Special Operations Soldiers conduct premission planning during exercise Emerald Warrior 2010

U.S. Air Force (Clay Lancaster)

FORCE PLANNING IN THE 2010 QDR

By KATHLEEN H. HICKS *and* SAMUEL J. BRANNEN

The use of Integrated Security Constructs—overlapping, detailed sets of planning scenarios and associated assessment tools—in the 2010 Quadrennial Defense Review (QDR) provides the United States with a clean break from Cold War–era force planning.

Although we maintained the longstanding measure of succeeding in two substantial conventional conflicts overseas, we also tested the force against a broader set of projected threats, many of them inconceivable to the prior generation of defense planners.

Moreover, to meet the unique demands of our changing security environment, the 2010 QDR provides differentiated force planning guidance for the near term—unequivocally emphasizing the Nation's intention and capability to prevail in current conflicts—as well as guidance over the mid to long term—ensuring the U.S. military's preparations for the wide range of challenges lying over the horizon.

How did we get here?

In 1991, just after the end of the Cold War, Iraqi forces seized Kuwait. In response, the United States and its coalition partners undertook a massive deployment of military might. Over 3.7 million tons of cargo, 112,500 vehicles, and 697,000 U.S. military personnel moved into Southwest Asia from Europe, the United States, and the Pacific. The fight to remove Iraq from Kuwait began with an air campaign on January 17, 1991. Just over a month later, the ground campaign commenced with a combined arms left hook across the northern Saudi border. One hundred hours into the campaign, the U.S.-led coalition had routed Iraqi forces and liberated Kuwait.

Force planners in the 1990s referred to operations such as *Desert Storm* as "major regional contingencies" and later as "major theater wars" (MTWs). The ability to conduct two nearly simultaneous operations became the gold standard for measuring U.S. force capacity and capability. Planners held that U.S. forces should be able not only to prevail against the next Saddam Hussein, but also to stave off an opportunist Kim Jong-Il while doing so.

From almost the beginning, MTW-centered force planning came crashing into the reality of how U.S. forces were deployed across an evolving threat spectrum that defied easily categorized forms of conflict. Somalia, Bosnia, Kosovo, the 9/11 attacks, and more recent experiences in Afghanistan and Iraq demonstrate clearly that the post–Cold War world demands vigilance and, when necessary and appropriate, a willingness to act, adapt, and prove flexible across a wide range of military operations.

The most recent QDR builds on its predecessors by acknowledging these facts. At the time of the report's release, the United States was operating in Iraq, Afghanistan, and Haiti; fighting a war against al Qaeda and its allies around the world; providing ready and capable forces postured to maintain access to the global commons and deter and defeat threats in key regions of the world; and standing ready to defend the Nation and support civil authorities at home.

The 2010 QDR makes clear that the *nature* of future threats and their likely overlap is far more important than simplistic *numbering* formulas can convey. From state and nonstate actors poised to threaten nuclear attack, to fragile states that may engender terrorism, nuclear insecurity, civil strife, or even genocide, to the rapid growth in advanced antiaccess, area-denial capabilities that could threaten U.S. allies abroad and access to the global commons on which our economy—and the world's economy—depends, the range of likely future conflicts can neither be wholly captured in MTW scenarios nor met with *Desert Storm*–like capabilities.

Prior Constructs

The DOD systematic approach to defense planning is rooted in systems analysis institutionalized during the term of Secretary of Defense Robert McNamara. His approach enabled force planning that was informed by budgetary realities but designed to uphold global deterrence by meeting the challenge posed by Soviet and Warsaw Pact forces. That McNamara's Pentagon famously failed to develop a strategy and the capabilities appropriate for the Vietnam War illustrates the importance of testing the force against a wide range of plausible challenges—including prevailing in ongoing operations.

