QDR REPORT

Draft as of December 3, 2009

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PREFACE

[TO BE WRITTEN BY SECDEF SPEECHWRITER]

- Established initial administration narrative in FY2010 process
 - o Strategy-based: 2008 NDS and Presidential reform priorities
 - Significant attention to eliminating or reducing poorly performing programs
- Initiated strategic reviews (QDR, NPR, SPR, BMDR) to refine approach
- These reviews update the NDS, providing the long-term vision to guide the administration's defense activity
- The FY11 budget build on FY10, providing additional attention to key lines of investment that are highlighted in the reports
 - Taking care of our troops and our people
 - Reforming how we buy and operate
 - Rebalancing for
 - The current fight
 - Plausible future challenges
- QDR 2010
 - o Acknowledges and puts top priority on succeeding in today's conflicts
 - Balance near-and longer-term risks
 - Reflects the complexity of the security environment and calls for flexible and adaptable forces
 - Emphasizes defense of the homeland, defense support to civil authorities, and prevention activities alongside our overseas contingencies
 - Recasts our global defense posture and our deterrence approaches
 - Focuses on creating a sustainable rotation base to support long-duration operations

Further integrate with other agencies (state, VA, AID, DOE, DHS, etc.)

INTRODUCTION: THE CONDUCT OF QDR 2010

The Department of Defense conducted the 2010 Quadrennial Defense Review (QDR) from February 2009 through January 2010. From the outset, this QDR was predicated on two principles. The first was that the Department's senior civilian and military leaders would be heavily engaged in the review. This included setting the governing structures and overall scope of the review, reviewing and approving its basic assumptions and scenarios, evaluating early insights and findings, and deciding on new policies, initiatives, and investments to emerge from it. The second principle was inclusiveness: From top to bottom, the QDR provided vehicles for those with requisite knowledge and expertise to contribute to assessments of the force and the development of potential enhancements to it. And key stakeholders at every level had opportunities to review results as they were developed and to help shape them.

The QDR was strategy driven. It began with an assessment of the many ways in which the U.S. Armed Forces will be called upon to protect and advance the nation's interests. This assessment was grounded in the National Defense Strategy approved by Secretary Gates in June 2008 and was refined through a series of interagency exchanges in the early months of 2009 that were managed by the National Security Council staff. These efforts culminated in the President's National Security Strategy, which was published in January 2010.

The QDR was analytically grounded. Very early in the QDR, the Secretary, advised by other senior leaders within the Department, reviewed, modified, and endorsed an assessment of the emerging global security environment that characterized potential threats, challenges, and opportunities that could affect important U.S. interests. This assessment informed the selection of a set of scenarios that the QDR used to help evaluate current and future forces. Many scenarios were set in the future to facilitate the evaluation of forces programmed for the end of the Future Years Defense Plan or beyond. However, the analysis also focused heavily on assessing the needs of commanders and forces in the field today, principally in Afghanistan and Iraq, in order to ensure that the Department's leaders had a clear picture of the demands of ongoing operations as they consider resource tradeoffs.

QDR analyses centered on the following challenge areas: defending the United States and providing defense support to civil authorities, conducting irregular operations (including counterinsurgency, stability operations, and counter-terrorist operations), defeating adversaries armed with anti-access capabilities, countering weapons of mass destruction, and operating effectively in cyberspace. Teams of analysts drew upon and conducted a wide range of efforts in

order to assess the capabilities and capacity of programmed and alternative forces. Insights were drawn from:

- Assessments of field reporting and lessons learned from ongoing operations in Iraq, Afghanistan, and elsewhere;
- Interactive war games and tabletop exercises involving strategists, planners, and operators;
- Combat modeling and simulation at the tactical, operational, and campaign levels; and
- All-source analysis of the social, political, economic, and security dynamics in countries and regions that could generate threats—deliberate and otherwise—to the interests of the United States, its allies, and its partners.

Together, these analytical efforts yielded insights regarding existing or potential gaps in the capabilities of U.S. forces as well as shortfalls in capacity in some areas. Analysis teams also gathered and evaluated proposals for addressing gaps and shortfalls in the capabilities of the force. Once these proposals were vetted, collated, and costed, they formed the basis for revised planning guidance issued by the Secretary prior to the completion of program objective memoranda by DoD components.

Lessons learned from ongoing operations and insights from individual scenarios served as yardsticks for assessing the capabilities of current and future forces. Alternative combinations of scenarios allowed decision makers to evaluate the aggregate capacity of future forces and to assess the extent to which those forces could cope with the possibility of multiple, overlapping contingencies. As such, they informed decisions about the force sizing and shaping construct promulgated by this QDR.

As the QDR generated insights and interim findings, these were shared with and reviewed by a wide range of experts, both within DoD and beyond. Over the course of the review, analysis team leaders and others provided progress briefings to Congressional staff roughly once per month. QDR staff also consulted with and briefed representatives of allied governments. The governments of the United Kingdom, Australia, and Canada generously detailed full-time staff members to the Pentagon to participate in the QDR and to provide their perspectives on force planning and operational needs. And participants in the QDR held a series of meetings with leading defense analysts outside of government who represented a wide range of views.

The QDR received the closest scrutiny from a Red Team constituted by the Secretary explicitly for this purpose. The Red Team was co-chaired by Andrew Marshall, the Director of OSD's Office of Net Assessment, and by General James Mattis, commander of U.S. Joint Forces Command. Under their leadership the Red Team, which comprised retired senior military officers and other defense experts, convened through the spring and summer of 2009 and reviewed every aspect of the QDR's approach. The Red Team also conducted its own appraisal of the emerging security environment, as well as independent assessments of the capabilities of programmed U.S. forces. These assessments centered on a set of war games conducted by the Red Team. The leaders of the Red Team reported their findings to the Secretary in September.

The QDR was conducted in tandem with a number of other reviews relating to U.S. national security ends, ways, and means. The *Nuclear Policy Review*, *Space Policy Review*, and *Ballistic Missile Defense Review*, all led by DoD, were conducted in parallel with the QDR. Each effort informed and was informed by the others as they went forward. Each review will issue its own report. Representatives of DoD also engaged with their counterparts in the Departments of State and Homeland Security as they undertook their Quadrennial Diplomacy and Development Review and Quadrennial Homeland Security Review, sharing views about the process of strategic planning as well as insights regarding key missions, capabilities, and plans in issue areas that overlap their agencies' responsibilities.

The sections that follow describe a number of initiatives that, together, comprise the results of this QDR. Some take the form of new policies; others involve the development of new capabilities or growth in the capacity of a part of the force; still others call for further study of an issue that is not yet adequately understood. As is always the case, resource constraints will not allow our government to fully address all of the potential challenges that present themselves. Choices must be made. Some initiatives can be taken right away; others must be postponed.

Where it has not been possible to set in motion programs to meet important operational needs, the Secretary has identified vectors for the future evolution of capabilities, calling on DoD components to devote sustained efforts toward developing new concepts and capabilities for addressing those needs. Assessments of future operating environments will refine our understanding of future needs: the Department will continue to look assiduously for savings in less pressing mission and program areas so that more resources can be devoted to filling these gaps.

SECTION I: DEFENSE STRATEGY

A Complex Environment

At a time of significant change in the international system, the United States faces a series of challenges and opportunities. More than eight years of war in Afghanistan, Iraq, and against Al Qaeda and its allies have demanded sustained sacrifice from America's men and women in uniform.

In addition to ongoing conflicts, the United States faces a complex and uncertain security landscape in which the pace of change continues to accelerate. Not since the fall of the Soviet Union or the end of the Second World War has the international terrain been affected by such far-reaching and consequential shifts. The rise of new powers, the growing influence of non-state actors, the spread of weapons of mass destruction and other destructive enabling technologies, and a series of enduring and emerging trends pose profound challenges to international order.

Successfully maintaining strategic balance while addressing these global challenges requires the steadfast engagement of the United States, a continued willingness to commit substantial resources to the maintenance of international order, and renewed commitments by the United States and its partners abroad to cooperative, purposeful action in the pursuit of common interests.

Current Operations

The United States remains a nation at war. The outcome of today's conflicts will directly shape the global security environment for decades to come, and prevailing in current operations constitutes the Department's top priority.

The United States, along with our allies and partners, has renewed its efforts to help the governments of Afghanistan and Pakistan disrupt, dismantle, and defeat Al Qaeda and eliminate their safe havens within both nations. By the end of 2010, approximately 100,000 American troops will be fighting to deny the Taliban its goal of overthrowing Afghanistan's government, and by so doing prevent Al Qaeda from reestablishing the safe haven from which it prepared the attacks of September 11, 2001. Recognizing that victory in Afghanistan ultimately lies with its people, U.S. forces are focused on securing key population centers, training competent Afghan Security Forces, and partnering with them as they fight for their country's future.

Our efforts in Afghanistan are inextricably linked to our partnership with Pakistan – one based on mutual interests, respect, and trust. The United States is committed to strengthening Pakistan's capacity to target those extremists who threaten both countries, and our military partnership is strengthened as we cooperate in eliminating terrorist safe-havens. While the partnership with Pakistan is focused urgently on confronting Al Qaeda and its allies, America's interest in Pakistan's security and prosperity will endure long after the campaign ends.

While the epicenter of the terrorist threat to the United States is rooted in Afghanistan and Pakistan, the war against Al Qaeda and its allies continues around the world. While we have become more adept at disrupting terrorist networks, our terrorist adversaries continue to learn and adapt, posing an enduring threat to America's security along with our allies and partners. Recognizing that sustainable success requires the patient and persistent application of all elements of U.S. power and the engagement of the international community, we will nonetheless continue to employ military force to defeat Al Qaeda and its extremist allies.

In Iraq, years of effort and a critical shift toward a population-centered counterinsurgency strategy have helped produce a security environment that enabled the Iraqi government to take the lead in protecting its people and providing essential services. An Iraqi state, with a just and accountable government, capable of sustaining stability, full sovereignty and national unity while serving as a long-term U.S. partner, will buttress America's strategic goals and those of its allies. As the responsible drawdown of the U.S. military presence proceeds, U.S. forces will continue to play important roles advising, training, and supporting Iraqi forces.

The demands of these ongoing operations have strained America's Armed Forces, and many of our troops have served multiple tours in Afghanistan, Iraq, and elsewhere. Recognizing these strains, and as described in further detail in this report, the Department has elevated the need to preserve and enhance the All-Volunteer Force in our assessments and force planning.

Key Geopolitical Trends

In addition to the influence ongoing conflicts will have on the shape of the future security environment, the Department of Defense must remain cognizant of underlying dynamic global forces and trends that will significantly alter the contours of the international system

The distribution of global political, economic, and military power is shifting and becoming more diffuse. The rise of China, the world's most populous country, and India, the world's largest democracy, will continue to shape an international system that is no longer easily defined—one in which the United States will remain the most powerful actor but must increasingly rely on key

allies and partners if it is to sustain stability and peace. Whether and how rising powers fully integrate into the global system will be among this century's defining questions, and it is in America's interest that they succeed.

The continued growth and power of non-state actors will remain a key feature of the environment. The process of globalization is accelerating the process of technological innovation while lowering entry barriers for a wider range of actors to develop and acquire advanced technologies. As the pace of global information flows and technological innovation accelerate, non-state actors will continue to gain influence and capabilities that, during the last century, remained largely the purview of states.

Of grave concern, the proliferation of weapons of mass destruction (WMD) undermines global security, further complicating efforts to sustain peace and prevent harmful arms races. Even as the United States and Russia make progress in reducing the number of deployed strategic nuclear weapons, states such as Iran and North Korea continue to pursue nuclear weapons programs.¹ Moreover, Al Qaeda and other terrorist networks have a demonstrated interest with the employment of WMD, including chemical weapons and biological agents. Perhaps most serious, the instability or collapse of a WMD-armed state, leading to the potential for rapid proliferation of WMD material, weapons, and technology, would quickly become a global crisis that could pose a direct physical threat to the United States.

A series of powerful cross-cutting trends, made more complex by the ongoing economic crisis, threaten to both complicate international relations and make the exercise of U.S. statecraft more difficult. From rising demand for resources, to rapid urbanization, the effects of climate change, the emergence of new strains of disease, and profound cultural and demographic tensions in several regions, future conflicts are likely to be sparked or exacerbated by the complex interplay between these and other trends.

Shifting Operational Landscape

Lessons gleaned from ongoing conflicts combined with assessments of the likely security environment point to a challenging operational landscape for America's Armed Forces. Perhaps more than ever before, the United States requires joint military forces able to function and succeed across a wide and expanding spectrum. Moreover, military forces must be capable of working in seamless integration with a range of civilian and military partners.

¹ The myriad challenges associated with nuclear weapons in the current and projected environment are outlined in the Department's *Nuclear Posture Review*.

Three features of the current and expected operational landscape are most pressing.

First, the continued dominance of America's Armed Forces in large-scale force-on-force warfare provides powerful incentives for adversaries to employ methods designed to offset our strengths. We see this today. From non-state actors using highly advanced military technology and sophisticated information operations, to states employing unconventional technologies, our current adversaries have shown that they will tailor their strategies and employ their capabilities in sophisticated ways.

The term "hybrid" has recently been used to describe the seeming increased complexity of war, the multiplicity of actors involved, and the blurring between traditional categories of conflict. While the existence of innovative and learning adversaries is nothing new, today's hybrid approaches demand U.S. forces prepare for conflicts in which state adversaries adapt modern military technologies to protracted forms of warfare, including the use of proxy forces to coerce and intimidate, as well as conflicts in which non-state actors use operational concepts and high-end capabilities traditionally associated with state actors.

We must also anticipate the employment of other unique methods. Future adversaries will use surrogates including terrorist and criminal networks, manipulate access to energy resources and markets, and exploit perceived economic and diplomatic leverage in order to complicate our calculus. Such approaches will be difficult to detect or predict, placing a premium on our ability to rapidly innovate and adapt.

Second, as other powers rise and as non-state actors become more powerful, U.S. interests in, and assured access to, the global commons – the sea, air, space, and cyberspace – will take on added importance. The global commons are areas of the world that no one state controls but upon which all rely. They constitute the connective tissue of the international system. Global security and prosperity are contingent on the free flow of goods shipped through air or by sea, and information transmitted under the ocean or through space.

A series of recent trends highlight these growing challenges – from cyberattacks abroad and network intrusions here at home, to anti-satellite weapons tests and the growth in the number of space-faring nations, to the investments some nations are making in systems designed to threaten our primary means of projecting power: our bases, sea and air assets, and the networks that support them.

Prudence demands that the Department prepare for future adversaries likely to possess and employ some degree of anti-access capability across all domains. Given the proliferation of

sophisticated weapons and technology, it is likely that smaller states and some non-state actors will be able to posses and employ longer-range and more precise weapons. Future adversaries will likely possess sophisticated capabilities designed to contest or deny command of the air, space, and cyberspace.²

Finally, the changing international environment will continue to put pressure on the modern state system, and this will likely increase the frequency and severity of the challenges associated with chronically fragile states. The challenges posed by fragile states to American interests are legion, but two are most acute: such states are often catalysts for the growth of radicalism and extremism; and some states at risk are critically important to enduring American interests. Over the course of the next several decades, instances of conflict are at least as likely to result from the problem of state weakness as from state strength.

Given the centrality of the problems associated with fragile states and the threats they represent to international order, U.S. forces will continue to perform missions ranging from stability and reconstruction operations, to developing the capability and capacity of security forces and their sustaining institutions, to combat advising alongside host nation security forces, and to the provision of enabling support for international peacekeeping efforts. The responses fragile states demand extend well beyond the traditional domain of any single military service, or any particular U.S. Government agency or department.

America's Interests and the Role of Military Power

America's security and prosperity are deeply connected with the security and prosperity of the international system. Given the integrated nature of the global economy, the United States must remain deeply engaged in the pursuit of peace and security throughout the world. As outlined in the President's 2010 *National Security Strategy*, America's enduring interests are:

- The security and resiliency of the United States, its citizens and their way of life, and of U.S. allies and partners;
- A strong and competitive U.S. economy with a leading role in a vibrant and open international economic system that promotes opportunity and prosperity;

² The Department is conducting comprehensive reviews in these areas, and has completed a *Space Posture Review* (in cooperation with the intelligence community), a *Ballistic Missile Defense Review*, and has initiated a review of DoD's role in cyberspace.

- Respect for values such as civil liberties, democracy, equality, dignity, justice, and the rule of law at home and around the world; and
- An international order underpinned by U.S. leadership and engagement that promotes peace, security, responsibility, and stronger cooperation to meet global challenges, including transnational threats.

For more than sixty years, the United States has helped construct and sustain an international system the very existence of which is commensurate with these interests. America's leadership comes from proven resolve to support liberty, freedom, and open access to markets and ideas. The United States can only lead when others trust it to carry forward their best interests, to listen to their concerns, and to conduct itself in line with the norms and values of the international community.

The United States understands the importance of mutual respect and leadership within the architecture of a just and stable international system. America's enemies fear its ability to cooperate and to build consensus against tyranny and totalitarianism. The continued relevance of our enduring interests to today's threats and tomorrow's challenges reflects the central idea governing America's grand strategy – that pursuing a just and stable international order is a global common good, something that all nations can benefit from equally and in perpetuity. It is the guiding principle that underlies America's foreign policy and our interactions with the international community, and it frames our approach to defending the United States and promoting security and stability around the world.

America's leadership in the world demands we maintain Armed Forces with superior capabilities and a willingness to employ them in defense of our enduring interests and the common good. The United States remains the only nation able to project and sustain large-scale combat operations over extended distances. This unique position generates an obligation to be responsible stewards of the power and influence that history, determination, and circumstance have provided.

The role of the Department of Defense is to field, sustain, and employ the military capabilities needed to protect the United States and advance its interests. In order to fulfill this role the Department must continually assess how America's Armed Forces are evolving relative to the wartime demands of today and the expected character of future challenges.

The ability of the United States to build the security and governance capacity of key partners and allies will be central to meeting 21st century challenges. Helping to ensure the United States has

strong regional allies and partners will constitute a central role for American statecraft and requires sustained attention and resources. Building the capacity of allies and partners, together with efforts to prevent and deter conflict from beginning or escalating, can help reduce the need for large and enduring deployments of U.S. forces in conflict zones.

Although the United States prefers to operate in concert with its allies and partners, America's Armed Forces will retain the ability to act decisively when appropriate, including the ability to employ overwhelming force in response to aggression, and maintain joint, all-domain military capabilities that, in aggregate, can prevail across a wide range of contingencies.

As a global power, the United States has a broad range of tools for advancing the enduring interests described above. Whenever possible, we seek to pursue our interests through cooperation, diplomacy, development, and economic engagement, and the power of America's ideas.

In cases where the President determines threats to U.S. and allied interests are sufficiently serious, the Department of Defense must be prepared to present options for defending them, including, if necessary, the use of military force.

Balancing the likely costs and expected risks with U.S. and allied interests at stake should constitute the central calculus in any decision of whether to commit U.S. forces to hostile environments. America's men and women in uniform should never be put at risk absent a clear mission and a realistic and sufficiently resourced plan to succeed. Our Soldiers, Sailors, Marines, Airmen, and Coast Guardsmen constitute our most critical strategic resource. They deserve the unflinching support of a nation that clearly understands, from the outset, why the all-volunteer force has been placed in harm's way and what risks and costs come with the use of military force.

