TOWARD A RISK MANAGEMENT DEFENSE STRATEGY

Nathan Freier

August 2009

Visit our website for other free publication downloads

http://www.StrategicStudiesInstitute.army.mil/

To rate this publication click here.

The views expressed in this report are those of the author and do not necessarily reflect the official policy or position of the Department of the Army, the Department of Defense, or the U.S. Government. The views expressed in this report are those of the author and do not necessarily reflect the official policy or position of the Department of the Army, the Department of Defense, or the U.S. Government. Authors of Strategic Studies Institute (SSI) publications enjoy full academic freedom, provided they do not disclose classified information, jeopardize operations security, or misrepresent official U.S. policy. Such academic freedom empowers them to offer new and sometimes controversial perspectives in the interest of furthering debate on key issues. This report is cleared for public release; distribution is unlimited.

This publication is subject to Title 17, United States Code, Sections 101 and 105. It is in the public domain and may not be copyrighted.

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding ar DMB control number.	ion of information. Send comments arters Services, Directorate for Info	s regarding this burden estimate or branching or street	or any other aspect of the s, 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington		
1. REPORT DATE AUG 2009		2. REPORT TYPE		3. DATES COVE 00-00-2009	red 00-00-2009		
4. TITLE AND SUBTITLE		5a. CONTRACT	NUMBER				
Toward a Risk Ma	nagement Defense S		5b. GRANT NUMBER				
					5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)					5d. PROJECT NUMBER		
					5e. TASK NUMBER		
					5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army War College, Strategic Studies Institute, 122 Forbes Avenue, Carlisle, PA, 17013					8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)					10. SPONSOR/MONITOR'S ACRONYM(S)		
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAIL Approved for publ	LABILITY STATEMENT ic release; distributi	on unlimited					
13. SUPPLEMENTARY NO	OTES						
14. ABSTRACT							
15. SUBJECT TERMS							
16. SECURITY CLASSIFIC		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON			
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	76			

Report Documentation Page

Form Approved OMB No. 0704-0188

The author is extremely grateful to the leadership and staff of the U.S. Army War College's Peacekeeping and Stability Operations Institute and the Strategic Studies Institute for their continued support of this research. Special thanks, in this regard, go to Colonel John Kardos, Colonel Lorelei Coplen, and Professor Douglas Lovelace. The author is further grateful to colleagues and staff at the Center for Strategic and International Studies. Here, the author would like to single out Mr. David Berteau, Dr. Clark Murdock, Mr. Sam Brannen, and Ms. Christine Wormuth. A special thank you also goes to Dr. John Bonin of the U.S. Army War College. He was instrumental in helping me refine many of the monograph's most important conclusions. All of the aforementioned offered me key insights. Hopefully, I accurately reflect the most important among them. This work would not have been possible without the insights and contributions of the scholars and policymakers cited. Their ideas too have been instrumental. Finally, the author would like to extend special recognition to the civilian and military personnel in the Department of Defense. They continue to serve selflessly with distinction through one of the most difficult and complex periods in American history.

Comments pertaining to this report are invited and should be forwarded to: Director, Strategic Studies Institute, U.S. Army War College, 122 Forbes Ave, Carlisle, PA 17013-5244.

All Strategic Studies Institute (SSI) publications are available on the SSI homepage for electronic dissemination. Hard copies of this report also may be ordered from our homepage. SSI's homepage address is: www.StrategicStudiesInstitute.army.mil.

PKSOI's website address is https://pksoi.army.mil.

The Strategic Studies Institute publishes a monthly e-mail newsletter to update the national security community on the research of our analysts, recent and forthcoming publications, and upcoming conferences sponsored by the Institute. Each newsletter also provides a strategic commentary by one of our research analysts. If you are interested in receiving this newsletter, please subscribe on our homepage at www.StrategicStudiesInstitute.army. mil/newsletter/.

ISBN 1-58487-401-5

FOREWORD

The U.S. Army War College's Peacekeeping and Stability Operations Institute and Strategic Studies Institute are pleased to offer this important study on key considerations for DoD as it works through the on-going defense review. Mr. Freier outlines eight principles for a risk management defense strategy. He argues that these principles provide "measures of merit" for evaluating the new administration's defense choices. This monograph builds on two previous works—Known Unknowns: Unconventional "Strategic Shocks" in Defense Strategy Development and The New Balance: Limited Armed Stabilization and the Future of U.S. Landpower.

