Given the military capabilities fielded by current adversaries, U.S. forces today seem well prepared to deter and defeat large-scale aggression against important U.S. interests. But our adversaries—current and potential—are not standing still. As their forces begin to field new, more-capable weapons, U.S. forces could witness an erosion in their ability to “defeat large-scale, cross-border aggression in two distant theaters in overlapping time frames,” as called for in the administration’s defense strategy. The reason is not, as some have asserted, that U.S. force structure in the aggregate will be too small to do the job. Rather, the shortfalls revealed by our analysis are mainly qualitative rather than quantitative.

Since the early 1990s, funding for defense modernization has been hard pressed. DoD’s procurement budget in Fiscal Year (FY) 1996 was one-third lower, in real terms, than in FY80.\(^1\) As we have seen, growing resource constraints have meant that programs central to the effectiveness of early arriving forces are either underfunded (e.g., Skeet antiarmor munitions) or being truncated (JSTARS). Indications are that pressure on these accounts is likely to grow.

DoD’s approach to addressing this problem, chiefly by seeking to reduce unneeded base structure and to accelerate the adoption of new and more-efficient approaches to many of its support activities, is laudable. Eventually, such measures can yield substantial savings

that could be applied to higher-priority activities. But most of these initiatives will take time to implement, and even more time will be needed before many of them begin to pay large dividends. Thus, even if DoD is highly successful in reducing its costs of doing business, savings will need to be generated from other accounts over the next five to ten years to field all of the capabilities needed to halt invasions in two theaters nearly simultaneously.

**PAYING FOR NEEDED ENHANCEMENTS**

It is highly likely that further, deeper reductions in endstrength (personnel) and force structure will be unavoidable a few years hence if DoD attempts to meet its highest priority modernization needs. How should those cuts be apportioned to avoid or minimize a loss of warfighting capability?

DoD has recognized that the most obvious place to cut military manpower and force structure is in units that play little or no role in current or projected theater operations—that is, nondeployable forces. The primary examples of these forces today are the air defense squadrons of the Air National Guard and the Army National Guard’s combat-configured brigades and divisions. DoD has proposed reductions in both forces. The Air Force will convert six continental air defense squadrons to general-purpose missions and will eliminate some three larger squadrons from its active force structure. The Secretary of Defense announced a reduction of 15,000 military personnel from the Army’s active component and 45,000 military personnel from the Army’s reserve component. Previous to the QDR, 12 of the Army National Guard’s 40 brigades already were scheduled to change from combat to combat support capability. Once in place, these manpower cuts could save approximately $450 million annually. Such cuts are welcome, and they yield no real reduction in U.S. military capabilities.

However, these cuts cannot, by themselves, yield sufficient savings to ensure a robust force modernization program. Given the marginal utility of combat-configured units in the Army’s reserve component, substantially greater reductions seem justified. Nevertheless, political opposition to such changes may delay or limit the realization of savings. And even if the savings are eventually realized from cuts to nondeploying forces and support activities, the price tag associated
with recapitalizing the entire force structure called for in the QDR might still exceed available funds. In either case, DoD could well find itself a few years hence again facing the need to cut the active and readily deployable reserve component force structure. The approach taken in this report and its supporting analysis provide some clear directions that can help inform such cuts.

As DoD has recognized, it is essential that capabilities needed to quickly execute the halt phase of future conflicts be retained and, as necessary, enhanced. U.S. adversaries are likely to realize that the opening phase of a future conflict will determine the cost, nature, and duration of the conflict. Thus, a U.S. force that is postured and equipped to deny the enemy the prospect of success in a short-notice attack is most likely to be the best deterrent against such an attempt.

In its 1993 Bottom-Up Review, DoD identified a “building block” of forces from each of the services that it used for planning purposes to describe the type and number of forces that would be required to defeat aggression against a major regional opponent. That building block, reproduced in Figure 6.1, generally describes the type of force that DoD today would plan to send to a major theater war.\(^2\) DoD’s total warfighting force structure, which is approximately twice this building block, is assumed to be capable of fighting and winning two nearly simultaneous MTWs. When most planners consider cuts in force structure, they think in terms of across-the-board, vertical cuts to this service-denominated building block. Guidance to the services regarding their fiscal planning and authorized force structure is also issued in these terms.