The United States will always reserve the right to protect and defend our citizens and allies. We do not seek conflict with other nations, but will not wait to be attacked by adversaries preparing to harm U.S. citizens and allies. The need to employ force is likeliest against actors and threats that do not respond to traditional approaches to international influence and engagement.

Despite some adversaries' disregard for the rules of the international system, the United States will maintain and support international norms by upholding the Geneva Conventions and by providing detainees and prisoners of war the rights and protections afforded to them under international law. Whenever possible, the United States will use force in an internationally

sanctioned coalition with allies and like-minded nations committed to these common principles. The Department of Defense also continues to build the capacity of other nations to promote stability, prevent conflict, and deter regional aggressors. Achieving desired political outcomes through the use of force also requires that the Department of Defense work in close coordination with other elements of national power.

U.S. Defense Objectives

In order to help defend and advance our national interests, the Department of Defense must balance resources and risk among four strategic priorities: prevailing in today's wars; preventing and deterring conflict; preparing for a wide range of future contingencies; and preserving and enhancing the All-Volunteer Force. These priorities reflect the need for a strategic approach that can evolve and adapt in response to a changing security environment. These four priorities are at once both timely and enduring.

Prevail in Today's Wars

In today's conflicts, as in the past, America must ensure the success of its forces in the field - in Afghanistan, Iraq, and around the world. Not only are the conflicts in Afghanistan and Iraq central strategic priorities for the United States, the character of both conflicts – multifaceted insurgencies with adaptive adversaries employing lethal tactics – is representative of potential future challenges.

As outlined above, prevailing against Al Qaeda and the Taliban in Afghanistan and its border regions requires a comprehensive approach employing all elements of national power. Focusing resources where the population is most threatened, our military and civilian efforts align with the following primary objectives:

- Reversing Taliban momentum through sustained military action by the United States, our allies, and Afghanistan's security forces;
- Denying the Taliban access to and control of key population and production centers and lines of communications;
- Disrupting the Taliban outside secured areas and preventing Al Qaeda from regaining sanctuary in Afghanistan;
- Degrading the Taliban to levels manageable by Afghanistan's National Security Forces (ANSF);

- Increasing the size and capability of the ANSF and employing other local forces selectively to begin transitioning security responsibility to the Afghan government within 18 months; and
- Selectively building the capacity of the Afghan government, particularly in key ministries.

Achieving these objectives has required the commitment of an additional 52,000 troops to Afghanistan since January of 2009 for a total U.S. force of approximately 100,000. The size of this commitment coupled with the challenging terrain makes it imperative that the Department focus on rapidly increasing the number and quality of the key enablers – fixed and rotary-wing lift, unmanned aerial systems, and a range of other combat support and combat service support assets – considered critical to success. Prevailing in this conflict also requires focused attention on increasing the ability of U.S. forces to train and partner, especially in combat, with Afghan army and police forces. The next section of this report addresses these issues in detail.

In Iraq, as the responsible drawdown of our presence proceeds, U.S. forces continue to focus on advising Iraqi security forces, providing key enablers needed as they assume ever greater control and responsibility for the security challenges posed by those who continue to use violence and intimidation to imperil progress. U.S. forces are also working to prepare for the departure of U.S. forces by 2011. It is working closely with its partners to create security architectures that will constitute America's enduring posture in the broader region.

The continuing war against Al Qaeda and its allies in Afghanistan and elsewhere will demand continued vigilance and determination. Prevailing against this multifaceted enemy requires an extensive array of tools for ready and effective military and intelligence capabilities that are dedicated, responsive, and appropriately resourced to evolve along with an adaptive adversary. The defense contribution to this war takes two basic forms: a highly capable network of special operations and intelligence capabilities designed to seek out, identify, and eliminate Al Qaeda leadership, dismantle their networks, and erode their effectiveness; and an enduring effort to build the security capacity of key partners around the world, where improved indigenous capability and capacity can gradually reduce the size and number of Al Qaeda's safe havens.

Prevent and Deter Conflict

America's enduring effort to advance common interests without resort to arms is a hallmark of its stewardship of the international system. Preventing the rise of threats to U.S. interests requires the integrated use if diplomacy, development, and defense, along with information, law enforcement, and economic tools of statecraft. Such an approach also requires working closely

with our allies and partners to leverage existing alliances and create conditions to advance common interests.

The Department helps defend the United States from direct attack, deter potential adversaries, foster regional stability, secure and assure access to the global commons—including sea, air, space, and cyberspace—and build partnership capacity by:

- Maintaining awareness of the global environment to provide warning of potential threats and identify emerging opportunities;
- Supporting U.S. diplomatic and development efforts to foster good governance and opportunities for individual betterment in order to counter radicalization at the individual level.
- Extending a global defense posture comprised of forward-stationed and rotationally deployed U.S. forces, prepositioned equipment and overseas facilities, and international agreements;
- Contributing to an appropriately sized and shaped portfolio of homeland defense and civil support capabilities seamlessly integrated into the broader set of U.S. homeland security activities;
- Protecting critical DoD infrastructure, including in space and cyberspace; and
- Sustaining the U.S. nuclear deterrent at the lowest levels consistent with U.S. interests.

Credibly underwriting U.S. defense commitments will demand tailored approaches to deterrence. Such tailoring requires an in-depth understanding of the capabilities and intent of potential adversaries – whether individuals, networks, or states – including their decision-making approaches and values. These tailored approaches build from the foundational deterrence that keeps the United States and its allies safe and secure every day.

The United States is postured to deter a wide range of attacks or coercion against the United States and its allies with capabilities across domains. Deterrence is predicated largely on land, air, and naval forces capable of fighting limited and large-scale conflicts in anti-access environments, as well as forces prepared to respond to the full range of challenges posed by state and non-state groups. These forces are enhanced by emerging U.S. capabilities to deny adversary objectives through ballistic missile defense, early warning and intelligence collection, resilient infrastructure, including command and control systems, and global basing and posture. Until such time as the President's goal of a world free of nuclear weapons is achieved, nuclear capabilities to respond will be maintained as a core mission for the Department of Defense, with

a safe, reliable, and effective stockpile and forces sufficient to defend the United States, U.S. interests and forces abroad, and to continue to meet extended deterrence commitments to allies.

The United States is strengthening its approach to deterrence in multiple ways.

- The Department of Defense continues to improve its ability to attribute WMD, space and cyberspace attacks so that it can continue to hold aggressors responsible and deny them the obfuscation of new domains or the use of proxies.
- The United States will not and does not distinguish between those who employ weapons of mass destruction and those who may transfer those weapons or enabling materials for use. Any regime considering the transfer of such materials should have no doubt that it will be held responsible for the consequences.
- To reinforce U.S. commitments to extended deterrence, we will consult closely with allies and partners to build our capabilities to work together in the context of new, tailored, regional deterrence architectures that take advantage of our forward presence, relevant conventional capabilities (including missile defenses), and continued commitment to extending our nuclear deterrent to allies.
- The United States has and continues to strengthen its resiliency: the ability to recover quickly from attacks in any domain and to fight through catastrophic events and effectively recover. The U.S. Government is also expanding its capabilities to assist allies in responding to such events.
- The United States will work with like-minded nations to foster regimes and norms regarding behavior in the global commons—especially space and cyberspace. These are shared resources in which an attack on one nation has consequences for all.

Prepare to Succeed in a Wide Range of Contingencies

Where deterrence fails and adversaries challenge our interests with the threat or use of force, the United States must have the wherewithal to conduct operations in support of U.S. national interests. As described above, the current and projected operating environments portend state and non-state actors with access to an ever-increasing range of capabilities. There are also significant risks posed by fragile and failed states, civil wars, economic and resource battles, ethnic conflict and mass atrocities, and natural disasters. Not all contingencies will require the involvement of

U.S. military forces, but the Defense Department must be prepared to provide the President with options across a wide range of contingencies.

The range of plausible future challenges includes:

- Supporting a national response to attacks on, or natural disasters in, the United States;
- Defeating aggression by adversary states, including states armed with advanced antiaccess capabilities and/or nuclear weapons;
- The need to locate and secure or neutralize weapons of mass destruction and related facilities in the context of a loss of control of such weapons and their potential possession by a non-state adversary;
- The need to help support and stabilize fragile states facing threats from terrorist and insurgent groups;
- Defeating Al Qaeda and related terrorist groups;
- Conducting effective operations in cyberspace; and
- Preventing human suffering due to internal conflicts, systematic repression against particular groups, or large-scale natural disasters abroad.

Preserve and Enhance the All-Volunteer Force

In order to succeed in today's wars and prepare for the future the Department of Defense must ensure the long-term viability of the All-Volunteer Force, its most precious military resource. This will require Total Force policies that sustain the rotation base, provide care for our people all service members and their families—in peace and conflict, and adapting as required by the environment. We must also reset equipment lost through combat and the strain of constant operations. In many cases, this will not require wholesale replacement of our current generation of military platforms. Rather, it will necessitate more practical and efficient procurement processes and programs and hard choices about our future capability needs.

SECTION II: REBALANCING THE FORCE

This QDR has explicitly linked force planning, which determines the overall size and key capabilities of the force, to the defense strategy's priorities: prevail in today's wars; prevent and deter conflict; prepare to succeed in a wide range of contingencies; and preserve and enhance the force.

QDR analyses evaluated the capabilities and capacity of alternative future forces against a diverse set of scenarios, which depicted challenges that could plausible arise from a broad range of complex contingencies. These scenarios highlighted plausible and qualitatively distinct types of challenges that might call for a response by U.S. military forces. In keeping with our assessment of the emerging security environment, these scenarios depicted challenges that could plausibly arise from a broad range of complex contingencies. These scenarios depicted challenges that could plausibly arise from a broad range of complex contingencies.

- Attacks on or natural disasters in the United States ranging from serious (for example, the dispersal of anthrax spores in a medium-sized city) to severe (nuclear weapons release in a metropolis).
- The need to deter and defeat aggression by adversary states. Our assessment recognized that such adversaries could, by the middle of the next decade, include regional powers armed with modest numbers of nuclear weapons, as well as larger, more powerful states that field a broad range of sophisticated weapons and support systems that could support a multi-faceted anti-access campaign. Adversary states can also employ irregular means and non-state proxies against U.S. force, allies, and interests. The role of cyber operations, including the defense of DoD information systems from computer network attacks, was considered largely in the context of conflicts with state adversaries.
- The need to locate and secure or neutralize weapons of mass destruction and related facilities in the context of a loss of control of such weapons and their potential possession by a non-state adversary.
- The need to help support and stabilize fragile states facing threats from terrorist and insurgent groups. Experience derived from ongoing operations in Iraq and Afghanistan was particularly critical for understanding this challenge set.

The QDR also assessed the qualitative and quantitative demands associated with a long-term effort to counter Al Qaeda and similar transnational terrorist groups around the world. We anticipate that this will entail a series of small-scale, dispersed, but sustained overlapping missions to disrupt and defeat networks and to build the capabilities and capacity of the security forces of partner countries, as well as their sustaining institutions. Over time, this can enhance their effectiveness in providing security to their own populations and countering terrorist and insurgent groups.

To focus the Department's analysis, the QDR examined challenges and capabilities in six key mission areas critical to achieving its strategy objectives. Those missions are:

- Defend the United States and support civil authorities at home;
- Conduct counterinsurgency, stability, and counterterrorist operations;
- Build partnership capacity;
- Deter and defeat aggression in anti-access environments;
- Impede proliferation and counter weapons of mass destruction;
- Operate effectively in cyberspace.

Our analysis focused on identifying gaps in capabilities and shortfalls in capacity that programmed forces might encounter in executing these missions over the near-, mid-, and longer-term. Insights regarding those gaps and shortfalls helped to focus efforts to enhance the "fit" between programmed forces and the demands that may be placed on them in future operations. Those efforts have resulted both in specific initiatives to address gaps and shortfalls and in guidance intended to shape the evolution of the force and its capabilities over the longer term. Some initiatives involve investments in new or existing systems. Others involve creating new units within the force to perform functions that are in high demand. Still others involve adjustments to training, doctrine, or force posture.³

³ By Congressional direction, in parallel with the QDR, DoD has conducted reviews of U.S. nuclear strategy and forces, ballistic missile defense, and space assets and operations. The findings of these reviews are being reported separately.

Defend the United States and Support Civil Authorities at Home

The first responsibility of any government and its defense establishment is to protect the lives, property, and safety of its people. Because the United States has been blessed with favorable geography and continental size, direct attacks against the country itself have been rare throughout our history. However, the terrorist attacks of September 11, 2001 show that the rapid proliferation of technologies of destruction, combined with potent ideologies of violent extremism, portends a future in which all governments will have to maintain a high level of vigilance against terrorist threats. Moreover, state adversaries are acquiring new means to strike out at greater distances from their borders and with greater lethality than before. Finally, as global climate change magnifies the destructive power of natural events and the nation's infrastructure continues to age, the United States also must be prepared to respond to large-scale, highly destructive natural disasters.

The experiences of the last several years have solidified the realization that state- and non-state adversaries alike may seek to attack military and civilian targets within the United States. In this context, the role of the Department of Defense in protecting the nation against direct attack and in providing support to civil authorities, potentially in response to a very significant or even catastrophic event, has steadily gained prominence.

When responding to an event within the United States, the Department of Defense will almost always be in a supporting role. When the capabilities of state and local authorities to respond effectively to an event are overwhelmed, these authorities can request assistance from the federal government. That assistance will be coordinated by the Department of Homeland Security in its role as the incident manager for the federal government. The Department of Defense in turn works in support of DHS, and can, at the direction of the Secretary of Defense or the President, provide a wide range of capabilities to civil authorities.

To ensure that the Department of Defense is prepared to provide appropriate support to civil authorities consistent with the contingencies envisioned in the new force planning construct, the QDR examined the sufficiency of the programmed force to meet these challenges and sought to indentify the highest priority capability enhancements for the future. Key initiatives resulting from this assessment include:

• Field faster, more flexible consequence management response forces. Having made the decision in 2006 to develop significant specialized CBRNE consequence management response forces, the Department has gained important experience and learned valuable lessons associated with the challenges of fielding these capabilities. Given the potential

for no-notice events within the United States, the Department will begin reorganizing these forces to increase their life-saving capability, maximize their flexibility and make them able to respond more quickly in the wake of an event. First, the Department will restructure the original CBRNE Consequence Management Response Force (CCMRF), making it larger and able to respond more rapidly to an event here at home. Complementing the evolution of the first CCMRF, the Department also will phase out the second and third CCMRFs and instead build ten Homeland Response Forces (HRFs), based in the ten FEMA regions. These ten HRFs, sourced from the National Guard, will become centers of gravity in each FEMA region for response planning, training and exercising and will forge links between the federal level and state and local authorities. Each HRF will be employable by a state governor, or in extremis could be federalized by the President and placed under the command of U.S. Northern Command. Combining a robust Title 10 capability under the control of USNORTHCOM with regionally dispersed National Guard units associated with the ten FEMA regions will better posture the Department of Defense to respond rapidly and effectively across the range of potential scenarios that may arise within the United States. In addition, DOD will establish two Headquarters and Support Consequence Management Response Forces to provide additional command and control, logistics, and support capability for follow-on operations.

- Enhance capabilities for domain awareness. The Department of Defense and its interagency partners must be able to monitor in more detail the air, land, and sea domains for potential direct threats to the United States. In coordination with domestic and international interagency partners, DoD will explore technologies that have the potential to detect, track, and identify threats in these domains to ensure there is opportunity to deploy capabilities to counter them in a timely fashion. Examples of enhanced capabilities in this area include the following:
 - Next generation over-the-horizon-radar (OTHR) technology: In order to maximize its capability to counter maritime and air threats at a safe distance from the United States, DoD is exploring the application of state of the art OTHR technology to provide persistent beyond line-of-sight detection and tracking capability of maritime and air contacts approaching the coasts of the United States.
 - **Rapid reaction tunnel detection:** The Department is working with DHS and DIA through a joint technology capability demonstration program to explore new

- Accelerate development of standoff radiological/nuclear detection capabilities. DoD faces a gap in its ability to passively or actively detect radiological and nuclear material and weapons at a distance. Development and fielding of these sensors will allow more effective wide-area surveillance in the maritime or air approaches to the homeland.
- Enhance domestic counter-IED capabilities. To better prepare the Department to support civil authorities focused on countering the threat that could be posed by improvised explosive devices (IEDs) in the United States, DoD will enhance its counter-IED training, intelligence and exploitation teams, and its information integration centers here at home. Increasing access to trained DoD reserve component forces during the athome portion of their force generation cycle could also decrease the stress on domestic law enforcement resources that are engaged in support of DoD activities worldwide.

Conduct Counterinsurgency (COIN), Stability, and Counterterrorist (CT) Operations

The wars we are fighting today and assessments of the future security environment together demand that the United States retain the capability to conduct large-scale counterinsurgency (COIN), stability, and CT operations in environments ranging from densely populated urban areas and mega-cities, to remote mountains, deserts, and jungles. It may often be in the US interest to forestall the collapse of weak states, including those facing homegrown insurgencies and transnational terrorist threats or those that have been weakened by humanitarian disasters. Moreover, there are few cases in which U.S. armed forces would engage in sustained large-scale combat operations without the associated need to assist in the transition to just and stable governance. Accordingly, the U.S. armed forces will continue to require capabilities to create a secure environment in fragile states in support of government authorities and, if required, provide essential government services, emergency infrastructure restoration, and humanitarian relief until the appropriate civilian authorities are able to do so.

In order to ensure that America's armed forces are prepared for this complex and taxing mission, it is vital that the lessons emerging from today's conflicts are further enshrined in military doctrine, training, capability development, and operational planning. Stability operations, large-scale counterinsurgency, and counter-terrorist operations are not niche demands belonging to one

military department, but instead require a portfolio of options derived from across America's armed forces and other departments and agencies.

Since 2001, U.S. forces have become far more proficient in operations against insurgents and terrorist groups and in helping partners to provide security to populations threatened by such groups. U.S. forces will need to maintain a high level of competency in this mission area for decades to come. Accordingly, the Department is continuing to grow capabilities needed to support critical counterinsurgency, stability, and counter-terrorism operations in Iraq, Afghanistan, and elsewhere. To institutionalize the lessons learned over these years, DoD has made substantial changes to personnel management practices, professional military education and training programs, and career development pathways.

Operational innovation and adaptability have always been hallmarks of the American Soldier, Sailor, Airman, and Marine. Our experience in Iraq and Afghanistan and elsewhere has tested our forces and they are again proving their mettle. The Department and supporting defense industry must continue to adapt to accommodate both longer timelines for operations and engagements, and shorter ones for fielding new tactics and capabilities against highly-adaptive adversaries. They must become as responsive, adaptable, and mission-focused as the forces they are supporting.