Combined, these three works offer key insights on the most appropriate DoD responses to increasingly "unconventional" defense and national security conditions. This work in particular provides DoD leaders food for thought, as they balance mounting defense demands and declining defense resources.

DOUGLAS C. LOVELACE, JR

Director

Strategic Studies Institute

BIOGRAPHICAL SKETCH OF THE AUTHOR

NATHAN FREIER is a Visiting Professor of Strategy, Policy, and Risk Assessment at the U.S. Army's Peacekeeping and Stability Operations Institute and a Senior Fellow in the International Security Program at the Center for Strategic and International Studies (CSIS). Mr. Freier joined CSIS in April 2008 after retiring from the U.S. Army as a lieutenant colonel after 20 years of service. He was seconded to PKSOI in August of last year. Mr. Freier's last military assignment was as Director of National Security Affairs at the U.S. Army War College's Strategic Studies Institute. Prior to that, he served in the Office of the Deputy Assistant Secretary of Defense for Strategy, where his principal responsibilities included development of the 2005 National Defense Strategy. Previously, he was an Army fellow/visiting scholar at the University of Maryland's Center for International and Security Studies and a strategist with the Strategy, Plans, Concepts, and Doctrine Directorate, Department of the Army Staff in Washington, DC. Mr. Freier twice deployed to Iraq as a strategist while assigned to the Army War College. From January to July 2005, he served in the Strategy, Plans, and Assessments Directorate of Headquarters, Multi-National Force-Iraq, and from May to August 2007, he served as a special assistant to the Commander, Multi-National Corps-Iraq, in the Commander's Initiatives Group. In his current capacity, he continues to provide expert advice to key actors in the defense policymaking and analysis communities. Among his research interests and areas of expertise are U.S. grand strategy; national security, defense, and military strategy and policy development; irregular, catastrophic, and hybrid security challenges and conflicts; strategic net and risk assessment; terrorism; and the Iraq War. Mr. Freier holds masters degrees in both international relations and politics.

SUMMARY

Current fiscal and operational realities no doubt constrain the defense decision space. It is realistic to view the coming era as one of general defense and national security evolution, complemented by some targeted revolution within the Department of Defense (DoD). Toward that end, the current Quadrennial Defense Review (QDR 10) must rationalize competing visions about the certainty of future unconventional threats and lingering uncertainty about evolving traditional challenges. Doing so requires adoption of a new risk management defense strategy.

Both the President and the Secretary of Defense (SecDef) recognize the need for a risk management approach in future DoD strategy, planning, and capabilities development. The President, the new national security team, and the SecDef also recognize that the likeliest and most dangerous future security challenges will be unconventional. A contemporary risk management defense strategy should adhere to and be judged against eight principles. These help inject realism, rigor, and strategic precision into future DoD plans and programs. The eight principles are:

Integration of DoDwhole-ofinto government approach avoiding for preventing the most dangerous future conflicts. Success of a risk management defense strategy relies on synchronized interagency efforts that together focus on avoiding or preventing the most dangerous conflicts in the first place. A more deliberate and synchronized whole-of-government approach to traditional war prevention, for example, will relieve

some of the pressure on DoD to maintain an excessive traditional hedge. As for dangerous unconventional challenges or conflicts, it is incumbent on the U.S. Government (USG) to use "smart power" around the world now to prevent nonmilitary, but still war-like, competition, as well as violent dissolution of a large and important state.

• Optimization for persistent management of violent unconventional threats. Among the least preventable future defense-relevant challenges are failures of governance whose second- and third-order impacts threaten U.S. interests unconventionally. DoD should seize the opportunity afforded by a wider USG focus on preventing dangerous but less likely conflicts, optimizing strategy and key defense capabilities for persistent management of chronic unconventional hazards.

This requires a new "division of labor" for much of the joint force. General purpose land forces will need to optimize for the armed stabilization of crippled states. Direct action special operating forces will need to continue honing their capabilities for deep penetration of un-, under-, or irresponsibly governed territory to kill or apprehend terrorists and criminals, disrupt effective sanctuary, secure or disable weapons of mass destruction, and support general purpose land forces prosecuting resource-intensive stabilization more counterinsurgency. Air and naval forces will support land-centric irregular warfare missions but will likely lean toward optimizing for more

conventional warfighting missions. In doing so, they cannot err on the side of "excessive conventional overmatch," and they must continue to demonstrate broad utility for both conventional and unconventional conflict environments.