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With the end of the Cold War, large-scale conventional war with the Soviet Union and its allies could no longer serve as the focus for U.S. force planning. Pressure mounted to reduce the defense spending that had, in part, broken the Soviet Union. During his command of U.S. Army Forces Command

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U.S. Army (Robert Reeve)

M1A1 tanks move across desert in northern Kuwait during Operation *Desert Storm*

and then as Chairman of the Joint Chiefs of Staff, General Colin Powell developed a force planning concept that cut personnel numbers while seeking to maintain overall force capacity as well as the forward-basing and rotational presence of U.S. personnel.[1] General Powell argued that the United States still had global security commitments and needed the ability to respond to a range of contingencies—few, if any, of which would be predictable. His planning framework centered on the capability to conduct two nearly simultaneous major regional contingencies (MRCs) anywhere in the world, while preparing the additional capabilities to deal with several lesser regional contingencies. Both types of contingencies were modeled on earlier U.S. conventional engagements including Operations *Desert Storm*, *Provide Comfort*, and *Just Cause*.

Powell's force planning construct, dubbed the Base Force (a base beneath which the force should not go), called for a reduction of total U.S. force structure by 25 percent during fiscal years 1991–1995.[2] Initially, Powell's construct was resisted by the George H.W. Bush administration as cutting too deeply and taking too much future risk. By 1990, however, President Bush and his Secretary of Defense Dick Cheney adopted Powell's construct in response to broad congressional pressure for the United States and its allies to cash in a "peace dividend" from victory in the Cold War.

Democratic Members of the House Armed Services Committee, led by Chairman Les Aspin, charged that the Base Force was merely "defense by subtraction." Aspin argued that U.S. military forces should be sized against real threats in real places.[3] He invoked the use of "sizing scenarios" that examined the likeliest contingencies in greater detail than had the Joint Staff in producing the Base Force. Aspin and his staff created four illustrative options that included equivalents of recent smaller-scale operations, with overlapping operations "stacked" on one another. Each operation and its required force structure were binned as a "contingency-based building block."[4] House Democrats backed Aspin's Illustrative Option C: a "Basic *Desert Storm* Equivalent," a regional contingency/Korea operation, a *Provide Comfort*–type "Humanitarian or Evacuation Action," and a Panama-type operation, with bases for long-duration rotation, appropriate lift, and prepositioning.

DOD (Cherie Cullen)

Secretary Clinton and Secretary Gates look out over North Korea from observation point in Demilitarized Zone

Beneath these options were a range of activities and force capacities called the "Defense Foundation."

As Secretary of Defense under President Bill Clinton, Aspin sought to refine and institutionalize his Option C through a Pentagon internal review. The 1993 Bottom-Up Review investigated several potential "paths" (much like the illustrative options), among which it selected Path 3, the capability to "first halt and then defeat" two nearly simultaneous MRCs in two different theaters. All other potential operations were thought to be "lesser-included cases" that the existing force would handle whenever possible.[5]

The 1997 QDR was the first required by law. Its force-sizing template echoed that of the 1993 Bottom-Up Review, but recognized the increasing demands of smaller-scale contingencies from Somalia to Bosnia. The 1997 QDR echoed the logic of the Base Force in justifying the need to maintain a broad, capable U.S. military:

> *As a global power with worldwide interests, it is imperative that the United States now and for the foreseeable future be able to deter and defeat large-scale cross-border aggression in two distant theaters* [MTWs] *in overlapping time frames, preferably in concert with regional allies.*[6]

It emphasized deploying forces for forward presence to deter aggression and coercion by regional actors, including those armed with weapons of mass destruction (WMD). It also noted that a key challenge to fighting and winning major theater wars was the ability "to transition to fighting major theater wars from a posture of global engagement—that is, from substantial levels of peacetime engagement overseas as well as multiple concurrent smaller-scale contingency operations."[7]

The 2001 QDR was the first of the George W. Bush administration, and it announced a "paradigm shift in force planning" that emphasized global flexibility and a so-called capabilities-based approach to planning centered around two MRCs (dropping the short-lived reference to MTWs). It sought to clarify the force planning construct, derived in no small part from the lessons of Kosovo, during which the Air Force discovered that a seemingly smaller-scale contingency could produce an operational tempo and force demand far closer to an MRC.[8] The 2001 QDR instructed that forces should be prepared around a "1–4–2–1" construct:[9]

1: organize, train, and equip sufficient military forces to defend the U.S. homeland

4: operate in and from four forward regions

2: swiftly defeat adversaries in two overlapping military campaigns

1: one of the swift defeats of adversaries in two overlapping military campaigns should be a "win decisive."