The QDR has placed special emphasis on ensuring that the men and women fighting today's conflicts have the tools and resources they need to succeed. It has also sought to institutionalize the lessons and processes that our forces have developed in the field. Accordingly, the Secretary has directed increased investments in certain capabilities that have been consistently in high demand and have proven to be key enablers of tactical and operational success. Building on initiatives undertaken over the past several years, the QDR has directed a number of steps aimed at filling persistent shortfalls in key capability areas. Many of these steps are incremental and are intended as "down payments" toward greater investments in coming years.

Chief among these enhancements are:

• Increase the availability of rotary wing assets. Vertical lift has been indispensible to successful counterinsurgency and counterterrorist operations in Iraq and Afghanistan and elsewhere. As operations in the rugged terrain of Afghanistan grow in scope and intensity, more rotary wing lift capacity will be needed to ensure that coalition and Afghan forces can be resupplied at remote outposts and effectively cover their areas of responsibility. Among other steps, USSOCOM will field an additional company of cargo helicopters. And the general purpose forces will take steps, including expanding pilot

training, to make selected vertical lift assets more readily accessible to forces in forward theaters of operations. The Navy, for example, will dedicate two helicopter squadrons for direct support to Naval Special Warfare units. And improved management of Army rotary wing assets will enable the deployment of a combat aviation brigade to Afghanistan.

- Expand manned and unmanned aerial systems (UAS) for intelligence, surveillance, and reconnaissance (ISR). Long-dwell UAS, such as the Predator and Reaper systems, have proven to be invaluable for monitoring activities in contested areas, enhancing situational awareness, protecting our forces, and assisting in targeting enemy fighters. In FY10, the Department made a commitment to grow to a capacity of 50 sustained orbits of Predator/Reaper by FY13. The Department is on track to achieve this goal and will continue to expand the force to at least 65 orbits by FY15. And DoD is exploring ways to enhance the effectiveness of its fleet of ISR aircraft by developing innovative sensor technologies, support infrastructures, and operating concepts.
- Expand intelligence, reconnaissance, and targeting capacity. Forces in Iraq, Afghanistan, and elsewhere have developed new and more effective means for rapidly processing, exploiting, and fusing information from a wide array of sources and disseminating this information to operators at the tactical level. These approaches have yielded significant improvements in our ability to understand insurgent and terrorist networks and to target key elements. The Department is adding trained manpower and critical supporting systems, including communications architectures, to these functions commensurate to the growth in special operations forces to support counterterrorist operations. It is adding capability to support both special operations forces and general purpose forces to enhance the effectiveness and precision of counterinsurgency operations in Iraq and Afghanistan.
- Expand electronic warfare (EW) capacity. Airborne EW assets have been in high demand in Iraq and Afghanistan and will be useful in future irregular and hybrid conflict environments. Among other tasks, they play key roles in countering improvised explosive devices (IEDs). In order to increase coverage over these battlefields, the Air Force will continue to field additional EW capabilities, to include outfitting one additional C-130 aircraft in the EW configuration. The Navy will take steps to extend the service lives of its venerable EA-6B EW aircraft and will procure additional F/A-18Gs.

- Increase key enabling assets for SOF. As the Department continues to expand special operations forces, this QDR also recognized the need to invest in enabling capabilities commensurate with programmed growth. For example, the Department is replacing and modernizing the gunship inventory to provide close air support and force protection. Additionally, the Department is increasing the number of organic combat support and combat service support assets available to both Army and Naval special operations forces units. These assets include communications, information support specialists, forensic analysts, and intelligence experts.
- Increase COIN and CT competency and capacity in general purpose forces. Our assessment of security trends points strongly to the conclusion that the future mix of missions facing U.S. forces will call for greater flexibility and agility to operate among populations, with a wide variety of partners, and in a variety of operating environments. Accordingly, by FY13 the Army will convert a heavy brigade combat team (BCT) to the Stryker configuration. As resources become available, of the Department intends to convert several more BCTs. For the maritime domain, increasing agility means increasing green and brown water capacity. Beginning in FY11, the Navy will add a fourth riverine squadron to its force structure and invest in service life extension programs for its coastal patrol craft. The 2010 QDR also directed the Air Force to field light attack and light mobility units that are specially organized, trained, and equipped for counterinsurgency, stability, and CT operations. These units will not only conduct and support U.S.-led operations, but will also provide effective support to U.S. partners and facilitate efforts to train, advise, and equip foreign security forces with modest levels of resources.
- Expand civil affairs capacity. The absence of effective governance creates areas for terrorists and insurgents to exploit. Circumstances are ripe for violent ideologies to spread among a population when governments struggle to provide basic services, justice and security, or the conditions for economic opportunity. Civil affairs forces, therefore, are the vanguard of DoD's civil-military efforts to assist partners in the fields of rule of law, economic stability, governance, public health and welfare, infrastructure, and public education and information. With their linguistic and cultural skills, civil affairs personnel often serve as the liaisons between our military forces and the civilian population, reducing friction between them. Iraq and Afghanistan have placed high demands on existing civil affairs forces, which were heavily weighted in the reserve component. The Department has begun to readjust that balance. The FY10

budget invested in the first active duty civil affairs brigade to support general purpose forces. In addition, the 2010 QDR directed the Army to increase SOCOM's currently programmed civil affairs capacity.

• Increase regional expertise for Afghanistan and Pakistan. The CJCS recently launched and is continuing to develop the AF-PAK Hands program, an initiative to develop and deploy a cadre of regionally-aligned experts who are proficient in COIN doctrine, have language skills, and are culturally attuned to the Afghanistan-Pakistan region. Language training is the cornerstone of this program and by January 2010, more than 200 students will have received language instruction in Dari and Pashtu. To gain maximum value from the Department's investment in training this cadre of military and civilian personnel, personnel will rotate between U.S.- and theater-based key staff and leadership positions to provide necessary expertise in support of U.S. operations in the region.

In addition to bolstering the armed forces' ability to conduct COIN, stability, and CT operations in complex environments, of these investments will facilitate unconventional warfare operations in which U.S. forces work with irregular forces in support of a resistance movement, an insurgency, or conventional military operations aimed at destabilizing or overthrowing an enemy regime or against non-state actors such as transnational terrorist groups like Al Qaeda.

Build Partnership Capacity

Since the United States assumed the role of a leading security provider following the end of World War II, DoD has worked actively to build the defense capacity of allied and friendly states and to ensure that the armed forces of the United States have ample opportunities to train with and learn from counterpart forces. In today's complex and interdependent security environment, these dimensions of the U.S. defense strategy have never been more important. U.S. forces, therefore, will continue to treat building partnership capacity as a high priority mission.

This mission encompasses a wide array of activities, including the conduct of bilateral and m ultilateral training and exercises, foreign military sales (FMS) and financing (FMF), officer exchange programs, sharing educational opportunities at schools for professional military education, and others. Of these, the most dynamic in the coming years will be a series of security force assistance (SFA) missions: "hands on" efforts, conducted primarily in host countries, to train, equip, advise, and assist those countries' forces in becoming more proficient at providing security to their populations. Working in conjunction with other U.S. government agencies to strengthen the security institutions of partner nations will be a crucial part of U.S. and allied efforts to defeat terrorist groups around the world.

Terrorist groups seek to evade security forces by exploiting ungoverned and less-governed areas as safe havens from which to recruit, indoctrinate, and train fighters, as well as to plan attacks on U.S. and allied interests. The United States will work with partner nations to strengthen their capacity for internal security, denying terrorists and insurgents safe havens. Successful counterinsurgents in the past have found ways to keep their adversaries under intense pressure but to do so in ways that did not alienate the populations they were trying to protect. If the United States and partner governments seeking to disrupt, degrade, and destroy dangerous transnational terrorist groups are to replicate this approach, they will need capable partners where the terrorists seek safe haven. For reasons of political legitimacy as well as sheer economic necessity, there is no substitute for professional, motivated local security forces protecting populations threatened by insurgents and terrorists in their midst.

U.S. forces have been training, advising, and assisting Afghan and Iraqi security forces. Longterm success in these conflicts depends upon building capable Afghan and Iraqi security forces that can uphold the rule of law and control and defend their territory against violent non-state actors. In these contested environments, partnered COIN, in which partner Afghan and Iraqi units operate in tandem with U.S. forces, is an effective way to train and advise forces while conducting combat operations against insurgents. These partnered host nation units have the advantage of knowing the terrain, language, and local culture. Partnering with U.S. forces in return allows them to train and learn by doing.

Efforts that use smaller numbers of U.S. forces and emphasize host-nation leadership before incipient levels of violence are able to grow are, in fact, preferable to large-scale counterinsurgency campaigns. For example, in the Philippines, since 2002, U.S. forces have trained and advised elements of the Philippine armed forces working to to secure areas of the southern Philippines that had been a haven for the Abu Sayef terrorist organization, as well as other terrorist elements. Over a seven-year period, U.S. forces and their Philippine counterparts have trained together and worked to understand the organization and modus operandi of the adversary. As their equipment and skills have improved, Philippine forces have patrolled more widely and more frequently, bringing security to previously under-served areas.

This model is being applied elsewhere to good effect: U.S. forces are working in the Horn of Africa, Colombia, Pakistan, and elsewhere to provide training, equipment, and advice to their host-country counterparts on how to better seek out and dismantle terrorist and insurgent networks while providing security to populations that have been intimidated by violent elements

in their midst. As U.S. forces draw down in Iraq and make progress toward building stability in Afghanistan, more U.S. forces will be available for building the capacity of foreign security forces in other parts of the globe.

Traditionally, smaller-scale missions to train and advise partner country forces have been the province of special operations forces, but QDR analysis suggests an increasing role for general purpose forces in these missions. Special operations forces will still have a leading role in low-visibility training in politically sensitive environments, but many situations will call for training and advising capabilities and expertise that can be delivered by general purpose forces. For example, today general purpose forces provide training to coalition partners to support their deployments to the International Security Assistance Force (ISAF) in Afghanistan. Additionally, this QDR has recognized that, in order to ensure that enhancements developed among security forces are sustained, the Department must also seek to enhance the capabilities and capacity of partner security force supporting institutions, such as defense ministries. As these security force assistance missions grow in scope and importance, it will be essential that the general purpose forces play growing roles within them.

Key QDR initiatives to support this mission area include:

- Institutionalize general purpose force capabilities for security force assistance. All four services provide specialized training to individuals and groups deploying abroad to train and advise the security forces of partner nations. In anticipation of the growing role of security force assistance in U.S. strategy and operations, the Army, Navy, and Marine Corps will add a total of approximately 500 personnel to their train-the-trainer units for general purpose forces. The Air Force will expand its regionally-oriented contingency response groups (CRGs) and will field light mobility and light attack aircraft in general purpose force units in order to increase their ability to work effectively with a wider range of partner air forces. Over time, the intention is for these units to grow to the point where their staffs can sustain specialized expertise in regions and countries of greatest importance and regularly detach experts to accompany units deploying to training missions abroad. Additionally, the investments in airborne ISR, light attack, and light mobility, as well as in green and brown water maritime capacity described above will also contribute to the security force assistance mission.
- Enhance language, regional, and cultural ability. Operating in partnership with host nation security forces and among local populations puts a premium on foreign language skills and regional and cultural knowledge. Today's operating environment demands a

much greater degree of language and regional expertise that requires years, not weeks, of training and education. The Department is increasing incentives for special operations forces to master relevant language skills and is expanding language training centers for general purpose forces to support ongoing operations. The Department will continue to examine ways to enhance language capabilities, including programs to recruit and retain native speakers and linguists into the armed forces. In the future, as more forces become available from the USCENTCOM area of responsibility, the military departments will regionally align some portion of their general purpose forces, including those conducting security force assistance, to capitalize on investments in foreign language training and regional knowledge.

- Strengthen and expand capabilities for training partner aviation forces. Today, the Department meets only half of the current demand for training partner aviation forces. In order to address this persistent shortfall, starting in FY12, DoD will double its current capacity to provide such training. This enhancement will include the purchase of light, fixed wing aircraft to enable the Air Force 6th Special Operations Squadron to engage partner nations for whose air forces such aircraft might be appropriate. Also in FY12, two non-U.S. standard helicopters will be acquired to support the unit's activities. Providing training to partner aviation forces is an area that QDR analysis suggests will continue to grow. To that end, the Department will also seek authorities and resources to enable the Army to sustain its ability to train partner forces in the operation and maintenance of helicopters used by partner states.
- Strengthen capacities for ministerial-level training. As noted above, the Department recognizes that in order to ensure that enhancements developed among security forces are sustained, supporting institutions in partner nations must also function effectively. This ministerial training mission is being conducted in Iraq and Afghanistan today by members of the Department's civilian expeditionary workforce (CEW). In FY10, the Department launched two formal programs, the Ministry of Defense Advisor (MODA) program and the Defense Institution Reform Initiative (DIRI), to extend ministerial capacity building to other countries. As these programs further develop and expand, the Department anticipates a commensurate growth in the CEW.
- Create mechanisms to facilitate more rapid transfer of critical materiel. SFA missions in recent years have repeatedly encountered delays in transferring critical end items to partner state forces that were ready to employ them. The Department is

exploring options for expediting the acquisition and transfer of critical capabilities to partner forces.

Deter and Defeat Aggression in Anti-Access Environments

U.S. forces must be able to deter, defend against, and defeat aggression by potentially hostile nation states. This capability is fundamental to the nation's ability to protect its interests and to provide stability in key regions. Without dominant U.S. power projection capabilities, the integrity of U.S. alliance and security partnerships could be called into question, reducing U.S. security and influence and increasing the possibility of conflict.

U.S. forces conducting power projection operations abroad will face a panoply of challenges from adversaries determined to impose their will on their regions. States with the means to do so are acquiring a wide range of sophisticated weapons and supporting capabilities that, in combination, can support anti-access strategies aimed at impeding the deployment of U.S. forces to the theater and blunting the operations of those forces that do deploy forward. Over the past ten years, for example, China has fielded more than one thousand short-and medium-range ballistic and cruise missiles, advanced attack submarines armed with wake-homing torpedoes, increasingly lethal integrated air defense systems, extensive electronic warfare and computer network attack capabilities, and counter-space systems. North Korea and Iran are also deploying ballistic missiles in large numbers. Many of these systems are far more accurate than the Scud-class missiles used by Iraq in the Gulf War. As their numbers and capabilities continue to grow, U.S. forces deployed forward will no longer enjoy the relative sanctuary that they have had in conflicts since the end of the Cold War. Air bases, ports of debarkation, logistics hubs, command centers, large surface combatants, and other assets essential to high-tempo military operations could be at risk.

U.S. power projection forces also face growing threats in other domains. In recent years, adversary states have acquired sophisticated anti-ship cruise missiles, quiet submarines, advanced mines, and other systems that threaten naval operations. In addition to these weapons, Iran has fielded large numbers of small, fast attack craft designed to support "swarming" tactics that seek to overwhelm the layers of defenses deployed by U.S. and other nations' naval vessels.

U.S. air forces in future conflicts will encounter integrated air defenses of far greater sophistication and lethality than those fielded by adversaries of the 1990s. Russia has sold large numbers of modern surface-to-air missile systems to China, and Iran has sought to make similar purchases. The Chinese are also fielding large numbers of highly capable fourth-generation

fighter aircraft. Non-state actors such as Hezbollah have acquired unmanned aerial vehicles from Iran.

Chinese military doctrine calls for pre-emptive strikes against an intervening power early in a conflict and places special emphasis on crippling the adversary's ISR, command and control, and information systems. In January 2007, China demonstrated its ability to destroy satellites in low earth orbit. Accordingly, prudence demands that we anticipate that future conflicts could involve kinetic and non-kinetic (e.g., jamming, laser "dazzling") attacks on space-based surveillance, communications, and other assets.

Because of their extreme lethality and long-term effects, nuclear weapons are a source of special concern, both for the United States and for its allies and partners in regions where adversary states possess or seek such weapons. If regional adversaries such as North Korea succeed in fielding even small arsenals of deliverable fission weapons, the security dynamics of key regions could be severely complicated. Even as we strive to prevent proliferation, we must take steps to hedge against its possibility. The United States, its allies, and its partners will undertake consultations on policies and postures that can credibly deter aggression under new circumstances. We will also enhance our capabilities for preventing the use of nuclear weapons and their delivery means, recognizing that a regime in the crucible of a crisis or conflict with a far more powerful opponent might feel driven to cross the nuclear threshold in an attempt to break the coalition arrayed against it or deter decisive military operations.

DoD is taking steps to ensure that future U.S. forces remain capable of protecting the nation and its allies in the face of this dynamic threat environment. In addition to ongoing modernization efforts, this QDR has directed the following further enhancements to U.S. forces and capabilities:⁴

• **Develop a joint air-sea battle concept**. The Air Force and Navy are together developing a new joint air-sea battle concept for defeating adversaries equipped with sophisticated anti-access and area denial capabilities. The concept will address how the joint force will integrate capabilities across all operational domains—air, sea, land, space, and cyberspace—to counter a range of challenges to U.S. freedom of operation. As it matures, the concept will also help to guide the development of future capabilities needed for effective power projection operations.

⁴ The Nuclear, Space, and Ballistic Missile Defense Policy reviews have developed additional initiatives to enhance capabilities relevant to meeting these challenges. Those initiatives are described in the reports developed by those reviews.

- **Expand future long-range strike capabilities**. In order to increase the long-range striking power of future U.S. forces, the Navy is investigating options for expanding the cruise missile capacity of future Virginia-class attack submarines. It is also slated to conduct field experiments with prototype versions of a naval unmanned combat aerial system (N-UCAS) no later than FY 15. The N-UCAS offers the potential to greatly increase the range of strike aircraft operating from the Navy's carrier fleet. The Air Force is reviewing options for fielding a penetrating, persistent surveillance and strike aircraft as part of a comprehensive, phased plan to modernize the bomber force. The Navy and the Air Force are cooperatively assessing alternatives for a new joint stand-off attack cruise missile, as well as advanced electronic warfare systems. The Department also plans to experiment with conventional prompt global strike prototypes. Building upon insights developed during the QDR, the Secretary of Defense has ordered a follow-on study to determine what combination of joint persistent surveillance, electronic warfare, and precision-attack capabilities, including both penetrating platforms and stand-off weapons, will be best suited to supporting U.S. power projection operations over the next two to three decades. Findings from that study will inform decisions that shape the FY 2012-17defense program.
- **Exploit advantages in subsurface operations**. The Navy is increasing funding for the development of an unmanned underwater vehicle that will be capable of a wide range of tasks, including coastal ISR and seabed mapping.
- Increase the resiliency of base infrastructure. U.S. forces will need networks of bases and supporting infrastructures in key regions that are more resilient than today's in the face of attacks by a variety of means. Appropriate steps will vary by region but will generally involve combinations of measures, including hardening key facilities against attack, redundancy and dispersal concepts, active defenses, and growing reliance on long-range platforms for ISR and strike.
- Assure access to and use of space assets. The Department, through the implementation of priorities from the Space Posture Review, will explore opportunities to leverage growing international and commercial expertise to enhance U.S. capabilities and reduce the vulnerability of space systems and their supporting ground infrastructure. The Department will broaden and deepen relationships with other nations and private firms to create mutually beneficial partnerships to share capabilities, systems, technology, and personnel. Working both bilaterally and multilaterally, the Department will promote spaceflight safety. Air Force investments in space situational awareness will support U.S.

efforts by enabling attribution and greater understanding of events in space. Ongoing implementation of the 2008 Space Protection Strategy will reduce vulnerabilities of space systems, and fielding capabilities for rapid augmentation and reconstitution of space capabilities will enhance the overall resiliency of space architectures.