Acknowledgement of a defense-relevant, unconventional world beyond the War on Terror (WoT). Current trends threaten overoptimization of defense strategy and capabilities for operations in the Middle East from a regional perspective, and counterterrorism and classical counterinsurgency from a functional one. Both of these are important but also insufficient by themselves for DoD's adjustment to a new more unconventional operating environment. To use a contemporary financial analogy, the United States and its interests are threatened unconventionally worldwide by a range of "systemic risks." These can manifest by hostile design or in the absence of design. Any, under the right circumstances, threaten to fatally undermine the security of important interests in ways that would require substantial U.S. military involvement. Points of unconventional, defenserelevant systemic risk include a competitors recourse to "war without warfighting," political extremism, toxic anti-American populism, nuclear proliferation, and expanding political and economic vulnerability.

It would be prudent for senior defense officials to recognize that waves of unrelated unconventional threats will combine with a smoldering WoT with Islamic extremists.

Together these will remain persistent DoD burdens. This wider set of unconventional challenges will include well-defined threats from state and nonstate opponents free-riding on adverse contextual conditions and less containable threats from contextual conditions themselves. Combined, these will see DoD less employing its resources to underwrite a vulnerable but functioning order and more—under the most demanding circumstances—leadingwiderUSGresponsestotheconsequential absence of order all together.

contingency plans Recalibration of pursuit of limited strategic and operational objectives. Adoption of a risk management defense strategy requires that future military whole-of-government) campaigns pursue more realistic and limited strategic and operational aims. Appetite suppression and strategic discipline should inform future DoD contingency planning. U.S. actions in traditional conflicts should trend in the direction of coercive or punitive joint campaigns focused on a circumspect set of limited outcomes. These might include satisfactory adjustment of an offending regime's bad behavior, neutralization destruction of destabilizing military capabilities, and restoration of the status quo ante bellum. In large-scale contingencies under less conventional conditions, strategic and operational objectives should be similarly limited - often the minimum essential and manageable stabilization of an irregular conflict environment.

- Pursuit of institutional change conforming to the "art of the possible and necessary" versus the "desirable and ideal." Today, the prioritized application of limited defense resources is more important than ever. The new administration has an expansive list of defense priorities. Under a risk management defense strategy, it might be prudent to limit, curtail, or delay some of these after a thorough review of their broad utility. The United States is increasingly threatened unconventionally. Key sources of unconventional threat include terrorism, insurgency, and civil violence; higher-tech "global guerrilla" warfare; proxy "irregular" war and sophisticated "hybrid" war; the democratization of nuclear capabilities; and niche exploitation of the global commons by competitors—particularly space and cyber-space. These areas demand continuing institutional defense revolution. improvement Deliberate in traditional warfighting capabilities is important. However, it is not nearly as important as "precision institutional guided" revolutions irregular warfare and stabilization, nuclear nonproliferation, consequence management and civil support, space, and cyber security.
- Recognition that prevention and response are zero sum propositions. In a policy environment marked by declining defense resources, the balance between investment in prevention and investment in effective crisis response is particularly delicate. It is likely that resources committed to building exclusive capacity for

one amounts to a net loss in capabilities for the other.

A more preventive, indirect "advisory" approach to managing future conflict is among the most cost effective ways to secure common interests with partners. However, as a tool for prudent risk management, embedding advisory capacity in existing formations might be the wiser approach. In making forthcoming strategic choices about force structure and missioning, senior defense decisionmakers will have to carefully evaluate the cost-benefit relationship between exclusively missioning military forces for conflict prevention and the impact of doing so on broad capabilities for crisis response.

Incorporation of unthinkable but plausible "strategic shocks" in future defense planning. Defense senior leaders must account for the surprise onset of the most plausible and hazardous unconventional contingencies that would, without meaningful defense contributions, defy effective resolution. Some of these potential "strategic shocks" merit preliminary academic exploration. Some should be the object of prudent defense hedging, and others must increasingly become the targets of deliberate and detailed contingency planning. When combined, these efforts help underwrite the efficacy of key defense strategy and resource decisions and guarantee the relevance and resilience of DoD against the broadest range of defense-relevant challenges.

Net and risk assessment of and speculative contingency planning for specific "strategic

shocks" are low-cost down payments on prudent hedging and risk mitigation. Planning for defense-relevant shocks involves marrying plausibility and extreme hazard with defense relevance. Contingency events that are more plausible, hazardous, and irresolvable without material defense contributions merit serious consideration.