The events of 9/11 and the onset of Operation *Enduring Freedom* posed significant challenges in maintaining this construct.

First, the construct and DOD analysis of the time did not account for counterinsurgency operations or for extended duration operations. Second, *Enduring Freedom* in Afghanistan, begun only a month after the 2001 QDR's publication, took place outside of the four forward regions referenced in the strategy document. The 2001 QDR provided a listing of major force elements—such as Army divisions, Marine Corps expeditionary forces, Air Force fighter squadrons, and naval surface combatants—but it did not tie these to the defense strategy or the force planning construct.

The 2006 QDR largely continued on the course of the 2001 QDR. An important change, however, was the recognition that so-called irregular wars posed unique demands on both the force's structure and its capabilities. The 2006 QDR's planning construct called for the following items:

- ability to contribute to the Federal response to and consequence management of WMD attacks or a natural disaster on the scale of Hurricane Katrina, with the ability to raise defense responsiveness across domains (including cyberspace)[10]
- irregular warfare capacity at "the current level of effort associated with operations in Iraq and Afghanistan"[11]
- capacity to conduct "two simultaneous conventional campaigns (or one conventional campaign if already engaged in a large-scale, long-duration irregular campaign)" while maintaining the capacity "in one of the two campaigns to remove a hostile regime, destroy its military capacity, and set conditions for the transition to, or for the restoration of, civil society."[12]

The construct also aimed to differentiate force demand from "steady-state" activities (previously forward presence, shaping, or deterrence) and "surge" activities (previously MRC/MTW operations). Published without a list of major force structure components, the 2006 review failed to anticipate the increased end strength that DOD, the Army, and the Marine Corps would require in early 2007.

Bridging to the Future

In preparing for the 2010 QDR, DOD identified three instructive trends in this evolution of force planning.

The first is the need to balance current operational readiness with the requirement to develop forces for future contingencies. In the 1997 QDR, this concept was demonstrated in the tension between our readiness to "respond" and our imperative to "prepare now." More recently, the concept of balance was introduced by Secretary of Defense Robert Gates in the 2008 National Defense Strategy.

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The second is an increasing recognition that future operations are less predictable than we would like. Planning against a specific threat in a specific place would leave the United States vulnerable to the wide range of operations that history has proven we unexpectedly find ourselves involved in. There was false comfort in believing that to prevail in the future we could simply look to past successes.

The third trend, tied in many ways to the second, is the increasing difficulty of neatly or reliably categorizing potential contingency types (for example, as conventional or irregular warfare). The hybrid approaches to warfare that adversaries are likely to employ demand that U.S. forces prepare for a much broader challenge set and be ready to move quickly from one "type" of warfare to another, often converging in time and place. We have been routinely surprised by our inability to predict the course or costs of the employment of our military. Even after the tide of conflict is turned and the United States and its allies and partners prevail in combat, there is often

U.S. Marine Corps (James Frank)

Rapid Response Force Marines conduct sustainment training to prepare for full-scale missions from humanitarian relief efforts to combat operations

a decades-long requirement for security force assistance or follow-on activities in the theater to maintain deterrence or military balance. Likewise, so-called small-scale conflicts, such as counterinsurgency and stability operations, can pose significant demands on the force and call for capabilities that may be quite different from those employed in combat.