- Enhance the robustness of key C4ISR capabilities. In concert with improving the survivability of space systems and infrastructure, U.S. forces will want to field more robust and capable terrestrial and airborne systems to provide critical wartime support functions. In particular, airborne ISR assets must also be made more survivable in order to support operations in heavily defended airspace. The Department is also exploring options for expanding jam-resistant satellite communications and for augmenting these links with long-endurance aerial vehicles that can serve as airborne communications relay platforms.
- **Defeat enemy sensors and engagement systems**. In order to counter the spread of advanced surveillance, air defense, and strike systems, the Department has directed increased investments in selected capabilities for electronic attack.

Prevent Proliferation and Counter Weapons of Mass Destruction

The potential for proliferation of nuclear, chemical, biological, and radiological capabilities among state and non-state actors can threaten our ability to defend U.S. and allied interests, promote peace and security, ensure regional stability, and protect our citizens. Further, the use of a nuclear weapon or a biological attack would have far-reaching and global ramifications. Preventing the proliferation and use of those weapons is therefore a high priority. As the ability to create and employ weapons of mass destruction spreads globally, so must our efforts to detect, interdict, and contain the effects of these weapons. Deterrence of such threats and defense against them can be enhanced through measures aimed at better understanding potential threats, securing and reducing dangerous materials wherever possible, posturing to monitor and track lethal agents and materials and their means of delivery, and, where relevant, defeating the agents themselves.

Identifying and mitigating emerging WMD threats, be they new actors interested in such weapons, or the emergence of new types of chemical, biological, or nuclear weapons, is essential to protecting America's vital interests. Consequently, the Department will expand capabilities to counter WMD threats, strengthen interdiction operations, refocus intelligence requirements, enhance and grow international partnerships to thwart proliferation, and support cooperative threat reduction efforts such as the President's initiative to "lock down" all vulnerable nuclear

material worldwide. Additionally, to deter adversaries considering the use of chemical or biological weapons, the Department will enhance efforts to develop countermeasures, defenses, and mitigation strategies.

Further, the Department must prepare to contain WMD threats emanating from failing or fragile states and ungoverned spaces. Success in this area will hinge upon the ability to prevent and respond to global WMD crises, such as situations where responsible state control of nuclear, chemical, or biological materials is not guaranteed. Faced with such emergencies, the Department will require the ability to locate and secure WMD and WMD-related components, as well as interdict them on land, sea, or air.

Geographic containment of areas of concern will be necessary to ensure that WMD and related materials do not fall into the hands of hostile actors—a concept of operations that will require U.S. forces, interagency capabilities, and the cooperation of regional powers and coalition forces. Effectively responding to WMD-armed threats will require an integrated, layered defense network in multiple geographic environments, including inside the state of concern, along the state's borders, in global transshipment lanes, in the approaches to the United States, and in the United States itself. Such an integrated, layered defense is essential to preventing an attack before it occurs, as well as responding to an attack should prevention fail. In addition, these preparations can help to deny state and non-state adversaries the benefits they seek through actual or threatened use of WMD by raising the costs and risks of such an attack.

Through the QDR, the Secretary of Defense has directed that the following initiatives be undertaken:

- Establish a standing Joint Task Force Elimination Headquarters. In order to better plan, train, and execute WMD-elimination operations, the Department is establishing a standing JTF-E HQ, with increased nuclear disablement, exploitation, intelligence, and coordination capabilities.
- **Research countermeasures and defenses to non-traditional agents.** The globalization of the world's chemical industry, coupled with scientific breakthroughs, increases the possibility of non-traditional chemical agents being used against U.S. and Allied forces. The Department, with interagency partners, is increasing resources for research and development of technologies to meet and defeat these emerging threats.
- **Support nuclear forensics.** The Department is examining options for new platforms to conduct nuclear/radiological air and ground sampling in order to better monitor the

nuclear programs of potential adversary states. Research is ongoing to identify new means by which we can arrive at reliable technical nuclear forensics assessments more quickly. Additional resources will enhance DoD's air and ground sample collection mission as well as augmenting current laboratory assessment capabilities.

- Secure vulnerable nuclear materials. A radiological or nuclear attack by a terrorist organization would create catastrophic consequences. Preventing such an attack begins by ensuring the security of all weapons-usable material at the source and promoting stringent nuclear security practices for both civilian and defense facilities across the globe. To guarantee the security of all vulnerable materials, we are working with the interagency to identify partner countries that will benefit from site upgrades, security training facilities and disposition of weapons-grade materials.
- **Expand the biological threat reduction program**. Countries that have the infrastructure and capability to report and track the spread of an outbreak are able to save more lives. Detecting, diagnosing and determining the origin of a pathogen will enable us to better respond to future disease outbreaks and identify whether they are natural or man-made. Accordingly, we are expanding the biological threat reduction program to countries outside the former Soviet Union in order to create a global network for surveillance and response.
- **Develop new arms control verification technologies**. In order to support a robust arms control treaty agenda, new technologies for verification and monitoring will be necessary to ensure full compliance from all parties. DoD is developing new initiatives to build the specialized technological solutions needed to support arms control treaty compliance.

Operate Effectively in Cyberspace

Our assessments of conflict scenarios involving state adversaries pointed to the need for improved capabilities to counter threats in cyberspace—a global domain within the information environment encompassing the interdependent networks of information technology infrastructures, including the internet and telecommunication networks. There is no exaggerating our dependence on DoD's information networks for command and control of our forces, the intelligence and logistics upon which they depend, and the weapons technologies we develop and field. In the 21st century, modern armed forces simply cannot conduct high-tempo, effective operations without reliable information and communication networks.

It is therefore not surprising that DoD's information networks have become targets for adversaries who seek to blunt U.S. military operations. Indeed, DoD's information networks are under attack daily target from a myriad of sources, including small groups of individuals and some of the largest countries in the world. For example, criminals may try to access DoD's healthcare systems in order to obtain personally identifiable information to perpetrate identity theft. Terrorists may seek to destroy military networks and systems to cause chaos and economic damage. Foreign intelligence or military services may attempt to alter data in DoD databases to hinder our military's response to a country's unlawful aggression elsewhere in the world. Whatever the adversary's goals, DoD must be prepared not only to protect the perimeter of our defense and military networks, but also to defend those networks by actively engaging adversaries known to be causing harm.

This is no small task. DoD currently operates more than 15,000 different computer networks across 4,000 military installations around the world. On any given day, there are as many as 7 million DoD computers and telecommunications tools in use in 88 countries operating thousands of warfighting and support applications. The number of real and potential vulnerabilities to be exploited is staggering. Moreover, the speed of cyber attacks and the anonymity of cyberspace greatly favors the offense. This advantage is growing as hacker tools become cheaper and easier to employ by adversaries whose skills are growing in sophistication.

We must therefore be constantly vigilant and prepared to react nearly instantaneously if we are to effectively limit the damage that the most sophisticated types of attacks can inflict. In this environment, the need to develop strategies, policies, authorities, and capabilities for DoD to defend its information networks is paramount to achieve the core DoD mission to protect the security of the nation.

DoD is taking several steps to defend its networks and strengthen its capabilities in the cyber domain:

• **Develop a DoD comprehensive approach to cyberspace operations**. A Departmentwide comprehensive approach will help build an environment that views cybersecurity as a priority for DoD. Strategies and policies to improve cyber defense in depth, resiliency of networks, and surety of data and communication will all allow DoD confidence in its cyberspace operations. A central component of this approach is culture change: The Department will redouble its efforts to imbue its personnel with a greater appreciation for the threats and vulnerabilities in the cyber domain and to give them the skills to counter those threats and reduce those vulnerabilities at the user and system administrator levels. DoD can no longer afford to have users think of its information technologies and networks as simply the benign infrastructure that facilitates their work. Users and administrations must be held accountable for ensuring network security and for implementing best practices. DoD is also growing its cadre of cyber experts to protect and defend its information networks and is investing in and developing the latest technologies to enable our forces to operate in cyberspace under a wide range of conditions, including in contested and degraded environments.

- Centralize command of cyber operations. In an effort to organize and standardize cyber practices and operations more effectively, the Department is standing up U.S. Cyber Command, a sub-unified command under U.S. Strategic Command, to lead, integrate and better coordinate the day-to-day defense, protection, and operation of DoD networks. USCYBERCOM will operate and defend DoD information networks, prepare to, and when directed, conduct full spectrum cyberspace military operations in order to enable actions in all domains. An operational USCYBERCOM will also play a leading role in helping to integrate cyber operations into operational and contingency planning. In addition, DoD is training cyber experts, who are trained and equipped with the latest technologies, to protect and defend its information networks.
- Enhance partnerships with other agencies and governments. Just as we partner with other U.S. departments and agencies and international partners to conduct many of our missions, DoD needs to partner with them to ensure our ability to operate in cyberspace. Among other things, DoD military networks often rely on other networks to accomplish DoD cyberspace defense and operations.

Resources for Rebalancing

Early in the QDR process and as part of the process of completing DoD's budget submission for FY10, the Secretary took action to direct resources away from lower priority programs and activities so that more pressing needs could be addressed, both within that budget and the years that followed it. Those decisions included ending production of F-22s, restructuring the procurement of the DDG-1000 and the Future Combat System program, deferring production of new maritime prepositioning ships, and stretching out of procurement of a new class of aircraft carrier. Cuts were also imposed on the Air Force's fleet of older 4th-generation fighter aircraft.

Those actions, among others, have enabled the Department to redirect resources into the areas outlined above. Further rebalancing actions may be called for in coming years.

Sizing and Shaping the Force

The armed forces of the United States must be sized and shaped in accordance with the nation's defense priorities, and must also have the agility to adapt to unforeseen challenges that might emerge in the future. Our force design is premised on the recognition that U.S. forces must be capable of advancing U.S. interests in concert with other elements of U.S., allied, and coalition power. America's military commitments cannot be open-ended and its capabilities will never be unlimited. We must therefore be prudent in our priorities for the use of U.S. forces and collaborate with our allies and partners wherever advisable to meet the demands of global leadership.

The considerations outlined above relate to the sorts of *capabilities* that U.S. forces will need in order to accomplish their missions now and in the future. Force planning also requires that decisions be made about the aggregate *capacity* of the force: that is, how many operations should the force be able to accomplish simultaneously if called upon, and what types of operations could be necessary? This force sizing and shaping construct is a key part of defense strategy that provides a yardstick by which to determine current and future force sufficiency. It is informed by the needs of the nation, assessments of threats and challenges that could confront the United States and its allies, the operational and force management requirements of the force, and a sense of the overall level of resources that may be available and appropriate for the defense of the nation and its interests. It is derived from the defense strategy priorities articulated earlier in this report:

- Prevail in today's wars;
- Prevent and deter conflict;
- Prepare to succeed in a wide range of contingencies; and
- Preserve and enhance the Force.

Given the current and projected security environment our armed forces must, in aggregate, be capable of conducting a broad, plausible range of several overlapping operations to prevent and deter conflict and, if necessary, to defend the United States, its allies and partners, selected critical infrastructure, and other national interests. This includes the potential requirement to conduct multiple concurrent operations, including large-scale combat operations, in disparate theaters. Any lesser capability would present the risk that the nation might be unable to defend

important interests while its forces were undertaking a single large-scale operation. This would increase the risk of opportunism by other potential adversaries.

Largely for this reason, past defense reviews have called for the nation's armed forces to be able to fight and win two major regional conflicts in overlapping time frames. These have been characterized as conflicts against state adversaries, typically employing conventional military forces. This QDR likewise acknowledges the need for a robust force capable of protecting US interests against a multiplicity of threats. It breaks from the past, however, in its acknowledgement of the wide range of operations the U.S. armed forces must be capable of conducting, from homeland defense and defense support to civil authorities, to deterrence and preparedness missions, to the conflicts we are in and the wars we may someday face.

In short, U.S. forces today and in the years to come can be plausibly challenged by a range of threats that extend far beyond the familiar "major regional conflicts" that have dominated U.S. planning since the end of the Cold War. We have learned through painful experience that the wars we are in are seldom the wars that we would have planned. For instance, in Iraq and Afghanistan, two theaters in which we are engaged simultaneously, we have seen that achieving operational military victory can be only the first step toward achieving our strategic objectives.

Because America's adversaries have been adopting a wide range of strategies and capabilities that can be brought to bear against the United States and its forces, allies, and interests, it is no longer appropriate to speak of "major regional conflicts" as the sole or even the primary template for sizing, shaping, and evaluating U.S. forces. Rather, U.S. forces must be prepared to conduct a wide variety of missions under a range of different circumstances. These operations may vary in duration and intensity for maritime, air, ground, space, and cyber forces. This force planning construct acknowledges the special demands that long-duration operations place on our all-volunteer force.

U.S. forces must also sustain robust levels of engagement overseas through forward stationing and routine deployments. Successfully achieving any of the core missions of the U.S. armed forces requires strong security relationships with a host of allies, partners, and friends – relationships best enabled and maintained through the long-term presence abroad and sustained, focused interactions between U.S. and partner forces.

Force Sizing and Shaping in the Near- to Mid-Term

Past QDRs have focused solely on shaping the force beyond the five year timeframe. As previous sections have made clear, we do not have the luxury of ignoring the pressing challenges of today's conflicts. Our force sizing construct must therefore take into account the realities of the current operational environment. We anticipate that for the near- and mid-term future substantial numbers of U.S. forces (75,000 or more) will likely be operating in Afghanistan and U.S. forces in Iraq will continue a responsible drawdown in accordance with that nation's wishes, and as Iraqi forces take on greater roles for providing security there. U.S. force sizing for the immediate future thus consists of the following elements:

- *Prevail* in Iraq and Afghanistan and defeat Al Qaeda and its allies.
- **Prevent and deter** further threats to U.S. interests. Priority will be paid to ensuring a defense in depth of the United States, preventing the emergence or re-emergence of transnational terrorist threats, including Al Qaeda, and deterring other major potential adversaries through routine security engagement and deterrence.
- *Prepare* to defend the United States and support civil authorities in the event of an emergency. Deter potential challengers in times of crisis and, if necessary, defeat their threats to U.S. and allied interests.
- **Preserve and enhance** the all-volunteer force by transitioning it to a sustainable rotation base as the operational environment allows. The Department will be prepared to manage the risks of significant new military missions that may arise during this time, which may require shifts in current operations or further mobilization of the force.

Force Sizing and Shaping in the Mid- to Long-Term

Following the responsible drawdown of U.S. military forces in Iraq, and the transition to greater Afghan leadership in providing security, we anticipate greater flexibility to respond to emerging threats across the spectrum of conflict. Over the mid- to long-term, U.S. forces will be sized to be able to conduct the following types of operations simultaneously:

- *Prevail* in current operations that endure beyond Operation Iraqi Freedom, including efforts in Afghanistan and elsewhere to defeat Al Qaeda and its allies.
- Increase the emphasis on extensive *prevent and deter* missions in concert with others. The focus in this period will remain on deterring threats to U.S. territory in-depth,

preventing the growth or re-growth of transnational terrorist movements, and deterring would-be aggressors through our presence and building partnership capacity efforts.

- **Prepare** to prevail in a range of operations that may occur in multiple theaters in overlapping timeframes. Some such operations include supporting civil authorities in response to a catastrophic event in the United States, deterring and defeating state and non-state aggressors employing irregular, sophisticated anti-access, and "hybrid" approaches, and conducting large-scale stability operations. Operations over the past eight years have stressed the ground forces disproportionately, but the future operational landscape could portend significant long-duration air and maritime campaigns for which we must be prepared.
- **Preserve and enhance** the force by managing Total Force rotation policies to ensure its long-term health. The Department plans that, in times of significant crisis, it will be prepared to lower its dwell time for up to several years at a time and/or mobilize the reserve component. This will typically be the case if the United States is engaged for long periods in more than one large operation, such as Operation Iraqi Freedom.

Representative combinations of the types of overlapping operations against which the Department sized its forces include the following:

- A major stabilization operation, deterring and defeating a regional aggressor, and extending support to civil authorities in response to a catastrophic event in the United States; or
- Deterring and defeating two regional aggressors while maintaining a heightened alert posture for U.S. forces in and around the United States; or
- A major stabilization operation, a long-duration deterrence operation in a separate theater, a medium-sized counterinsurgency mission, and extended support to civil authorities in responding to multiple, geographically dispersed events.

In all of the scenario sets it tested, the Department assumed ongoing U.S. military engagement in presence and deterrence missions. The Department's force planning assumes that over time forces can be redirected from most prevent and deter activities in order to meet more pressing operational needs.

The Pace of Change

Our assessment of ongoing and potential future military operations has identified a large number of possible shortfalls in the capabilities or capacity of programmed U.S. forces. In some cases, opportunities exist to fill these shortfalls by investing in new systems or additional force structure. In other cases, no readily available measures are at hand but greater investments in research and development or concept exploration are warranted. As is always the case, resource constraints will not allow our government to address all of the potential challenges that present themselves. Choices must be made. Some initiatives can be taken right away; others must be postponed.

Where it has not been possible to set in motion programs to meet important operational needs, the Secretary has identified vectors for the future evolution of capabilities, calling on DoD components to devote sustained efforts toward developing new concepts and capabilities for addressing those needs. Assessments of future operating environments will continue with an eye toward refining our understanding of future needs. And the Department will continue to look assiduously for savings in less pressing mission and program areas so that more resources can be devoted to filling these gaps. Section VI describes the Department's risk assessment and risk management priorities in more detail.

"Building Blocks" of U.S. Force Structure

Taking into account the demands of a dynamic and complex security environment, the requirements of U.S. defense strategy, the need for enhancements to key capabilities across a wide range of missions, and the need for forces with sufficient aggregate capacity to meet the criteria laid out above, DoD has determined that U.S. forces, for the duration of the FY11-15 Future Years Defense Program, should conform to the general parameters outlined below. The formations and platform types shown here generally encompass only the major combat elements of each of the military departments. Strategic nuclear forces, which are listed in the report of the Nuclear Policy Review, are not shown here. Neither are most of the non-combat and "enabler" elements that play such crucial roles in supporting effective operations in complex environments. The absence of these elements of the force is in no way a reflection of their importance relative to those elements that are shown: support and enabling capabilities are vital to effective operations and they will be resourced accordingly. But the purpose of listing the building blocks shown below is to provide a summary portrayal of the overall outlines of the force.

The Department will continue to strive to ensure a proper balance between the overall size of U.S. combat forces, the capabilities and capacity of key support elements and enablers, and

investments in new capabilities that will be needed by forces called upon to carry out future missions.