In light of DoD’s emphasis on the need to prevail in the opening phase of a future conflict, however, a more useful way to conceptualize MTW building blocks is shown in Figure 6.2. This approach is based not on systems or units provided by each military service, but rather on the functions provided by those force elements in defending against large-scale combined arms attacks—the most demanding and important missions assigned to U.S. forces. Taking this approach, it is possible to identify three types of deployable forces:

\(^2\)See Aspin, 1993, pp. 18-19.
How Advances in Information and Firepower Can Transform Theater Warfare

Figure 6.1—The MTW Building Block

- 4–5 CVBGs
- 100 bombers
- 10 FWE (fighter wing equivalent)
- 4–5 MEBs (Marine Expeditionary Brigades)
- 4–5 divisions

Figure 6.2—A Functional MTW Building Block

- Forces not deployed
- Counteroffensive forces
- Enablers
- “Halt” forces
• Those that contribute to the initial phase (as well as succeeding phases) of the operation;
• Those that provide key enabling functions throughout the operation; and
• Those that are available only for the later counterattack or counteroffensive phase, in which enemy forces would be forcibly expelled from captured territory.

From the perspective of preparing for major theater warfare, it seems clear that if cuts must be taken from force structure, they should be taken horizontally from those forces that are not a part of the deployed force or from those that arrive late and contribute only to the counteroffensive.

We advocate this approach not only because of the manifest importance of halting early, though that should be reason enough. This approach is warranted also because incipient and forthcoming improvements in the capabilities of modern information and firepower systems suggest changes in the division of labor among different types of forces. As we have seen, these improvements are allowing modest-sized forward deployed and early arriving forces—the halt forces and the enablers—to engage and quickly destroy, at least under some conditions, a far greater portion of the enemy’s warfighting capabilities than has heretofore been possible. Consequently, the role of forces committed to the later phases of a major theater war is changing.

This judgment is based on growing evidence that longer-range firepower can be substantially more effective than in the past, not only in the halt phase of a theater war but also after the enemy ground force has halted and dug in. Modern navigation and engagement systems can permit fixed- and rotary-wing aircraft to find and attack targets effectively at night. Coupled with accurate weapons, this means that U.S. forces can harass stationary forces and interdict enemy troop and supply movements virtually around the clock and in poor weather as well as fair. As the air campaign in Operation Desert
Storm showed, unremitting attacks of this nature can sap an enemy force of the capability and will to fight.³

In the future, then, planners will see later-arriving forces (principally composed of mobile ground force units) as increasingly providing the joint commander with the means to ensure that the enemy ground forces, badly mauled by joint firepower, move from their dug-in positions, either to fight or flee. Once dislodged, the enemy forces become more susceptible to detection and engagement by a wide range of U.S. sensors and fires. In short, where the traditional concept of maneuver warfare saw the close battle as the decisive element of the joint campaign, future commanders will see the halting operation—by necessity and choice dominated by standoff sensors and longer-range fires—as the culminating point of the conflict. Put another way, traditional doctrine saw fire as enabling maneuver: Fire was the means, shaping the battlefield to support the end of maneuver so that friendly forces could enjoy advantages of surprise or favorable position in the close battle. In the future, the dominant paradigm will be information enabling effective firepower. Gaining accurate, timely, and comprehensive information about the location and disposition of enemy forces, and denying comparable information to the enemy, will become perhaps the single most important element of a successful campaign.

Even in the conflict’s opening phase, friendly ground forces will play key roles: By their presence in the theater, friendly armor can compel the enemy to attack with sizable formations of heavy mechanized forces. This attack is actually advantageous to the defenders, because it makes it more likely that U.S. surveillance assets will detect prewar mobilization efforts and that, once on the move, the enemy ground forces will be slower and more cumbersome than light unarmored forces would be. Friendly heavy forces are uniquely able to “stand and fight” in defense of critical territory. Using delay and retrograde tactics, mobile friendly ground forces can slow an advancing enemy and create more lucrative targets for longer-range fires. Nevertheless, as U.S. information and firepower continue to improve, we envisage a substantial shift in the division of labor away

from heavy ground forces and toward longer-range firepower in many situations.

Figure 6.3 presents a somewhat more detailed description of the types of forces and assets that might typically constitute halt, enabler, and counteroffensive forces in a major theater operation.

Many of the systems most needed to provide two robust halt and enable forces are already substantially funded, especially the major platforms, such as the C-17 airlifter and the F-22 fighter. The capabilities most at risk to budget-driven delays generally reside in less-conspicuous programs that do not define major force elements. These include

- Advanced munitions, such as smart antiarmor munitions and standoff attack weapons,
- Sensor-to-controller-to-shooter communication links,

**Figure 6.3—Forces and Functions for a Major Theater War**
Upgrades to avionics and other systems on existing platforms that will allow them to integrate and employ advanced information and munitions,

• Theater surveillance sensors and platforms, to locate and characterize both enemy maneuver forces and mobile air defenses,

• Prepositioned assets, and

• Improved concepts and capabilities for finding, engaging, and destroying advanced surface-to-air missile systems, such as the SA-10.