These lessons substantially informed the 2010 QDR defense strategy and its associated near-term and mid- to long-term force planning and sizing approach. Taking past experience into account, and casting our vision forward 20 years, the defense strategy focuses on fulfilling four key defense objectives:

- We must be able to *prevail* in today's conflicts.
- We must look for ways to *prevent and deter* further conflict.
- We must *prepare* to defeat adversaries and succeed in a wide range of future challenges.
- We must *preserve and enhance* our force, including making necessary improvements in our defense institutions to ensure we honor the commitment and sacrifice of our men and women in uniform. This strategic priority includes caring for our wounded warriors, supporting families, recruiting and retaining personnel (including development of present and future military leaders), and seeking ways to rebalance reliance on the Reserve Component as the operational environment allows.

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As in 2006, DOD undertook the 2010 QDR in a time of war. Unlike its predecessors, however, the most recent QDR explicitly addresses the sizing construct to be used in the near term (5 to 7 years) while describing how that construct shifts over the mid to long term (7 to 20 years).

Near-term Force Sizing (5 to 7 Years). This year's review leaves no doubt that as long as substantial numbers of U.S. forces are operating in Afghanistan and we are conducting a responsible drawdown of forces in Iraq, U.S. force sizing and shaping will be driven by the need to ensure success for the men and women serving in both theaters. Success in these operations significantly enhances our long-term security outlook.

Marines keep guard on Mogadishu airport tarmac during Operation *Restore Hope*

U.S. Navy (Mark R. Alvarez)

At the same time, the QDR requires U.S. forces to be capable of executing other elements of the defense strategy today. This includes limited prevent and deter missions focused on ensuring a defense in depth of the United States, preventing the emergence or reemergence of transnational terrorist threats. It also includes being prepared to defend the United States and to support civil authorities in the case of an emergency and defeating threats to U.S. allies and interests that might arise, such as on the Korean Peninsula. Finally, the QDR requires the force to begin transitioning to sustainable personnel rotation rates that encourage the vitality and long-term health of America's All-Volunteer Force.

Long-term Force Sizing (7 to 20 Years). Looking out along the long-term security horizon, we see an even more complex environment with a greater opportunity and need to address our prevention, preparation, and preservation (*prevent, prepare, preserve*) defense objectives. Some of the particularly stressing operational challenges we face include:

- lower barriers to entry for dangerous actors attempting to acquire an increasingly lethal array of technologies, including WMD—more actors are more dangerous and can directly threaten America's interests and its ability to operate
- incentives for nonstate and state adversaries to challenge us asymmetrically—this would likely occur at the low and high ends of potential lethality and/or technology, and we should expect future conflicts to combine these approaches
- potential for state collapse or chronically fragile states to pose a range of complex challenges.

Given the broad spectrum of potential future conflicts, Secretary Gates has directed force planners to develop "an American military that must have the maximum possible flexibility to deal with the widest possible range of scenarios and conflicts."[13]

Although the U.S. Armed Forces must in aggregate be flexible, not all portions of the force must do everything equally well. Operations will affect each part of the joint force differently, including variations in the intensity and duration of use for land, maritime, air, space, and cyberspace forces. Nor should we overspend by inflating threats. Indeed, as the QDR states, "Not all challenges pose the same degree of threat to national interests, rely on U.S. military capabilities equally, or have the same chance of occurrence."[14]

Ensuring our ability to meet defense objectives over the long term required us to move beyond a single, small set of scenarios against which to assess our future forces. For this reason, the QDR used multiple Integrated Security Constructs—scenario combinations designed to test the force's capacity to manage plausible but highly stressing combinations of overlapping missions. For example, QDR analyses tested the capacity of U.S. forces to meet the following challenges in overlapping timeframes:

- conduct a large-scale stability operation, such as Operation *Iraqi Freedom*

■ defeat a highly capable state adversary in a distant theater

■ extend support to civil authorities in response to a catastrophic event in the United States

■ continue to execute a global campaign against al Qaeda and its allies.