Integration of holistic homeland security (HLS) demands in strategy, planning, and capabilities development. One central point of failure of a risk management defense strategy would be continuing the genetic under-appreciation by DoD of its inherent responsibilities for supporting civil authorities at home under extraordinary circumstances. For DoD, support to civil authorities in the event of a crippling domestic catastrophe is perhaps its most underappreciated unconventional challenge. Regardless of the cultural predisposition within DoD to focus on exigent foreign security challenges, DoD must account for the most compelling domestic emergencies first in its future resource allocation and capabilities planning.

To date, DoD has pared its homeland defense and HLS responsibilities in ways that undermine its ability to respond effectively to domestic emergencies. Reversing this trend requires that DoD identify and resource specialized homeland security capabilities and ensure consistent access to the minimum essential number of general purpose forces necessary to respond

to the likeliest domestic emergencies. Both are critical risk management considerations for DoD.

Adhering to and judging future choices according to these eight principles will help senior defense and military leaders balance risk. They are consistent with the new administration's vision, as well as the priorities articulated by the SecDef. Adopting them will require some cultural adjustment and compromise. Employing principles like these can result in a *risk management defense strategy* that contributes decisively to securing core interests. They also materially reduce the likelihood of a perpetual "strategy-resource mismatch."

TOWARD A RISK MANAGEMENT DEFENSE STRATEGY

INTRODUCTION – SOMETHING HAS TO GIVE

I always think of the apocryphal statement attributed to the chancellor of the exchequer in the United Kingdom in 1927: "We are running out of money, so we must begin to think." . . . I think we are going to be in another era like that.¹

 Undersecretary of Defense for Intelligence James Clapper.

As the new administration moves out, the Department of Defense (DoD) and the whole of the U.S. Government (USG) face daunting strategy and resource choices. DoD's FY 2010 baseline budget request stands at \$533.7B.² With supplemental expenditures for FY 2010, that figure surpasses \$663B.³ In spite of commitments to reduce the U.S. presence in Iraq over the next 2 years, DoD still confronts dual, near-term warfights there and in Afghanistan. The latter effort will witness increased ground force commitments this year.⁴

The administration also pledges to continue with substantial landpower growth initiated in the final years of the Bush administration. Competing for resources with growth in Army and Marine Corps end strength are the rising costs of "resetting" both land components after extended combat abroad, as well as much needed Joint Force modernization. While still in the private sector, Michele A. Flournoy (now the Undersecretary of Defense for Policy) and Shawn Brimley (now a DoD

advisor to Flournoy) observed: "The next Secretary of Defense will inherit a department that is . . . under enormous pressure. The constant imperative to support forward-deployed forces engaged in current operations has strained the ability of the military services and their civilian leaders to adequately plan for a complex and uncertain future."

As DoD corporately assesses the President's priorities and the coming decade's mounting defense demands, something will have to give.8 Over the next year, DoD will make macro-decisions on strategy, force planning, and joint force missioning. The wider USG will also make key decisions on greater burden sharing across the interagency.9 All of these will ultimately be grounded by necessity in risk-informed choice.

Current fiscal and operational realities no doubt constrain the defense decision space. It may be more realistic to view the coming era as one of general defense and national security evolution, complemented by some targeted revolution in DoD missions and capabilities. Most agree that discretionary defense spending will either decline or plateau in real terms in this administration. This would be true regardless of which party occupied the Oval Office.

According to Secretary of Defense (SecDef) Robert Gates, "[T]he spigot of defense funding opened by 9/11 [September 11, 2001] is closing. With two major campaigns ongoing, the economic crisis and resulting budget pressures will force hard choices on this department." With growing and more diverse defense challenges and decreasing defense resources, *DoD will be in the business of risk management and risk allocation for the foreseeable future*. Risk elimination is both cost-prohibitive and impossible. Consistent with the worldview of Secretary Gates, Flournoy and

Brimley observe: "With the U.S. economy sliding toward recession and the national deficit and foreign debt rising to unprecedented levels, [President Obama and Secretary Gates] will need to avoid overstretch and make difficult decisions about where to place emphasis and how to prudently balance risk."¹¹

Transition to a new administration offers DoD the opportunity to begin defense strategy development and planning from a blank slate. However, there is no avoiding the continuing demands of current operations and a mixed-to-gloomy fiscal outlook. With respect to current operations, in particular, though there are real philosophical differences with the past administration, ongoing wars are lingering realities for the current defense team. They defy quick and easy redefinition or de-escalation and continue to draw disproportionate policy focus at very high levels. In addition, some policy decisions—i.e., land force expansion—are near or past the point of no return. Indeed, the Obama administration has repeatedly affirmed that course.