• Department of the Army:

73 total brigade combat teams (BCTs) (45 AC and 28 RC), consisting of:

- 40 infantry brigade combat teams (IBCTs) (20 AC and 20 RC)
- 9-13 Stryker brigade combat teams (SBCTs) (8-12 AC and 1 RC)
- 20 -24 heavy brigade combat teams (HBCTs) (13-17 AC and 7 RC)
- 20 21 combat aviation brigades (CABs) 12 13 AC and 8 RC)

18 Division headquarters (10 AC and 8 RC)

4 Corps headquarters (all AC)

• Department of the Navy:

- 10 11 aircraft carriers
- 9 10 carrier air wings
- 84 90 large surface combatants, including 19 32 BMD-capable combatants
- 14-28 small surface combatants
- 29 33 amphibious warfare ships
- 51 55 attack submarines
- 4 guided missile submarines
- 3 maritime prepositioning squadrons
- 30 34 combat logistics force ships
- 17 24 command and support vessels (including JHSV)
- 4 Marine divisions (3 AC and 1 RC)

11 infantry regiments

4 artillery regiments

4 Marine air wings (3 AC and 1 RC)

13 air groups

8 air control/support groups

4 Marine logistics groups (3 AC and 1 RC)

9 combat logistics regiments

13 Marine expeditionary headquarters elements:

3 Marine expeditionary forces (MEF)

3 Marine expeditionary brigades (MEB)

7 Marine expeditionary units (MEU)

• Department of the Air Force:

8 intelligence, surveillance and reconnaissance (ISR) wings (with approximately 300 total aircraft)

29 airlift and aerial refueling wing-equivalents (with 33 primary mission aircraft per wing-equivalent)

11 - 12 theater strike wing-equivalents (with 72 primary mission aircraft per wing-equivalent)

5 long-range strike (bomb) wings (with up to 96 primary mission aircraft)

5 air superiority wing-equivalents (with 72 primary mission aircraft per wing-equivalent)

3 command and control wings

(with a total of 30 aircraft and five air and space operations centers)

10 space and cyberspace wings

• Special Operations Forces:

600 – 660 special operations teams (includes ODA teams, SEAL platoons, Marine special operations teams, and operational aviation detachments [OAD])

3 – 4 Ranger battalions

155 – 175 tilt-rotor/fixed-wing mobility and fire support aircraft

The Department will review and, as appropriate, update these force sizing benchmarks annually as part of its force planning and evaluation processes.

SECTION III: TAKING CARE OF OUR PEOPLE

The talent, determination, and heart of our people are the bedrock of the Department. Likewise, the support that families provide their Soldiers, Sailors, Marines, Airmen and Coast Guardsmen is an enduring, highly-valued national asset. The complex security environment outlined above combined with continuing deployments, family separations, and our nation's economic downturn and recovery will further challenge our members, DoD civilians, contractors, and families. As they are steadfast in the mission, we will be steadfast in caring for our people. We will focus on several fronts.

Wounded Warrior Care

We need to achieve a seamless transition for our Service members to Veteran status, especially those who have been wounded in combat. Apart from ongoing conflicts, caring for our Wounded Warriors is our highest priority, and we will work to provide them top quality care that reflects their sacrifice. Providing world-class care and management, benefit delivery, and standardization of services among the Military Departments and Federal agencies continues to be the focus of the Departments' most senior leadership. We are working hard to establish a single Disability Evaluation System, creating a simpler, faster, more consistent process for determining whether wounded, ill or injured Service members may continue their military service and enable them to become as independent and self-supporting as possible. We will continue to pilot evolutionary changes to this system basing advancement on member feedback about improvements.

Expanding resources to better provide prevention, treatment, and resilience programs for mental illness intervention and suicide prevention is paramount. Approximately twenty to thirty percent of Iraq and Afghanistan veterans report some form of psychological distress, with over 45,000 cases of post-traumatic stress disorder (PTSD) diagnosed since 2002. Over the same period, 161,000 cases of mild to severe traumatic brain injury (TBI) have been diagnosed. The Department must have a healthy and resilient force – psychologically, physically, and spiritually fit – ready to deploy, fight, and win our nation's wars. The Departments of Defense and Veterans Affairs will continue to provide strong leadership for behavioral health and TBI programs and promotion of a holistic culture of support.

The Departments of Defense and Veterans Affairs have broadened the scope of information sharing, supporting stronger continuity of care and benefits delivery for military members. The Virtual Lifetime Electronic Record, under the Administration's guidance, is the future path for

improvements to care and services by enhancing the availability of administrative and health information. Role-based access will ensure that information is provided only to those with a legitimate need, thus addressing security and privacy concerns. This is an exciting long-term initiative for the nation, and we are fully dedicated to its success.

It is imperative to provide all Service members access to transition assistance and information about compensation and benefits. We are targeting transition assistance areas for improvement and foresee development of new legislation and regulations, at both the Department and Service level. Finally, we will use the most advanced information technology support to supply accurate and timely information to Service members, Veterans, and their families.

The Senior Oversight Committee extension of wounded warrior care to families recognizes our obligation to care for the whole family, but also the power of the family in the recovery and healing processes. The 2010 National Defense Authorization Act allows us to compensate military members whose family cares for them. We will assess the adequacy of this compensation and advocate changes based on the findings. Our obligation to these families, whose lives are dramatically affected by what happens to their Service member, is every bit as critical as the support provided to the Service member.

Managing the Deployment Tempo

Time at home station between deployments and honoring our commitment to release service members at the end of their service obligations remain the most tangible demonstrations of our commitment to our Service members and families. We must strive to provide them and their families with clarity, predictability and confidence concerning current and planned deployments. Between deployments, we must also give our personnel sufficient time to recover and prepare. Our planning objective for the Active Component remains two years at home station for every one year deployed. Our objective for mobilization of Guard and Reserve units remains five years demobilized for every one year mobilized. To this end, the Department is assessing the feasibility of creating differentiated dwell times and an associated incentive structure within the Reserve Component to create easier access to capabilities routinely in high demand.

Recruiting and Retention

After more than five years of the most challenging recruiting environment since the 1973 inception of the All-Volunteer Force, the Department met with resounding recruiting and retention success in 2009. However, this success is at least partially built on the economic downturn and, as the country recovers financially, we will face additional factors that

significantly affect our ability to attract qualified young men and women into the Armed Forces, to include a large and growing proportion of youth who are ineligible to serve in the military due to medical, criminal, ethical or physical reasons.

Our recruiting efforts are long-term investments that affect recruiting for many years to come. We must look for ways to expand the recruiting market and increase access to the number of persons eligible for military service while maintaining the quality of the force. We hope to extend the Military Accessions Vital to National Security pilot program and will monitor medical accessions standards to alter them as medical advances allow. Similarly, we must look for innovative ways to retain quality personnel. Data have shown the agile use of bonuses is effective in encouraging Service members with aptitudes and experience to re-train to needed skill sets and continue to serve. We will revise our bonus policies to allow the Military Departments to focus on these shaping incentives and give them the agility to manage bonuses to retain quality personnel and build new career fields. Both recruiting and retention will require the Department's intense focus and flexible methods to ensure the nation has Armed Forces of the size, skill, and availability necessary to protect and advance America's interests.

Keeping Faith with the Reserve Component

Achieving the defense strategy's objectives requires a vibrant National Guard and Reserve that is seamlessly integrated into the Total Force. Prevailing in today's wars requires a Reserve Component that can serve in an operational capacity—available, trained, and equipped for predictable routine deployment. Preventing and deterring conflict will likely necessitate the continued use of some elements of the Reserve Component in an operational capacity well into the future, especially in high-demand skill sets.

Over the last eight years, the National Guard and Reserve demonstrated their readiness and ability to make sustained contributions. Accordingly, the Department will use the National Guard and Reserve as an operational reserve, rather than the "force of last resort," to fulfill requirements for which they are well-suited in the United States and overseas. For example, the Reserve Components, particularly the National Guard, often serve at the forefront of DoD operations in support of domestic civil authorities.

At the same time, our nation must have a strategic reserve, deployed with less frequency but trained, equipped, and available for sizable contingencies that may unfold over months instead of weeks. As the operational environment allows, the Department will seek ways to rebalance its reliance on the reserve to ensure the long-term viability of a strategic force.

The Reserve Component has untapped capability and capacity. Over the coming year, the Department will conduct a comprehensive review of its National Guard and Reserve policies to ensure their best alignment with the defense strategy.

Effective use of the Reserve Component also helps to preserve and enhance the Total Force by increasing its capacity and expanding the range of capabilities and know-how it provides. Such a use of the National Guard and Reserve will lower overall personnel and operating costs, provide more efficient and effective use of defense assets, and contribute to the sustainability of both the Active and Reserve Components. National Guard and Reserve men and women volunteer with the understanding and the desire to serve on active duty periodically. National Guard and Reserve members volunteer to serve with the expectation that they will be judiciously used and given meaningful work to do. The Department will meet this expectation.

Leaders for the Future

The Department needs to ensure that commissioned and non-commissioned officer leaders continue to epitomize the core competencies of professionalism, leadership, and integrity, while ensuring that its leaders are prepared with the capabilities needed for the 21st century. The Department needs to ensure that professional military education places special emphasis on the critical missions associated with today's wars, including stability operations, counterinsurgency, and building partner capacity. Key among these will be our continued effort to build expertise in foreign language, regional, and cultural skills. We will continue our emphasis in building these skills for officers during pre-accession training. Given the inherent link between language and cultural expertise with mission success, this transformation requires urgent advancement.

Enactment of the Goldwater-Nichols Department of Defense Reorganization Act of 1986 was a watershed event. The special authorities enacted by the Congress in the FY 2007 NDAA, allowing the Department to recognize joint experience whenever and wherever it occurs in an officer's career, may turn out to be just as significant a milestone. Implementation of these authorities is aiding in the creation of an officer corps with the critical competencies required for counter-insurgency warfare, peacemaking, peacekeeping, and nation building. Reserve Component officers, full partners in this system, have the opportunity for the first time to have their joint experiences recognized and earn the same qualifications as their Active Component counterparts. The authorities delivered by the Congress in the FY 2009 NDAA provide for the development of senior leaders with the competencies and experiences necessary to lead and counter emerging threats and the Department will take full advantage of these authorities.

Support to Families

The past eight years of conflict have relentlessly tested our people. We have an obligation to prepare families for the stress of military life, of which deployment has become routine. Further, service men and women must have the opportunity to maintain a lifestyle beyond that of the unit and deployment. Access to robust single member, spouse, child and youth services has moved far beyond nice-to-have services; these are priorities for a quality lifestyle—and retention of skills for the Military Departments. Programs such as expanded childcare, outreach to Guard and Reserve members and families, 24/7 family support assistance through Military OneSource, referrals for non-medical counseling, financial education and training, pre-teen and teen programs, and access to training certification opportunities for spouses are examples of lifelines of support for Service members and their families stationed around the globe. These must be sustained and strengthened.

Behavioral health care demands have dramatically increased for both service members and their families. Inpatient behavioral health utilization rates for children have increased, primarily in adolescents. Rates of utilization of behavioral health inpatient and outpatient services for spouses of service members have also increased. Many in the numbers are Reservists who return to the civilian sector after demobilization. We have taken heed of these indicators, and are launching the "In Transition" program, which will provide a counselor/coach when members receiving mental health care change location or transition from DoD to the Department of Veterans Affairs. Together with our Veterans Affairs partners, we have committed to an integrated strategy that will enhance access to care for service members and their families and veterans with behavioral health problems. We are significantly increasing numbers of behavioral health providers and expanding the network across the country. Key in this effort has been a landmark agreement with the Department of Health & Human Services to place 200 Public Health Service mental health professionals in military treatment facilities. We must take care of our own, sympathetic to the challenging environment of the coming years.

Developing the Future Workforce

The Department is facing mission requirements of increasing scope, variety, and complexity. To ensure the availability of needed talent to meet these emergent mission demands, we are conducting a deliberate assessment of current and future mission requirements, which will result in a structured approach to workforce planning to meet those requirements. This effort will ensure the Department has the right workforce mix (military/civilian and contractor), with the right competencies (e.g., language/cyber/intelligence). This planning will be enterprise-wide, allowing the Department to identify, prior to a crisis, the skills it must acquire and develop.

For example, we have made advances within the Department to capitalize upon the talents of our civilian personnel to meet new mission challenges. The need to more effectively employ the Department's civilian personnel abroad has resulted in the creation of the Civilian Expeditionary Workforce (CEW), which will support the missions in Afghanistan, Iraq, and other contingency and humanitarian operations. The proper use of CEW will lessen burdens on uniformed personnel and support stability and reconstruction projects that provide development and support of host nation civilian institutions. A training program will be available by the end of FY 2011 for at least 90 percent of the deploying CEW personnel to ensure they are able to execute their missions while deployed. A parallel effort is underway to synchronize civilian and military leadership training, with the goal of ensuring common professional training and education between Senior Executive Service (SES) and flag officers and increasing joint capability for deployment of SES personnel.

In keeping with the Administration's desire to reduce the government's dependence on contractors, the Department introduced its in-sourcing initiative in the FY2010 budget. During the next five years, the Department will reduce the number of support service contractors from the current 39 percent of the workforce to the pre-2001 level of 26 percent, and replace them with full-time government employees. A balanced total workforce of military, government civilians, and contractor personnel that appropriately aligns functions to the public and private sector, and results in the best value for the taxpayer is the desired outcome. In this balanced workforce, the services provided by contractors will continue to be valued. However, well-reasoned Total Force solutions that appropriately consider both mission requirements and overall return on investment are imperative. To that end, removing impediments that limit analytically-sound solutions is a priority.

Leveraging "whole of nation capability" will improve operational effectiveness and reduce the tempo of operations. To achieve this objective, an integrated approach to designing and training the civilian-military team is needed. Development of national security professionals across federal agencies is a start, but a fully integrated approach requires a comprehensive concept of operations and implementation strategy to achieve unity of effort. Further, a training strategy is being developed to address how the Department will achieve a balanced force capable of meeting the diverse set of challenges associated with combat, security, engagement, relief and reconstruction operations around the globe. Achieving this objective will require investment and leveraging of technology and harmonizing Department-wide training investments to improve the efficiency and effectiveness of training.

Ensuring the medical readiness of the force is a key issue for the Department. We are closely monitoring readiness (medical and dental), but we fall short of the goal of a fully medically ready force (at least 75 percent) particularly in the Reserve Component. Maintaining psychological health and addressing TBI are two of our highest priorities. The Department has established a Defense Centers of Excellence that is partnering within and beyond the Department to improve access to quality psychological health and TBI services for service members, veterans and their families. We are leading the way in developing new and improved evidence-based prevention and care strategies, including developing clinical practice guidelines and standards of care. However, the costs associated with providing specialized and routine health care to the Total Force – soon to be approximately 10 percent of the Department's budget – is a major issue that must be addressed through a combination of legislative relief, adopting best practices, and applying inter-departmental solutions to common challenges.

The Department has fundamentally changed the way we view and assess readiness. The Defense Readiness Reporting System (DRRS) represents a significant cultural change for the Department, both in the technology used to report readiness and in the assessments that define readiness. For the first time, the Department can now see in real time what capabilities are available to address developing threats. The Combatant Commanders' assessments have become the nexus for our mission assessments. We will fully develop and capitalize upon DRRS capabilities.

SECTION IV: STRENGTHENING RELATIONSHIPS

Achieving the Department's strategic objectives requires close collaboration with allies and partners abroad and key counterparts at home. Through its foreign defense relationships, the United States not only helps to avert crises but also improves its effectiveness in responding to them. Moreover, by integrating U.S. defense capabilities with other elements of national security—including diplomacy, development, law enforcement, economics, and information—the nation can ensure the right mix of expertise is at hand to take advantage of emerging opportunities and thwart potential threats. The Department will therefore strengthen its relationships with key foreign defense partners, evolve its supporting global defense posture, and build sustained and routine relationships with critical actors at home.

Strengthen Key Relationships Abroad

Sustaining alliances and creating new partnerships is a central element of American security strategy. The United States cannot sustain a stable international system alone. In an increasingly interconnected and interdependent world, challenges to common interests are best addressed in concert with like-minded allies and partners who are willing to share responsibility for fostering peace and security. America's national security and defense strategies depend on strong foreign relations, including a vibrant network of defense alliances and partnerships adapted to this challenging era.

The United States is committed to the success of NATO, which has been the cornerstone of common security since the end of World War II. NATO is critical to ensuring the security and stability of Europe and to prevailing in ongoing operations in Afghanistan and elsewhere. Working with our NATO allies, we will seek to better equip the Alliance for twenty-first century challenges, from the spread of WMD, to terrorism and cybersecurity, to energy security, to complex in and out of area operations. Building on the hard-won lessons and insights gleaned from ongoing operations in Afghanistan, we will work with our NATO allies and other Troop Contributing Nations to enhance unity of effort, interoperability and operational effectiveness as we implement the new strategy.

The countries of Eurasia are positioned to improve Europe's energy security, support our efforts in Afghanistan, and play critical roles in countering transnational threats, including extremism, proliferation, and illicit trafficking. Yet Eurasia remains riddled with unresolved conflicts that inhibit the ability of many countries there to counter these threats. Accordingly, the United States

is working with its NATO allies to build our partners' security capacity, support their defense reform efforts, and facilitate their integration into Euro-Atlantic institutions.

The United States and Russia share many interests – including countering proliferation and confronting terrorism. We are working with Moscow to develop a START Follow-in treaty that will further reduce both nations' nuclear arsenals while sustaining important treaty monitoring provisions. We will seek out opportunities to work with Moscow on emerging issues, such as the future of the Arctic and the need for effective missile defense architectures designed to protect the region from external threats. At the same time, the United States will continue to engage with Russia's neighbors as fully independent and sovereign states.

In Central Asia, where culture, commerce, and competing geopolitical interests from East and West have intersected for centuries, security and stability are of vital importance. America's presence in Central Asia serves important roles both in support of efforts in Afghanistan, and in supporting these nations' efforts to improve their economic, defense, and security capacity in a dynamic and potentially volatile region.

The foundation of our presence in Asia remains the strength of our historical treaty alliances. These alliances have helped maintain peace and stability for over sixty years, particularly through the continued presence of capable U.S. forces in the region, and we remain steadfastly committed to the security commitments embodied in these agreements. The regional and global security environments are more complex today, however. Humanitarian assistance and disaster relief, global peacekeeping, stability and reconstruction operations, non-proliferation activities, missile defense cooperation, and energy security initiatives are all critical issues for regional defense cooperation. While our enduring interests will continue to influence the shape and character of our presence in Asia, this emerging security landscape requires a more widely distributed and adaptive presence in the region that relies on and better leverages the capabilities of our regional allies and partners. It also presents new opportunities to work with other regional partners to advance mutual security interests.

In Northeast Asia the Department is working closely with key allies Japan and the Republic of Korea to implement our agreed plans to realign our combined force postures, restructure allied security roles and capabilities, and strengthen our collective deterrent and defense capabilities. These changes will firmly poise these alliances for the 21st century security landscape and ensure their enduring strength, readiness, and resilience for the future. In the Pacific Rim, we are deepening our partnership with Australia, an alliance that stretches beyond Asia to provide

essential cooperation on a wide range of global security challenges. In Southeast Asia, we are enhancing our long-standing alliances and partnerships with Thailand, the Philippines, and Singapore on issues such as counter-terrorism, counter-narcotics, and support to humanitarian assistance operations in the region. In addition to enhancing existing regional partnerships, the United States is also developing new strategic partnerships with emerging regional leaders and encouraging the continued development of multilateralism and regional integration in security affairs.