We also tested the QDR force against several other plausible combinations of challenges, each designed to stress the force differently in terms of its speed, strength, versatility, and durability. To analyze scenarios, we planned a contingency operation, determining the required force size and structure,

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then tested these forces using modeling and simulation where possible, and military judgment in other cases. We complemented these efforts with lessons learned from past and current operations and numerous classified wargames—many set in the distant future.

Using this planning process, the 2010 QDR went far beyond the scope and time horizon of earlier reviews. By broadening scenario sets and testing multiple variations, we captured long-term challenges such as advanced cyber, nuclear, and antispace situations set decades in the future. We also explored the implications of increased demands for day-to-day global presence and partner capacity missions over a period of years. These missions—domestic support to civil authorities, security force assistance, and deterring nuclear-armed aggressors—have been only marginally assessed in prior analyses.

Although we must be realistic about our ability to predict all of the factors that affect U.S. and foreign military planning—trends that include global economics, energy, demographics, technology, geopolitics, and domestic pressures on adversaries, allies, and friends—we are confident that the analysis undertaken in the 2010 QDR and the review's resulting strategic and programmatic decisions set DOD on the right course to guide the force's needed evolution over the next 20 years.

The 2010 QDR concretely identifies the size and composition of U.S. force structure appropriate for executing the defense strategy. It then goes beyond prior reviews to establish clear measures for further force evolution, ensuring that our force of the future includes:

■ ground forces capable of full-spectrum operations

■ naval forces capable of robust power projection and effective partnering

■ survivable fifth-generation fighter aircraft with increased range, flexibility, and multimission versatility

■ agile special operations forces with organic enablers and support from general purpose forces

■ more and better enabling systems, including intelligence, surveillance, and reconnaissance, as well as electronic attack

■ communications networks, more resilient base infrastructure, enhanced cyber defenses and missile defenses

■ the right combination of joint persistent surveillance, electronic warfare, and precision-attack capabilities, including both penetrating platforms and standoff weapons, to support U.S. power projection operations.

Ensuring unparalleled U.S. military capability in the future is about much more than numbers of people and platforms. That is why the QDR places such strong emphasis on innovative concepts of operations. The joint air-sea battle concept being developed by the Navy and Air Force, for instance, will help knit together relationships, forward presence, global reach, and force development priorities in ways that maximize power projection in contested environments.

Likewise, the QDR stresses the importance of preserving and enhancing a skilled and forward-thinking military, civilian, and contractor workforce while adapting our defense institutions and processes to become more agile, from acquisition to security assistance to energy consumption. Secretary Gates has shone a bright light on the too often overlooked need for the right mix of key enablers—intelligence, surveillance, reconnaissance, and lift and logistics lift capabilities, as well as linguists, engineers, civil affairs officers, and intelligence analysts—demanded by commanders in the field and applicable to a wide range of future contingencies.

A Post-QDR Force Planning Agenda

Operation *Desert Storm* taught us that America's interests and role in the world required armed forces with unmatched capabilities and a willingness on the part of the Nation to employ them in defense of the common good. In the intervening 20 years, we have learned that no two major theater wars look alike and that the challenges to America's long-term security will come in many forms.

Since 1997, QDRs have gradually moved DOD away from the simplistic two-MTW construct that seemed increasingly at odds with operational experience and projections of the threats and capabilities of future adversaries. Some observers continued to stress that

U.S. Army (Chris McKenna)

Soldier tests communications during air assault operation in Bak, Afghanistan

QDRs have not provided sufficient clarity on the force capacity to execute the defense strategy. Indeed, even the two-MTW construct required significant analytical interpretation by the Services and others to develop future forces and gauge their capacity. As our approach to force planning becomes more sophisticated, the challenge of explaining our approach to a general audience becomes more daunting. William Kaufman, the godfather of American force planning, faced this same struggle. One reviewer, writing of Kaufman's force recommendations during the 1980s, noted:

The explanation for [Kaufman's recommendations] *must be sought in the details of the planning scenarios and the responses to them under the alternative forces. Herein lies both the value of the exercise and the problem for the general reader. The example demonstrates how many different assumptions and calculations are used in planning a military force structure, but to do so it embodies a degree of complexity that will overwhelm all but the most avid enthusiasts of military minutiae.*[15]

Like Kaufman, modern force planners should give first priority to the rigor and accuracy of their analysis. We will continue to make needed improvements to the range and quality of our near-, mid-, and long-term analysis, including new or refined scenarios, concepts of operation, confounding operational factors, and readiness assumptions and goals.