In our rough estimation, additional sustained investments of $2 billion–2.5 billion per year in these capabilities over a ten-year period should suffice to avoid further debilitating delays and cancellations in these low-profile but critical areas. Fairly modest cuts in later-arriving forces—on the order of 10 to 15 percent—should suffice to generate these funds.

Clearly, halting an invasion is not the same as victory, even if the halt comes quickly. U.S. and allied forces in future wars will be charged with other important objectives as well, including reducing the war-making capacity of the enemy nation, expelling enemy forces from captured territory, compelling surrender, and, perhaps, occupying enemy territory in order to impose a postwar settlement. In some cases, these objectives will call for forces well beyond those required for successful early operations. But halting the invasion (and, by extension, gaining dominance over operations on the land and sea, and in the air and space) creates favorable conditions for the pursuit of other objectives.

In short, modest cuts in later-arriving forces, with the resulting savings focused on early arrivers, would yield a force more capable of defeating short-warning invasions, yet retaining the capacity to expel enemy ground forces from captured territory. There need be no reduction in the number or the capabilities of U.S. ground forces available for a single major theater war. Two to three divisions plus a Marine Expeditionary Force would remain in the active component for operations in a second MTW as well.

Of course, U.S. forces must be capable of conducting a wider range of operations over a wider range of circumstances than those consid-
Broader Implications for the Defense Program

Ered in this analysis. These operations may include peacekeeping, intervention, monitoring, and sanction enforcement operations of extended duration. DoD will need to consider the potential future demand for these and other operations when weighing priorities for overall force structure and modernization needs. We believe that providing forces for large-scale power projection is the proper centerpiece for U.S. force planning in the coming era and that the scenario and cases examined here represent a prudent basis for evaluating those forces.

CONCLUDING OBSERVATIONS

By developing new operational concepts that exploit advanced capabilities—for gathering and passing information; for large numbers of smart, specialized munitions; for stealth; and for other innovations—U.S. military forces are on the threshold of realizing a revolution in the conduct of large-scale theater warfare. These innovations promise to allow U.S. forces to prevail in power projection operations against future adversaries even under stressing conditions. Alternatively, should we fail to exploit these emerging capabilities and hew to a more traditional approach, future U.S. commanders could find themselves unable to contend with well-equipped and competent regional adversaries at costs and risks that are acceptable to U.S. leaders.

Projecting large-scale military power into an aggressor’s back yard is never easy. By focusing on the dynamics of the opening phase of future conflicts, we can learn more about the demands of that critical phase and about nascent opportunities to ensure that U.S. forces can prevail. For sound political and economic reasons, the United States no longer stations large formations of forces abroad on a routine basis as we did in Central Europe during the Cold War. And our adversaries cannot be relied upon to be so foolish as to give U.S. military forces weeks to build up in the theater. Moreover, as weapons of mass destruction and the means to deliver them proliferate, the risks of placing large numbers of U.S. military personnel within range of these weapons will escalate inexorably. For these reasons, a traditional approach to theater warfare that relies primarily on heavy maneuver forces to halt and destroy the bulk of the enemy’s attacking ground force in the close battle can no longer be regarded as an
appropriate means of supporting U.S. objectives in the opening weeks of future conflicts.

New, emerging concepts will allow modestly sized forward forces and rapidly deploying units to play a far greater role in locating, disrupting, destroying, and halting attacking maneuver forces—and, more broadly, in gaining dominance over enemy operations. By exploiting information and advanced munitions, these concepts will allow the bulk of the enemy’s combat power to be neutralized at extended ranges, rather than in direct fire engagements with, or in close proximity to, friendly ground forces. These concepts are well suited to meeting the demands of U.S. strategy for power projection. If fully supported, these concepts can support a defense posture that strengthens deterrence and, should deterrence fail, provides the means for U.S. forces to gain the initiative rapidly and to prevail in conflict.

Changes of this magnitude in the capabilities of longer-range surveillance and firepower systems represent a fundamentally new approach to theater warfare. As these new capabilities are developed, tested, and fielded, they should prompt a thorough review of our operational concepts, force mix, and investment priorities.