China's rapid development of global economic power and political influence, combined with an equally rapid expansion of military capabilities, is one of the central and defining elements of the strategic landscape in the Asian region and, increasingly, global security affairs. China has begun to articulate new military roles, missions, and capabilities in support of its larger regional and global interests, which could enable it to play a more substantial role in the delivery of international public goods. The United States welcomes the rise of a strong, prosperous, and successful China that plays a greater role in world affairs. However, that future is not fixed, and while the United States will seek to maximize positive outcomes and the common benefits that can accrue from cooperation, prudence requires that the United States balance against the possibility that cooperative approaches may fail to prevent disruptive competition and conflict. The limited transparency of China's military modernization - in terms of its capabilities, intentions, and investments - remains a source of growing concern in the region, which increases the potential for misunderstanding and miscalculation. Our relationship with China must therefore be multi-dimensional in scope and undergirded by a process of building and deepening strategic trust that seeks to reinforce and expand on areas of mutual interest, while sustaining open channels of communication to discuss sources of friction in the bilateral relationship, and manage and ultimately reduce the risk that is inherent to any relationship as broad and complex as that shared by the United States and China.

As India's economic power, cultural reach, and political influence increases, it will assume a more influential role in global affairs. This growing influence, combined with shared democratic values and a commitment to global stability will present many opportunities for cooperation. India's military capabilities are rapidly improving through aggressive defense acquisition to include long-range maritime surveillance, maritime interdiction and patrolling, air interdiction, and strategic airlift. India has already established its worldwide military influence through counter-piracy, peacekeeping, humanitarian assistance and disaster relief efforts. As India's military capabilities grow, it will provide Asia with a net provider of security in the Indian Ocean and beyond.

The United States also recognizes the important role that Pakistan plays in regional security. Extremism, economic instability, resource scarcity, and illicit trafficking all imperil Pakistan's future. A secure, stable Pakistan is vital to U.S. national security, the region and the world. For these reasons, the United States has committed to a strategic partnership with Pakistan over the long term that is built on a foundation of mutual interests and joint efforts. We will strengthen Pakistan's capacity to target extremism, and will provide substantial resources to support Pakistan's democracy and development.

The United States has a substantial interest in the stability of the broader Indian Ocean, which will play an ever more important role in the global economy. The Indian Ocean provides vital sea-lanes of communication that are essential to global commerce, international energy security, and regional stability. Securing open access to the Indian Ocean will require a more integrated approach to the region across military and civilian organizations. An assessment that includes U.S. strategic interests, objectives, and posture implications will provide a useful guide for future defense planning.

Stability in the Middle East remains critical to U.S. interests. Strong U.S. security cooperation with Egypt, Lebanon, Jordan, Saudi Arabia, and the Gulf States will continue to build partner capabilities to counter extremism and other regional threats, including the proliferation of ballistic missiles. A persistent Al Qaeda threat will necessitate expanded counter-terrorism cooperation with regional partners, including counter threat financing, anti-extremist messaging, and critical infrastructure protection. A variety of maritime security challenges, including piracy, smuggling, and human trafficking, will require greater participation in regional maritime security organizations in order to protect vital sea lines of communication. We will also continue to work with our Middle East partners to develop a regional architecture that broadens and improves interoperable air and missile defenses.

As our forces continue their responsible drawdown from Iraq, the United States will remain committed to nurturing a strategic partnership that promotes peace and prosperity in Iraq and the region. And, as we strive towards a comprehensive peace in the region between Israel and its neighbors, the closeness of our defense relationship and cooperation with Israel will continue.

The United States will continue to work toward a secure and democratic Western Hemisphere by developing regional defense partnerships that address domestic and transnational threats such as narco-terrorist organizations, illicit trafficking, radical populism, and social unrest. The United

States will look for opportunities to enhance our defense relationships with Brazil and Mexico, which play a critical role in maintaining peace and prosperity in the region. Expanded defense-related cooperation can help lift our countries' bilateral relationships into a broad partnership that reflects our many shared interests.

In Africa, the United States will continue working towards a stable continent able to provide for its own security needs. America's efforts will hinge on partnering with key states as well as regional and sub-regional security organizations to conduct capacity-building, prevent extremism, and addressing humanitarian crises.

The Role of the U.S. Defense Posture

The United States is a global power with global responsibilities. Beyond operations in Afghanistan and Iraq, approximately 400,000 U.S. military personnel are forward-stationed or rotationally deployed around the world to help sustain U.S. capacity for global reach and power projection. To achieve the objectives of the defense strategy, U.S. military capabilities must be postured to defend the United States from external threats, prevail in current conflicts and ongoing operations, deter and prevent adversary aggression and other challenges, assure allies and partners of U.S. security commitments, respond to contingencies, and support security cooperation and capacity-building activities.

There are three key elements to our defense posture: forward-stationed and rotationally-deployed forces, capabilities, and equipment; a supporting overseas network of infrastructure and facilities; and a series of treaty, access, transit, and status-protection agreements and arrangements with allies and key partners.

In response to the end of the Cold War, the United States shifted its focus away from containing the Soviet Union and began significant reductions in the number of forward-stationed forces. A comprehensive Global Defense Posture Review in 2004 continued this trend by emphasizing further consolidation of ground and air forces into the continental United States; a reliance on a much lighter, scalable overseas footprint and naval forces; and increased investment in global attack and strategic mobility capabilities designed to maximize our ability to bring force to bear rapidly anywhere on the globe.

This push toward a force optimized for expeditionary operations from the continental United States and select forward bases generated substantial benefits, but it has also incurred significant

costs. In particular, this approach undervalued our long-term relationships while overvaluing reliance on technological solutions to security challenges.

The Department must ensure that our overseas posture adapts and evolves in ways that respond to—and anticipate—changes in the international security environment. The persistence of conflict, the diffusion of power around the world, the proliferation of nuclear and other weapons technologies, and rising pressures on the freedom of the global commons pose new security challenges that require innovative adjustments to our defense posture. To this end, we will seek a new architecture of cooperation, one that generates opportunities for the United States to work together with allies and partners on shared regional and global security opportunities and challenges.

Toward a Cooperative and Tailored Posture

In a future marked by continued globalization and enduring transnational threats, the United States and its allies and partners will face a multiplicity of shared challenges and opportunities. This dynamic security environment calls for a cooperative and tailored approach to global defense posture.

The United States will seek new or additional cooperative measures to address shared regional and global security concerns where U.S. interests align with those of our allies and partners. Such a "cooperative approach" recognizes that the United States cannot effectively manage these security challenges on its own, nor should it attempt to do so.

Viewing defense posture through a cooperative lens, the United States will support development of—and capitalize on—the specialization and expertise of allies, partners, and other U.S. government agencies. The United States will also cooperate with our allies and partners to effectively use limited resources by generating efficiencies and synergies from each other's defense postures.

The United States will continue to develop its defense posture to enhance other states' abilities to solve global security problems. The presence of U.S. military forces overseas can generate a powerful catalytic effect in promoting multilateral security cooperation and regional security architectures that serve both U.S. and partner states' interests.

Our cooperative approach to defense posture applies to internal collaboration in a whole of government manner as well. The United States will adopt interagency approaches to overseas defense posture to best support U.S. defense, diplomacy, and development efforts.

The United States will also apply a regionally "tailored approach" to posture our forces. A tailored defense posture reflects unique regional political and security dynamics by harmonizing the right combination of forward-stationed and rotational forces and capabilities, prepositioned equipment and basing infrastructure, and relationships and agreements. It calibrates the U.S. presence in each region to best support ongoing operations, contingency response, and prevent and deter activities. It also recognizes that augmenting our overseas presence is not always the most effective method to achieve our strategic objectives.

A tailored defense posture continually adapts and aligns itself to U.S. strategic and foreign policy priorities, serving to shape a favorable security environment and respond to evolving regional challenges and opportunities. In the emerging security environment, the United States will tailor its defense posture to address challenges such as population-centric conflict, the proliferation of nuclear technology and theater ballistic missiles, anti-access and area-denial capabilities, and maintaining secure access to the global commons.

Several insights that have emerged since the 2004 review will also guide future defense posture decisions:

- Forward-stationed and rotationally-deployed U.S. forces remain relevant and required. The long-term presence of U.S. forces abroad reassures allies and partners of our commitment to mutual security relationships, generates enduring trust and goodwill with host nations, and increases regional and cultural expertise in the force. We cannot simply "surge" trust and relationships on demand.
- Our defense posture will balance the need for a permanent overseas presence that assures allies and partners of our commitments with the need for a flexible ability to respond to contingencies and emerging threats and global stability needs in distant theaters. Forces can be permanently stationed abroad while also part of the global sourcing pool, allowing the United States to project power from proximate locations and shorten response time to contingencies. The United States will match appropriate forces and capabilities to each region's contingency response and assurance and deterrence requirements.
- The United States will balance the need for assured access to support ongoing operations with the risks of introducing fragility into its lines of communication. The challenges of generating and sustaining a defense posture to support ongoing operations in Afghanistan, for example, led to a reliance on short-term transactional relationships. In some cases, the access these relationships provided proved to be fragile, putting strategic success at risk. To meet this challenge, we will seek innovative ways to add strategic

depth to our posture network and prioritize the development and maintenance of enduring relationships with trusted partners that serve mutual security interests over the long-term.

- America's defense posture should provide a stabilizing influence abroad. Forwardstationing and rotational deployment of U.S. forces are designed to contribute to regional stability and will be enhanced, lessened, or reshaped as necessary to help prevent regional arms races and other escalatory dynamics that threaten peace and stability. The United States will work closely with allies and partners to maintain an appropriately tailored military presence that serves a constructive role in maintaining regional stability.
- Our defense posture will continuously adapt to changes in the strategic environment. Deliberate, ongoing assessment of military requirements and the strategic environment should guide U.S. global defense posture planning.

Regional Posture Perspectives

The United States will emphasize the following priorities in the adaptation and development of its global defense posture over the next five years:

- 1. Balance between ongoing operations, contingency response, and prevent and deter activities in the development of a strategic defense posture in the broader Middle East and Central and South Asia;
- 2. Work with allies and key partners to ensure a peaceful and stable Asia-Pacific region;
- 3. Reaffirm our commitment to Europe and NATO, including through the development of European missile defense capabilities; and
- 4. Support partnership capacity building efforts in key regions and states.

Operations in Iraq and Afghanistan since 2001 have significantly increased the U.S. presence in the greater Middle East and Central and South Asia. The urgency of these operations caused the Department to prioritize defense posture changes needed for near-term operational capability. It is time to transition from this legacy, operationally focused posture to a strategic architecture that better serves U.S., allied, and partner interests through the medium- to long-term. An emphasis on long-term relationships and shared interests with allies and partners will clarify our extended commitment to the region's stability, enhance the resiliency of our defense posture, and improve our collective ability to carry out current operations while preparing for contingency response. The United States will therefore:

• Manage a responsible force drawdown in Iraq.

- Maintain current access and develop alternatives in support of operations in Afghanistan while expanding access elsewhere in the region to prepare for contingency requirements.
- Reshape its defense posture to assure partners of a credible, long-term commitment to mutual security relationships and deter regional actors from aggression while balancing that requirement against the regional sensitivity to a large long-term U.S. force presence.
- Ensure its near-term investments in infrastructure and capabilities to support ongoing operations in Iraq and Afghanistan are consistent with long-term goals for desired capabilities and end-states in the region.
- Develop a defense posture network that supports a regional security architecture focused on strengthening national and regional defense capabilities and the advancement of regional stability and security.

The United States has been a Pacific power for over a century. The vast distances of the Pacific and the low density of U.S. basing and infrastructure there place a premium on forward-stationed and forward-deployed U.S. forces. We seek to sustain and strengthen our Asia-Pacific alliances and partnerships to advance mutual security interests and ensure sustainable peace and security in the region, while also promoting allied and partner contributions to global stability. We will do so by augmenting and adapting our forward presence, which reassures allies of the U.S. commitment to their security. At the same time, we will encourage our allies and partners to enhance their roles in security and facilitating regular multilateral security cooperation within the region to build trust, increase transparency, and reduce the risks of crisis or conflict. Specifically, the United States will

- Continue to adapt its defense presence as necessary to maintain regional stability and assure allies of their security, including through the provision of extended deterrence to Japan and the Republic of Korea (ROK).
- Improve the resiliency of U.S. forces and facilities in the region in order to safeguard and secure U.S., allied, and partner assets and interests in the region in response to emerging anti-access and area-denial capabilities.
- Augment regional deterrence and rapid response capabilities and seek opportunities to build the capacity of our Asian partners to respond more effectively to contingencies, including humanitarian crises and natural disasters.
- Continue to advance the ROK's lead role in the combined defense of its territory with the transition of wartime operational control to the ROK military in 2012.

- Develop a more adaptive and flexible U.S. and combined force posture on the Korean Peninsula to strengthen the alliance's deterrent and defense capabilities and its long-term capacity for regional and global defense cooperation.
- Continue working with Japan to implement the bilateral Realignment Roadmap agreement that will ensure a life-of-the-alliance presence of U.S. forces in Japan and transform Guam, the westernmost sovereign territory of the United States, into a hub for security activities in the region.
- Explore opportunities for a more forward-deployed presence that supports increased multilateral maritime security cooperation and enhanced capabilities for assured access to the global commons.
- Develop additional opportunities for joint and combined training in the Western Pacific that respond to: the need for consistent readiness of U.S. forces to carry out joint operations, particularly in the areas of humanitarian assistance, disaster relief, and maritime security; the scarcity of available land and facilities in the Pacific; and the potential for leveraging U.S. engagement with allied and partner militaries to build multilateral security relationships and operational capacity among the countries of the region.

The security of Europe has been central to American national interests for most of the last century. American defense posture in Europe has changed significantly since the end of the Cold War as legacy forces and basing structures transformed into a lighter, more flexible, and more deployable forward posture. Maintaining a robust U.S. military presence in Europe serves to deter political intimidation of allies and partners, promotes stability in the Aegean, Balkans, Caucasus, and Black Sea regions, demonstrates U.S. commitment to NATO Allies, builds trust and goodwill among our nations, and facilitates multilateral operations in support of mutual security interests both inside and outside the continent. The United States will therefore:

- Maintain its European defense posture network and its commitment to the security of the NATO Allies.
- Subject to a review of NATO's Strategic Concept and an accompanying assessment of U.S. military requirements in Europe, retain four Brigade Combat Teams and an Army corps headquarters forward-stationed on the continent.
- Support the deployment of a revised U.S. missile defense architecture in Europe. Enhance forward-deployed naval presence in the region to support this initiative and enable increased multilateral maritime security cooperation.

In Africa, the United States will continue to maintain a limited military presence to help build partner security capacity, generate regional security cooperation opportunities, and foster the development of constructive civil-military relations in developing nations. The expanse of Africa and light U.S. footprint highlight the importance of en-route infrastructure to support defense activities in theater. The United States will therefore:

- Posture to prepare for contingency response by improving our relationships and access agreements with African allies and partners, improving preexisting African-owned infrastructure, and exploring innovative opportunities for logistical collaboration with African militaries.
- Seek to share facilities and cooperate more closely with European Allies in our efforts to help African states build capacity and to prepare for contingency response.

Our defense objectives within the Western Hemisphere do not require a robust forward presence. We will retain a limited footprint while seeking to improve relationships with regional states and militaries in pursuit of common hemispheric security goals. Our defense posture in Latin America will support interagency capabilities to address critical issues including illicit trafficking, coastal security, and humanitarian assistance and disaster relief. In North America, the United States will maintain the defense posture required for mission assurance, consequence management, defense support of civil authorities, strategic dispersal, and homeland defense. The United States will therefore:

- Provide an alternative port to dock East Coast aircraft carriers to mitigate the risk of a manmade or natural disaster.
- Seek to develop new cooperative partnerships and bolster current partnerships with key Latin American states, particularly in the maritime domain, and encourage Latin American states to work more closely together on multilateral security initiatives.

Investing in Our Partnerships at Home

Just as maintaining America's enduring defense alliances and relationships abroad are central facets of statecraft, so too is the need to continue improving how the Department of Defense cooperates with other U.S. Departments and agencies. Years of war have proven how important it is for America's civilian agencies to possess the resources and authorities needed to operate alongside the U.S. Armed Forces during complex contingencies at home and abroad. As our experiences in Afghanistan and Iraq have shown, sustainable outcomes require civilian development and governance experts that can help build local civilian capacity. Although the U.S. military can and should have the expertise and capacity to conduct these activities until

appropriate civilian authorities are able, it is not the most appropriate institution to be leading capacity building efforts designed to enhance civilian control of security institutions.

A strong and adequately resourced Civilian Response Corps organized and trained to operate alongside or in lieu of U.S. military personnel during a variety of possible contingencies is an important investment for the nation's security. This is an urgent requirement for ongoing operations in Iraq and Afghanistan, and will remain an enduring need given the expected security environment—both to prevent crises and to respond to them.

America's civilian instruments of statecraft were allowed to atrophy in the post-Cold War era, and the lack of adequate civilian capacity has been a significant challenge in prevailing in current conflicts. Unfortunately, despite a growing awareness of the need and real efforts throughout the government, adequate civilian capacity will take time and resources to develop and is unlikely to materialize in the near-term. The Department will therefore continue to do all it can to meet the demands of complex stability and reconstruction operations. The Department will continue to build on the lessons learned from examples such as the provincial reconstruction teams in Afghanistan and Iraq, and work toward improving a whole of government approach.

Just as the U.S. military is not the most appropriate institution to lead capacity building efforts to enhance civilian institutions overseas, the Department of Defense also should be in support of civil authorities here at home. Consistent with Homeland Security Presidential Directive 5 (HSPD-5), DoD supports the Department of Homeland Security, as part of a whole-of-government, whole-of-nation approach to domestic incident response. It is essential that DoD improve its capabilities for contributing to civilian-led activities and operations, supporting "unity of effort" in homeland security. The Department of Homeland Security, to build capacity vertically from the federal level down to the local level, and horizontally across the federal government, as well as with stakeholders in the private sector, nonprofit organizations, and other elements of the public.

SECTION V: REFORMING HOW WE DO BUSINESS

Too often national security decision-making and assessment is concerned with inputs – that is, the type and number of resources devoted to solving a certain problem or accomplishing a particular objective. Particularly with regard to the internal operation of the Department of Defense, we must focus our assessment on outcomes and results. By so doing, we can better discern problems that require a new approach. As the Department reforms how it operates, the QDR focused on four particular issues: reforming security assistance; reorienting defense acquisition; strengthening the defense industrial base; and developing a more strategic approach to how the Department considers the issues of energy security and climate change.