As a defense community we can and should do better in explaining our approach and its implications. The 2010 QDR took a critical step in this direction. The publicly released QDR Report provided significant insight into U.S. force analysis, to include a detailed list of forces required out to 2015, a clear path for further evolution of the force 20 years hence, and exemplar scenario sets on which the force requirements were based. In addition, the QDR process was the first since 1997 to provide even further in-depth analytical briefings and materials to the legislative branch via the Congress, Government Accountability Office, and congressionally mandated QDR Independent Panel. DOD will continue to build on this new foundation of transparency to explain its approach while seeking input on ways to improve its planning and rationale.

DOD (Chad J. McNeeley)

Chairman meets with Israel Defense Forces chief in Jerusalem to discuss regional issues

For those outside the process, we need to improve our ability to explain planning to the men and women who execute the Nation's military missions, as well as the American taxpayers who fund them.

DOD will continue to participate in the force planning efforts of interagency partners and overseas allies. The 2010 QDR was the first to draw early and often on the insights and expertise of colleagues on the National Security Staff, Department of State, Department of Homeland Security, U.S. Agency for International Development, and U.S. Intelligence Community. It also opened itself up to scrutiny by a bipartisan set of security experts outside of government. Finally, this year's QDR was the first to include extensive bilateral consultations and embedded staff from our European and Asian allies. These interactions mark only the beginning of changes toward a more transparent and comprehensive QDR process. Over the next several years, we will focus on how allied and partner, U.S. civilian, and U.S. military capabilities can complement each other to make the most of our collective expertise and capacity. **JFQ**

NOTES

[1] Lorna S. Jaffe, *The Development of the Base Force: 1989–1992* (Washington, DC: Joint History Office, Office of the Chairman of the Joint Chiefs of Staff, 1993), 2–3.

[2] Ibid., 33–35, 44–45.

[3] Insightful discussion of Aspin's approach can be found in Richard A. Lacquement, *Shaping America's Military Capabilities after the Cold War* (New York: Praeger, 2003), 84.

[4] Les Aspin, "An Approach to Sizing American Conventional Forces for the Post-Soviet Era," report, U.S. Congress, House Committee on Armed Services, February 25, 1992, chart II.

[5] See Les Aspin, *Report of the Bottom-Up Review* (Washington, DC: Department of Defense [DOD], October 1993).

[6] William S. Perry, *Report of the Quadrennial Defense Review* (Washington, DC: DOD, May 1997), 12.

[7] Ibid., 13.

[8] This insight and many others on the purpose and history of force planning constructs are courtesy of Dr. Clark Murdock, senior advisor at the Center for Strategic and International Studies, with whom coauthor Samuel Brannen worked on a limited circulation report on force planning constructs in 2009.

[9] DOD, *Quadrennial Defense Review Report* (Washington, DC: DOD, September 2001), 17–23.

[10] DOD, *Report of the Quadrennial Defense Review* (Washington, DC: DOD, February 2007), 37.

[11] Ibid., 38.

[12] Ibid.

[13] Robert M. Gates, "Remarks as Delivered to the Navy League Sea-Air-Space Exposition," Gaylord Convention Center, National Harbor, MD, May 3, 2010.

[14] DOD, *Quadrennial Defense Review Report* (Washington, DC: DOD, February 2010), 42.

[15] Judith Reppy, review of William W. Kaufman, *A Reasonable Defense* (Washington, DC: The Brookings Institution, 1986), in *Bulletin of the Atomic Scientists*, August–September 1986, 63.