned qualitative enhancements—supports an ambitious national strategy of global engagement and provides the military wherewithal to meet the unknown and unexpected.

JFQ