Reforming Security Assistance

U.S. security is inextricably tied to the effectiveness of our efforts to help partners and allies build their own security capacity. The Department of Defense has had several key successes, including the development of Iraqi security forces that are enabling the responsible redeployment of U.S. forces from that country. The value of building partner capacity programs extends well beyond zones of conflict—indeed, conducting such efforts *before* conflict can help prevent or mitigate conflicts in the first place. Previous efforts have helped our partners deploy alongside U.S. forces or to manage their own security challenges at home or in their regions. Despite an increased emphasis on the capacity-building mission over the past few years, America's toolkit remains constrained by a complex patchwork of authorities, persistent shortfalls in resources, unwieldy processes, and a limited ability to sustain efforts beyond a short period.

The starting point for assessing today's security sector assistance architecture is to recognize that it was designed for a different era and mission. Many of the U.S. Government's basic policies, laws, and systems date back to the early 1960s and were created with cash sales of equipment to partners in mind – not substantial capacity-building or broad security sector assistance endeavors.

Although security assistance is not new, what has fundamentally changed is the role such assistance can play in providing security in today's environment. Threats to our security in the decades to come will stem more from state weakness than state strength. The future strategic landscape will increasingly feature the ambiguous grey area between war and peace. In a world of diffuse challenges, non-state threats, and under-governed spaces, building the capacity of our

partners can sometimes be our most important military mission. U.S. Armed Forces cannot be everywhere, nor are they best placed to respond to every contingency. Enabling our partners to respond to security challenges reduces risk to U.S. forces and extends security to areas we cannot reach alone.

Because our security assistance architecture was designed to build long-term relationships against a Cold War adversary, processes for making decisions and getting resources to the field can take months or – more often – years. As a result, there has been constant pressure to accelerate the processes and to develop special legislative and procedural workarounds. These programs were often created for specific contingencies – such as the Iraq Security Forces Fund, the Afghanistan Security Forces Fund, and the Pakistan Counterinsurgency Fund – or narrowly scoped purposes. Other tools were established only after a major system failure instead of when they would have been most useful for preventing or minimizing conflict.

The United States may not initiate another operation on the scale of Iraq or Afghanistan again soon, but it is likely to face similar challenges in a variety of locales for the foreseeable future. We will need to build future coalitions and help partners address their own indigenous challenges, and we need the right tools in place beforehand rather than having to build anew for each specific contingency. We have historically underinvested in these capabilities; now is the time to capitalize on lessons learned and institutionalize them to posture the United States for the future.

Many of our authorities and structures assume a neat divide between defense, diplomacy, and development that does not exist. For example, well-trained security forces are of limited utility – or indeed can even be counterproductive – without the institutional systems and processes to sustain them or the governance and regulatory frameworks to hold them accountable to civilian oversight and the rule of law. We have gained a new appreciation of the security sector— which includes the defense and criminal justice sectors, government management and oversight bodies, and civil society — as a system of systems in which one element is linked to another. The Department of Defense has a comparative advantage in developing defense capacity, but civilian agencies are better suited to build capacity in the other elements of the security sector. Developing the security sector requires comprehensive, whole of government programs and activities, but the patchwork of authorities incentivizes piecemeal, stove-piped approaches. Solving this problem will require recognition within our government that security is a shared responsibility and that our programs and processes must reflect that reality.

Finally, many adjustments to improve security sector assistance have been limited in scope, duration, and resources. As a result, the Combatant Commanders lack sufficient tools to support their Theater Campaign Plans and their assigned mission to build partner capacity, which may range from the wholesale reconstitution of security forces within a major stability operation, to fulfilling urgent train-and-equip requirements for partner confronting serious security challenges, to rebuilding a state's capacity to deliver essential services to vulnerable populations and provide access to justice.

The United States has developed some important tools to meet many of its most pressing needs, and is taking steps to lay the groundwork for additional reforms. In 2009, the Administration worked with Congress to create the Pakistan Counterinsurgency Fund and extend "Section 1206" Global Train-and-Equip authority to support coalition operations--allowing it to help increase contributions to Afghanistan. "Section 1207" Security and Stabilization Assistance authority has fostered a unique interagency process that catalyzed integrated State Department, USAID, and DoD efforts to create integrated assistance packages. The Department initiated a Defense Institution Reform Initiative designed to build the ministerial capacity of partners to sustain their operational investments.

Equally significant, the Administration has in the last year created a standing Interagency Policy Committee (IPC) on Security Sector Assistance under the National Security Council. This IPC will serve as a decision and adjudication body to vet security assistance issues for senior leadership, and it has taken on a review of related roles, missions, authorities, and resources that will culminate in a Presidential Policy Directive on security sector assistance. The Department is guided by the following six key principles as it participates in the review:

• First, the U.S. Government's security sector assistance architecture must be "full spectrum." That is, it must be responsive to the security needs of states in peacetime settings as well as war-fighting contingencies and to an in-between area of chronic instability, where the goal is to contain or prevent conflict. Waiting until U.S. boots are on the ground in large numbers to reconsider responsibilities and funding is too late. Temporally, any potential engagement along this spectrum may generate "fast-track" needs, whether to reassure a reluctant party to sign a peace agreement or enable a partner to deploy its forces rapidly alongside ours. By the same token, there can be longer-term needs as well, such as expanding a partner's logistics base or rebuilding a fragile state's security forces over a 3-5 year period so they can take over the duties from departing peacekeepers. Short-term and longer-term efforts do not rigidly correlate with military versus civilian requirements.

- Second, legislative authority is a necessary, but not sufficient, condition for success it must be matched by requisite funding and program management capacity. Choices on which departments or agencies should lead on particular programs should depend very much on their current capacity or future potential to deliver results within agreed timeframes. Moreover, program capacity takes time to grow, especially in areas such as unit-level training where contract management and oversight levies major human resource requirements at both the field and strategic levels.
- Third, program responsibilities need to be aligned with operational risks. Although the provision or denial of security assistance to a given partner is never without a foreign policy impact, the risks associated with operationally-driven requirements are particularly acute. DoD should expect to have a clear decision-making role for programs designed to enable foreign partners to shoulder operational burdens our war-fighters would otherwise have to bear or to mitigate potentially explosive situations where U.S. forces might be called upon to intervene. Although no construct will be perfect, better aligning authority and risk will minimize disconnects among U.S. activities and interests.
- Fourth, assistance programs should incentivize interagency collaboration. Security is a fundamentally shared responsibility; different departments and agencies each have unique expertise that improves government responses. In this regard, the Department of State brings to bear its knowledge of the partner's political context and an understanding of broad U.S. foreign policy objectives. DoD brings expertise in military planning, the ability to judge partner capability gaps, and an ability to execute training and equipping projects. Unilateral authorities incentivize the path of least resistance and lead to stove-piped responses. "Dual key" structures that require a collaborative approach guard against this and can be tailored to particular programs. While "dual key" may not be appropriate in all cases, it could be applied more widely to both Title 10 and 22 programs.
- Fifth, the security assistance system must be responsive both to top-down and bottomup imperatives. It goes without saying that the system must be flexible enough to implement Presidential and senior leader decisions with speed and efficiency. Yet in several cases over the past eight years, senior leaders have had to commit considerable time in developing a program once action was directed. At the same time, decision-making must also be responsive to input at lower levels. Although the Department of State and DoD must work at the strategic level to jointly set overall priorities, many actions are best delegated to

individual components at the regional and country level to provide the speed and tailoring of response required in today's environment.

• Sixth, requirements to balance assistance across sectors should not come at the expense of security-related operational needs to build partner capacity. Without question, we can and should be sensitive to the relative weighting of security and non-security components in its overall assistance package – lest our assistance be portrayed as being skewed against basic human needs. At the same time, it is important that a given recipient's operational needs (as mutually agreed) are fully met and scoped to its absorptive capacity. Constraining operationally-necessary security assistance solely for the sake of balance is unwise; instead, the United States must increase sufficient non-security assistance to provide the balance that must accompany operational imperatives.

The Department of Defense has made key internal adjustments as well. The Defense Security Cooperation Agency has launched a global review of Security Cooperation Manning to ensure our manpower reflects requirements. The Department is taking steps to improve the Foreign Military Sales implementation process such as issuing standard templates for capacity-building capabilities often required across a range of scenarios to make the requirements definition and procurement processes more efficient. The Military Departments have made strides towards improving doctrine, education, and training for U.S. service personnel engaged in these activities.

But we can and must do more. Internally, the Department is also exploring how to make changes to our personnel, organizations, and processes that execute capacity building missions, including tracking military and civilian personnel in order to develop qualified personnel for capacitybuilding activities, and develop vital enablers such as language, regional and cultural skills. We are also re-looking our organizations and processes, such as identifying capabilities necessary to improve requirements definition and to determine the balance of such capabilities required both at the Combatant Commands and in supporting DoD organizations.

The Department looks forward to working with its interagency partners and Congress on a number of key initiatives regarding security sector assistance. Some warfighter needs are urgent, and meeting them should proceed alongside broader reform efforts. The Global Train and Equip authority held by the Department now faces an expanded mandate for coalition activities; its authority must be expanded to match. To avoid procurement and contracting delays, the Secretary of Defense requires a Defense Coalition Acquisition Fund, which would enable the

maintenance of an inventory of commonly needed items by partners. The Department will also seek authority to provide expedited support services to the provision of training and equipment – accelerating and improving the delivery of equipment to partners – when it is in our national security interests to do so.

Matching the Department's capabilities to the critical capacity-building mission will require significant re-thinking of some assumptions that underpin our current activities. Helping to build partner capacity – once the province of Special Operations Forces – must now be a key mission for the Armed Forces as a whole. Many long-standing programs within DoD rely on authorities that pre-date our concept of building partner capacity as a key war-fighting activity. Similarly, Combatant Commanders have identified a series of internal DoD policies that they believe require adjustment for wartime operations, which are now under review. In a period when "active hostilities" are difficult to define and partner contributions are no longer ancillary activities but essential to success, such assumptions must be questioned and revised. Some of the required changes will take years or even decades to fully realize. But we must start now. We look forward to working with Congress on this endeavor.

Preventing conflict and building security sector capacity are essential elements of our future national security. Successfully convincing partners to pursue shared national security objectives, often at great political and physical risks, ultimately depends on proving that the United States is a reliable partner. We must recognize that security sector assistance is a resource intensive mission that requires focused, efficient, predictable funding and adequate authorities to provide the right assistance at the right time to the right people. Successful capacity building is not only critical in today's fights, but it hedges against future military interventions when resource constraints require balancing risk.

Reforming How We Buy

Another pressing institutional challenge facing the Department is acquisitions – broadly speaking, how we acquire goods and services and manage the taxpayers' money. Today, the Department's obligation to defend and advance America's national interests by, in part, exercising prudent financial stewardship continues to be imperiled by a small set of expensive weapons programs with unrealistic requirements, cost and schedule overruns, and unacceptable performance.

Over several decades and across multiple administrations, the Pentagon's acquisition system has developed three major problems that hamper our ability to acquire critical platforms and capabilities in a timely manner and with acceptable cost.

First, the requirements for new systems are too often set at the far limit of current technological boundaries. Such ambition can sometimes help produce breakthrough developments that can significantly extend America's technological edge. But far too often the result is disappointing initial performance followed by chronic cost and schedule overruns. The Department and the nation can no longer afford the quixotic pursuit of high-tech perfection without incurring unacceptable cost and risk. Nor can the Department afford to chase requirements that shift or continue to "pile on" throughout a program's lifecycle.

Second, the Pentagon's acquisition workforce has been allowed to atrophy, exacerbating a decline in the critical skills necessary for effective oversight. For example, over the last ten years, the Department's contractual obligations have nearly tripled while our acquisition workforce fell by more than ten percent. The Department also has great difficulty hiring qualified senior acquisition officials. Over the past eight years for example, the Department has operated with an average percentage of vacancies in the key acquisition positions ranging from 13 percent in the Army to 43 percent in the Air Force. There remains an urgent need for technically trained personnel – cost estimators, systems engineers, and acquisition managers – in order to conduct effective oversight.

Third, our system of requirements definition and capability development too often incentivizes reliance on overly optimistic cost estimates. In order for the Pentagon to produce weapons systems efficiently, it is critical to have budget stability, but it is impossible to attain such stability in DoD's modernization budgets if we continue to underestimate the cost of such systems from the start. We must demand cost, schedule, and performance realism in our acquisition process, and hold industry and ourselves accountable. We also ensure that only essential systems are procured, particularly in a resource-constrained environment. There are too many programs underway. We cannot afford everything we might desire; therefore, in the future, the Department must balance capability portfolios to better align to budget constraints and operational needs, based on warfighter capability prioritization.

The urgent and pressing need to develop and field capabilities that can assist and enable deployed forces to communicate and share information during ongoing conflict is further complicated by the pace and scope of the evolution in information technology. The conventional

DoD acquisition process is too long and too cumbersome to fit the needs of the many systems that require continuous changes and upgrades – a challenge that will only become more pressing over time.

In order to improve how we acquire and field critical capabilities for today's wars and tomorrow's challenges, the Department is undertaking a far-reaching set of reforms.

Developing Our People: To operate effectively, the acquisition system must be supported by an appropriately sized cadre of acquisition professionals with the right skills and training to successfully perform their jobs. To address personnel deficiencies, we will increase the number of acquisition personnel by 20,000 positions by 2015. We will continue to make significant increases in training and retention programs in order to bolster the capability and size of the acquisition workforce.

Ensuring Integrity in the Acquisition Process: Since early decisions and estimates greatly influence eventual success or failure, the Department is focusing on strengthening the front end of the acquisition process. We will ensure that all major programs are subjected to an early and clear definition of approved requirements based on a rigorous assessment of alternatives. To reduce technical risk, we will conduct a comprehensive design review, including independent reviews, to certify the maturity of program technologies in order for any program to progress to the costly final phase of development – engineering and manufacturing development. We will use competitive prototypes, when cost effective and in the interest of national security objectives. As we subject our acquisition process to more rigorous assessment, we must be mindful that in some cases the Department must accept some risk in order to field a capability that is needed for ongoing operations in Afghanistan, Iraq, or elsewhere.

Improved Cost Estimation: To strengthen our cost analysis and capability, we plan to expand the size and capabilities of the Department's independent cost organization within the Office of the Director Cost Assessment and Program Evaluation. We will also modernize cost and price analysis education and training programs. To strengthen our cost visibility and databases, we will improve contractor data reporting of actual costs, earned value management, and pricing.

Improved Program Execution: Beyond ensuring that acquisition efforts begin on the right track, the Department must also continue to strengthen the execution phase of weapons development programs by pursuing several avenues:

• First, begin to employ fixed-price development contracts more frequently.

- Second, constrain the tendency to add requirements to programs by employing Configuration Steering Boards previously endorsed by Congress.
- Third, through competitive prototyping, demonstrate critical technologies and prove out the concept before initiating Engineering and Manufacturing Development.
- Fourth, certify technology maturity through independent reviews and technology readiness assessments.
- Fifth, conduct realistic, integrated testing to identify system problems as early as possible. Where necessary, so as not to slow the fielding of urgently needed systems, the Department will conduct sufficient testing in parallel with fielding efforts to assess safety and identify system capabilities and limitations.
- Sixth, better align profitability with performance by: linking contract fee structure with contractor performance; rigorously examining service-based contracts to ensure fees are properly earned; eliminating the use of no-bid contracts whenever possible; and ensuring that multi-year contract vehicles are limited to instances where real, substantial savings are accrued to the taxpayer.

In short, we need to match requirements with mature technologies, maintain a disciplined systems engineering approach, integrated with comprehensive testing, and avoid sacrificing cost and schedule for promises of improved performance.

In sum, the Department – and the U.S. Government more broadly – must move away from the entrenched attitudes that too often plague the acquisition process: a risk-averse culture, a litigious process, parochial interests, excessive and changing requirements, unnecessary budget churn and instability, and sometimes adversarial relationships within the Pentagon and with other parts of the government. We will continue to work within the Department and with Congress to improve our acquisition and procurement processes in order to better meet our obligation to be good stewards of the All-Volunteer Force.

Strengthening the Industrial Base

In order for the Department of Defense to develop, field, and maintain high quality equipment, it must rely on a robust and capable defense industry. Indeed, America's industrial capacity and capability enabled victory in World War II, maintained the technological edge against the Soviet Union, and today helps ensure that our military personnel in harm's way have the world's best equipment and are supported by modern logistics and information systems, our technological advantage must be closely monitored and nurtured.

Unfortunately, the Federal Government as a whole and the Pentagon in particular has not adequately addressed the changes within both the industry and the Department's needs in the current strategic environment. The result has been that America's defense industry has consolidated and contracted around 20th century platforms, rather than the broad and flexible portfolio of systems today's security environment demands.

The decades-long primarily hands-off approach to the U.S. defense industrial base cannot be remedied quickly, and will require a long-term approach undertaken in partnership with industry and Congress. The range of products and services our forces depend upon requires that the Department approach the industrial base in a more sophisticated manner, taking into account the rapid evolution of commercial technology, as well as the unique requirements of the Department.

Whenever possible and appropriate, the Department will rely on market forces to create, shape, and sustain industrial and technological capabilities, but we must be prepared to intervene when absolutely necessary to create and/or sustain competition, innovation, and essential industrial capabilities.

For too long the defense industry has been viewed as a monolithic sector of the economy whose key players are made up only of the select few established military industrial providers. This simply is not true. The goods and services the Department relies upon reach far deeper into the overall U.S. economy. Although there are unique items produced solely for the Department, these items themselves often rely upon a complex and integrated supply chain of product providers, which, if constrained at the 2nd, 3rd, and even 4th tiers, would jeopardize even the seemingly pure military industrial providers' ability to support our forces on an ongoing basis.

Many of the defense industries' jobs that require the most perishable skills reside within nonprime suppliers. Many of these small, highly specialized companies depend upon the primes and their unique requirements for their very survival. The cascading effects on these critical sub-tier suppliers to decisions the Department makes at the overall programmatic level must be better understood: to ensure that critical lower-tier providers have the capacity to respond to these decisions; to ensure continued supply of critical sub-components to our defense industrial base; and to ensure these critical skills are not lost to our nation.

Moreover, the financial community has an important, and often overlooked, role to play in ensuring the health of our industrial base. From the small technology start-ups that seek venture

funding to pursue new products and systems, to the debt markets that provide capital support as programs mature and evolve, the Department must ensure that we do not take this access to capital for granted and work to form a more transparent view of our requirements and long-term investment plans.

Likewise, although national security-unique innovation often occurs within the "pure play defense industrial base," the vast majority of innovative and revolutionary components, systems, and approaches that enable and sustain our technological advantage often reside in the commercial marketplace, in small defense companies, or America's universities.

Therefore, the Department will work to establish requirements and pursue specific programs that take full advantage of the entire spectrum of the industrial base at our disposal: defense firms, pure commercial firms, or the increasingly important sector of those innovative and technologically advanced firms that fall somewhere in between.

The Department will also work to adopt a more holistic approach that can improve our ability to identify potential single points of failure or concern earlier in the process, and will establish a more comprehensive, and when appropriate, interagency approach to industrial policy and industrial base issues.

Our engagement with industry does not mean the Department of Defense will underwrite sunset industries nor prop up poor business models. It does mean the Department will create an environment in which our industries, a source of our nation's strength, can thrive and compete in the global marketplace.

In order for the defense industry to remain a source of strategic advantage well into the future, the Department and our nation requires a consistent, realistic, and long-term strategy for shaping the structure and capabilities of the defense industrial base. The Department of Defense is committed to doing so.

DoD's Strategic Approach to Climate and Energy

Climate change and energy are two key factors that will play a significant role in shaping the future security environment. Although climate change, energy security, and economic growth yield distinct types of challenges, the three issues are inextricably linked. The actions the Department takes now can prepare us to respond effectively to these challenges in the near-term and in the future.

Climate change will affect DoD in two broad ways. First, climate change will affect the operating environment, roles, and missions that we undertake. The U.S. Global Change Research Program, comprised of 13 federal agencies, reported in 2009 that climate-related changes are already observed in every region, to include the United States and its coastal waters. These physical changes include increases in heavy downpours, rising temperature and sea level, rapidly retreating glaciers, thawing permafrost, lengthening growing seasons, lengthening ice-free seasons in the ocean and on lakes and rivers, earlier snowmelt, and alterations in river flows.

Assessments conducted by the intelligence community indicate that climate change will have significant geopolitical impacts around the world, contributing to poverty, environmental degradation, and the weakening of fragile governments. Climate change will contribute to food and water scarcity, increase the spread of disease, and may help spur mass migration, though the causes of migration are complex and generally not linked to a single factor.

While climate change alone does not cause conflict, it may act as an accelerant of instability or conflict, placing a burden on civilian institutions and militaries around the world to respond. Additionally, extreme weather events may lead to increased demands for defense support to civil authorities for humanitarian assistance or disaster response within the United States or overseas. In some nations, the military is the only institution with the capacity to respond to a large-scale natural disaster. Proactive engagement with these countries can help build their capability to respond to such events. Working closely with relevant U.S. Departments and Agencies, DoD's environmental security cooperative initiatives with foreign militaries represent a non-threatening way of building trust, sharing best practices on installations management and operating practices, and developing response capacity.

Second, DoD will need to adjust to the impacts of climate change on our facilities and military capabilities. The Department already provides environmental stewardship at the hundreds of DoD installations throughout the United States, working diligently to meet resource efficiency and sustainability goals in response to relevant executive orders and law. Although the United States has significant capacity to adapt to climate change, this will pose challenges for civil society and DoD alike given the nation's extensive coastal infrastructure. In that regard, in 2008, the National Intelligence Council judged that more than 30 U.S. military installations were already at elevated levels of risk from sea level rise. DoD's operational readiness hinges on continued access to land, air, and sea training and test space. Consequently, the Department must complete a comprehensive climate change assessment of all installations, including sea level rise, as well as the potential increase of severe heat waves or fire conditions on ground combat training.

As climate science advances, the Department will regularly re-evaluate climate change risks and opportunities in order to develop policies and plans to manage its effects on the Department's operating environment, missions, and facilities. Managing the national security effects of climate change will require DoD to work collaboratively, through a whole of government approach, with both traditional allies and new partners.

Energy security for the Department means having assured access to reliable supplies of energy and the ability to protect and deliver sufficient energy to meet operational needs. Energy supply lines are vulnerable to both asymmetric and conventional attacks and/or disruption. Energy efficiency can serve as a force multiplier because it increases the range and endurance of forces in the field and can reduce the number of combat forces diverted to provide force protection for energy supply lines. DoD must incorporate geostrategic and operational energy considerations into force planning, requirements development, and acquisition processes, as recommended by the 2008 Defense Science Board report.

The Department is moving out smartly to increase use of renewable energy supplies and reduce energy demand both to improve operational effectiveness and to reduce greenhouse gas emissions in support of U.S. climate change initiatives. Indeed, the Military Departments have already invested in non-carbon power sources such as solar, wind, geothermal, and biomass at domestic installations and in alternative vehicle fuels, including hybrid, electric, hydrogen, and compressed national gas (CNG). Solving military challenges – such as more efficient generators, better batteries, lighter materials, and tactically deployed energy sources – has the potential to yield technology spin-offs that benefit the civilian community as well. DoD will partner with academia, other U.S. agencies, and international partners to research, develop, test, and evaluate new sustainable energy technologies.

The Department will also address energy security at domestic facilities by focusing on increasing endurance and resilience to enhance mission assurance. U.S. forces at home and abroad rely on support from installations in the United States. Extended power failures at those installations could potentially impact on power projection and homeland defense mission capability. DoD will conduct a coordinated energy assessment, prioritize critical assets, and promote investments in energy efficiency to ensure that critical installations are adequately prepared for prolonged outages from natural disasters or attack. At the same time, the Department will also take steps to balance energy production activities at installations with the requirement to preserve test and training ranges that are needed to maintain readiness.

SECTION VI: A DEFENSE RISK MANAGEMENT FRAMEWORK

The depth, scope, and scale of activities the Department of Defense undertakes every day are unparalleled. From employing forces in operations around the world, to providing education, health care, and housing for our people, to researching, developing, testing, and fielding new technologies, the Department has a unique set of global responsibilities.

Managing risk across such a vast enterprise is challenging; the range and volume of component activities and competencies defies simple categorization and aggregation of risk. Moreover, a dynamic security environment requires the Department to be flexible and diminishes the value of formulaic risk assessments. Taken together, the challenges associated with measuring risk and performance relegate the use of quantitative metrics to an important but supporting role in any defense risk assessment. DoD necessarily places a premium on informed judgment at all echelons of command.

Although difficult, risk management is central to effective decision-making and vital to our success. For our nation, this can mean the difference between victory and defeat; for our men and women in uniform and their families, such decisions have life and death consequences. That is why the Department is focused so centrally on rebalancing and reforming in favor of success in today's wars.

The Department used multi-disciplinary approaches in conducting a risk assessment for this QDR. The assessment reflects updated thinking on best practices, which increasingly draw not just on quantitative analysis, but also rely heavily on informed judgments, expert opinions, and the use of scenarios. The Department ensured its risk assessment was strategy-driven. Our efforts were informed by recent risk identification efforts conducted by components of the Department including the DoD Inspector General and by the Government Accountability Office.⁵

⁵ The GAO produces an annual list of high-risk US Government management issues, of which DoD had eight in 2009: Supply Chain Management; Weapon Systems Acquisition; Contract Management; Financial Management; Business Systems Modernization; Support Infrastructure Management; Approach to Business Transformation; and Personnel Security Clearance Program. The DoD Inspector General Management and Performance Challenges for Fiscal Year 2009 also identified eight risk areas for the Department: Financial Management; Acquisition Process and Contract Management; Joint Warfighting and Readiness; Information Assurance, Security, and Privacy; Health Care; Equipping and Training Iraqi and Afghan Security Forces; and Nuclear Enterprise, American Recovery and Reinvestment Act.

As an organizing framework, the 2010 QDR used risk categories, described below, that have been empliyed since 2001.

- *Operational risk*: the ability of the current force to execute strategy successfully within acceptable human, material, financial, and strategic costs. Consideration of operational risk requires assessing the Department's ability to execute current, planned, and contingency operations in the near-term.
- *Future challenges risk*: the Department's capacity to execute future missions successfully, and to hedge against shocks. Key considerations here are the Department's ability to field superior capabilities and sufficient capacity to deter/defeat emerging threats in the mid-, and long-term.
- *Force management risk*: our ability to recruit, retain, train, educate, and equip the total force, and sustain its readiness and morale. This requires the Department to consider its ability to provide trained and ready personnel in the near-, mid-, and long-term.
- *Institutional risk*: the capacity of management and business practices to plan for, enable, and support execution of DoD missions. It should consider ability to develop effective and efficient organizations and processes over the near-, mid-, and long-term.

Ongoing efforts to re-balance the joint force, including those taken during the course of this QDR, help better position DoD to not only prevail across a range of missions, but to do so in the challenging current and likely future security environment. However, extant and emerging issues could undermine the Department's ability to execute the defense strategy. Therefore, based on an enterprise-wide survey of inputs, this QDR risk assessment identifies those key shortfalls or complex problems that threaten the Department's ability to successfully execute its strategic priorities, and which will require the sustained attention of DoD senior leadership to mitigate successfully.

Operational

Key issues that pose risk to operational missions in the near-term are: providing sufficient enabling capabilities, building partnership capacity, and securing DoD systems in cyberspace.

- Failure to provide sufficient enablers would constrain multiple aspects of operations and constitute risk to achieving near-term goals of prevailing in ongoing missions in Afghanistan and Iraq. Key capability enablers are currently stressed and will remain so in the near- to mid-term environment due to their critical and potentially growing role in ongoing operations. Examples detailed previously include ISR, vertical lift, electronic warfare, language and culture skills, along with Special Operations Forces enablers. DoD continues to work toward closing the gap on areas of persistent shortfalls. Based on the results of QDR analysis, the Department has identified robust enabling capabilities that are useful in a wide range of operations and intends to make continued investments in FY2012 and beyond. Despite these efforts to reduce the risk of stressed enablers across the Future Years Defense Plan (FYDP), this risk could worsen over time based on projected demands in the future security environment.
- Allies and partners are critical to success in meeting today's security challenges; their inability or unwillingness to support shared goals would constitute an operational risk to U.S. ability to prevail in current or future conflicts. Building the defense capacity of Allies and partners and ensuring that U.S Armed Forces are able to train and operate with foreign militaries is a high priority mission. As the emphasis of developing the capability of indigenous security forces in Afghanistan and Iraq reflects, conducting security force assistance (SFA) operations is an increasingly critical element of building partnership capacity. In anticipation of the growing role of security force assistance in U.S. strategy and operations, the Department is: institutionalizing general purpose force capabilities for security force assistance; enhancing language, regional, and cultural abilities; strengthening and expanding capabilities for training partner aviation forces and capacities for ministerial-level training; and creating mechanisms to facilitate more rapid transfer of critical materiel. Working with interagency partners and with Congress, DoD is exploring how to improve the ways security assistance funds are authorized and overseen within the executive branch to improve their effectiveness in support of national security goals.
- A failure by the Department to secure its systems in cyberspace would pose a fundamental risk to our operations, personnel, and ability to accomplish defense missions today and in the future. Attacks in cyberspace could target command and control information systems/networks and the cyber underpinnings of weapon system platforms. To ensure unfettered access to cyberspace, DoD mission-critical systems and networks must perform and be resilient in the face of cyber attacks. The recent establishment of

Force Management

Key issues that pose risk to force management are: supporting operations in Afghanistan and Iraq, providing DoD health care, and Active Component/Reserve Component mix and roles.

- The scale and duration of concurrent operations in Afghanistan and Iraq currently place a considerable strain on the overall health of the force and on our ability to reset and reconstitute it. Eight years of ongoing combat have precluded us from maintaining desired proportions of time that U.S. forces spend in theater. In the near- to mid-term, this high operational tempo requires DoD to pay extra attention to the well-being of our service-members, institutions, and their families. A responsible drawdown in Iraq, coupled with increased requirements in Afghanistan, will necessarily dictate the pace of moves toward sustainable dwell rates. Practical and efficient replacement of some platforms and capabilities will also be required to reset lost equipment. In the mid- to long-term, the Department's new force planning and sizing construct and its approach to planning and executing operations will seek to better account for the demands of long-duration operations.
- Over the long-term, rising costs and long-term pressures threaten the Department's approach to providing high-quality health care to members of the U.S. Armed Forces, veterans, and their dependents. Although achievement of this objective is not immediately at risk, an increasing number of Military Health System users, steady cost shares/co-pays, and congressionally mandated benefit increases all have increased the Department's health care costs well beyond the programmed budget. Continued engagement in long-duration operations, and an increasing number of veterans approaching 65 years of age could further increase costs. As a first step toward mitigating these risks, the Military Health System has developed an approach to improve health care

while attempting to control costs. Additionally, in 2008 the Department established the Senior Oversight Council to focus on accomplishing all elements of Wounded Warrior care and is also developing new Defense Centers of Excellence to introduce new therapies.

• The critical contribution made by the Reserve Component (RC) in recent years – currently 25-30 percent of USCENTCOM forces – has seen the RC develop increased capability and heightened readiness. Significant reductions in use of the RC following the drawdown in Iraq may risk the RC's readiness to undertake operations in future. The Department has already initiated several studies examining issues associated with employing the RC on a routine, rotational basis as part of the total operational force, changing the AC/RC mix, and/or changing the role of the RC. Drawing on this work, the Department will explore the potential to redefine the role of the RC for both domestic and overseas operations.

Institutional

Key issues that pose institutional risk include: reforming acquisition processes, optimizing information technology acquisition processes, and maintaining the defense industrial base.

• Shortcomings in the acquisition process put the Department at risk of being unable to deliver the capabilities it needs, when it needs them, at acceptable costs, which in turn threatens the successful execution of military operations. The Department's acquisition and support processes have perennially received criticism for delays, cost growth, an inadequate workforce, and other inefficiencies. Given the importance of a healthy acquisition process, we must not embark on programs with artificially low cost estimates, immature designs and technology, fluid requirements, excessive technical authority certification requirements, churning budgets, and uneconomical procurement profiles. The December 2008 release of DoD Directive 5000.02, Operation of the Defense Acquisition System, seeks to mitigate key risks associated with the acquisition process. The Department will closely track implementation of new policies instituted by the directive to ensure more rigorous assessment of alternatives; competitive prototyping; more frequent and effective program reviews; the prevention of "requirements creep"; independent assessment of "technology readiness"; and better test and evaluation. We must also ensure the Department is able to rapidly prototype and field new capabilities, maximizing its ability to meet warfighter needs and leverage technological advantages

By 2015, the Department also plans to hire 20,000 new acquisition professionals, comprised of 9,000 new jobs and 11,000 converted contractor positions.

- The Department's deliberate acquisition process is particularly poorly suited for keeping pace with information technology (IT) innovation. The inability to acquire effective IT solutions in a timely and cost effective manner reduces the Department's ability to use information as a force multiplier in terms of agility, flexibility, responsiveness, and effectiveness. This represents an enduring missed opportunity to better take advantage of DoD, inter-agency, and international IT capabilities. The Department will take steps to consider how best to reform the IT acquisition process, drawing on successful commercial practices, with a view to accelerating the acquisition cycle.
- The Department's need to maintain a defense industrial base (DIB) with appropriate levels of competition, innovation, and industrial capacity represents another area of institutional risk. Since World War II, the U.S. defense industry has consolidated and contracted around 20th century platforms. The U.S. defense industry is, accordingly, not well-positioned to meet the Department's 21st century requirements. This creates risk that extends not only to the relatively small number of major, established providers of defense platforms, but the much larger community of product providers. Working closely with industry, the Department will consider further how to ensure that its future requirements can be met. Such an approach should not, however, include the underwriting of sunset industries, nor sustaining poor business models courses of action that simply introduce additional risks to the equipping of the U.S. military.

Future Challenges

Preceding sections highlighted several key challenges and opportunities in the security environment. In addition, other key issues that pose future challenges risk include: managing uncertainty about the future environment, and science and technology (S&T) trends.

• Difficulties in anticipating the nature of the future security environment create the risk that the Department may not be adequately prepared for the challenges that arise over the mid- to long-term. To better hedge against the uncertainty inherent in long-term defense planning, the Department drew on a wide range of analysis – including the use of multiple scenarios and combinations of scenarios – to inform its judgments for this QDR. Further refinement of this analytic process to make it more iterative and adaptive, as well

as the use of alternative futures to avoid point predictions, will be central to the Department's continuing efforts to manage risk in this context.

A number of factors related to research and development combine to generate a risk that • the United States may lose its technological edge in some areas over time. As global research and development (R&D) investment increases, it is proving more difficult for the United States to maintain a competitive edge across the entire spectrum of defense technologies. Even at relatively robust investment levels, the DoD S&T program is struggling to keep pace with the expanding challenges of the new threat environment and the increasing speed and cost of global technology development. The Department's options for managing risk with respect to S&T are limited, as they are well beyond the scope of an individual department. The health of the U.S. R&D base is largely determined by commercial and academic interests beyond the direct influence of DoD spending, and education standards and choices that are beyond the influence of DoD policies. The Department will consider the scope and potential benefits of a prioritized R&D strategy focused on areas where it is vital to maintain a technological advantage. This will be coupled with further work to assess how best to work with key allies to leverage breakthroughs and avoid duplication.

Strategic, Political, and Military Risk

In the face of ongoing war and a range of pressing current and future challenges, the United States requires a defense strategy and portfolio of military resources that can help protect and advance the nation's interests. To create and maintain the right mix of forces and military capability, the Department makes hard, strategy-informed choices. This requires determining where to invest additional resources and where to accept a degree of operational, force management, institutional and future challenge risk over the near and longer-term. These judgments inform our broader consideration of strategic, military, and political risks, as required by Title 10 legislation.

In the 2010 QDR risk assessment, strategic risk constitutes the Department's ability to support the National Security Strategy through execution of the defense strategic priorities in the near-, mid-, and long-term. Military risk considers the ability of U.S. forces to adequately resource, execute, and sustain military operations in the near- mid-term, and mid-long-term. In the international context, political risk derives from the ability and will of our Allies and partners to support shared goals. In the domestic context, political risk relates to public support of national strategic priorities in the near-, mid-, and long-term.

This QDR identified areas of weakness in our defense program, presented options to mitigate them, and made recommendations on where and how to rebalance the Department toward our most pressing challenges. The risk issues identified in this section will require sustained leadership attention in order to ensure that these risks are successfully mitigated. The QDR risk assessment concludes that the Department is positioned to successfully balance overarching strategic, military, and political risk between the near-to-mid term and the mid- to long-term, as well as across the full range of military missions required to protect and advance national interests.

CONCLUSION: THE WAY AHEAD

The challenges facing the United States are immense, but so are the opportunities. The Department of Defense must balance a series of enduring strategic priorities within a complex security environment. Doing so demands clear thinking, an honest appraisal of strategic priorities, and a willingness to make hard choices and manage risk.

Strategy-driven, this QDR provided an assessment of the strategic environment, America's national interests and global role, the role of U.S. military power, and a comprehensive description of the Department's strategic priorities and their implications for capability development, key policies and authorities, and our key defense relationships at home and abroad.

This QDR clarified the Secretary's priorities for the Department: prevail in today's wars; prevent and deter conflict; prepare to succeed in a wide range of contingencies; and preserve and enhance the All-Volunteer Force. The Secretary has been clear and this report reaffirms the need to balance risk prudently across these priorities in favor of prevailing in today's wars – this report has outlined in detail how the Department intends to do so.

This report will be used to shape and influence a series of ongoing processes and reviews that provide direction to the Military Departments and Combatant Commands. The strategic and investment priorities described in this report reflect the Secretary's intent as the Department revises the Guidance for the Development of the Force (GDF) and the Guidance for the Employment of the Force (GEF) to be updated this year.

This QDR report and the preceding months of deliberation served two key purposes: First, to establish the Department's key strategic priorities, providing context and recommendations regarding capability development and investment portfolios; and Second, to communicate the Secretary's intent for the next several years of the Department's work. The QDR thus serves as a critical capstone document, shaping how the Department of Defense will support America's men and women in uniform today, and build the policy and programmatic foundation that will better enable the next generation to protect the American people and advance their interests.

CHAIRMAN'S ASSESSMENT