The on-going Quadrennial Defense Review (QDR 10) must rationalize competing defense visions. On one hand is the certainty of future unconventional threats—irregular, catastrophic, disruptive, and hybrid. On the other is lingering uncertainty about evolving traditional challenges. Senior defense leaders will need to critically assess DoD's current planning trajectory; identify key areas of vulnerability; and invest finite discretionary resources accordingly. Decreasing resources and increasing challenges require rigorous net assessment; the careful allocation, balance, and mitigation of risk; and unprecedented coordination between various government agencies. As the opening epigram suggests, "We are running out of money, so we must begin to think." This requires a more disciplined

risk management approach to defense strategy.

This monograph builds on two previous works by the author—*Known Unknowns: Unconventional* "Strategic Shocks" in Defense Strategy Development and The New Balance: Limited Armed Stabilization and the Future of U.S. Landpower. ¹⁴ It frames the contemporary defense decisionmaking environment. It describes the concept of *risk management* as a founding principle for contemporary defense strategy development. And finally, it outlines the *eight key strategic principles* that should be at the core of important near-term defense decisions.

These eight principles are touchstones against which senior DoD leaders and defense planners evaluate the efficacy of future options. They inject realism, rigor, and strategic precision into future DoD plans and programs. The principles are:

- 1. Integration of DoD into a whole-of-government approach for avoiding or preventing the most dangerous future conflicts.
- 2. Optimization of strategy and key defense capabilities for persistent management of violent unconventional threats.
- 3. Acknowledgement of a defense-relevant, unconventional world beyond the War on Terror (WoT).
- 4. Recalibration of contingency plans for pursuit of limited strategic and operational objectives.
- 5. Pursuit of institutional change conforming to the "art of the possible and necessary" versus the "desirable and ideal."
- 6. Recognition that prevention and response are zero sum propositions.
- 7. Incorporation of unthinkable but still plausible "strategic shocks" in future defense planning.

8. Integration of holistic homeland security (HLS) demands in strategy, planning, and capabilities development.

All substantive work on this monograph was complete prior to recent decisions on the FY 2010 defense budget and the articulation of the Quadrennial Defense Review's key focus areas. ¹⁵ Since writing has concluded, the eight risk management principles outlined in this piece have largely been validated by senior defense officials through their statements and actions. ¹⁶

A COMPLEX DECISIONMAKING ENVIRONMENT AND COMPETING DEMANDS

Near-term defense realities and a future defined by persistent unconventional conflict complicate defense decisionmaking in ways not seen since the Vietnam War.¹⁷ The recent presidential transition occurred in a time of war—the first in 40 years. The world today is quite different from that faced by Presidents Lyndon Johnson and Richard Nixon. Nonetheless, they too confronted active combat abroad, proxy "irregular" wars, hybrid conflict, and the challenge of building joint forces for an indeterminate future. President Barak Obama and Secretary Gates navigate similar territory. Their challenge is compounded by expanding national and global economic vulnerability.

Secretary Gates is institutionalizing the President's defense vision in a resource-constrained environment. During the campaign, under the rubric of "Building Defense Capabilities for the 21st Century," President Obama articulated a number of key defense priorities. They included not only expanding the size of the Army

and Marine Corps but also increasing their capabilities for irregular warfare (IW).¹⁸ Candidate Obama further committed to preserving "unparalleled [U.S.] airpower capabilities"; recapitalizing U.S. naval forces; maintaining "pragmatic and cost effective" support for national missile defense; "(e)nsuring freedom of space;" and, finally, "identify(ing) and protecting against" emerging cyber threats.¹⁹

As campaigning transitions to governing, both President Obama and Secretary Gates have faced and will face a range of critical and often unpopular defense decisions. For one, DoD is not immune to increasing economic hardship in the United States and around the world. Secretary Gates' new decisionmaking reality is the likelihood of flat or decreasing defense resources and a concomitant increase in the number and type of compelling defense-relevant challenges. In this regard, Gates has already attempted to free up future decision space for himself with a number of controversial budget recommendations in advance of the QDR. 21

Defense-specific and defense-relevant strategic challenges are manifest. There is no room for a national security time out. A WoT of some description will endure. The President acknowledged as much in his inaugural address.²² Iraq's internal conflict and instability will smolder, even as U.S. forces progressively hand over responsibility to the Iraqi government. The U.S.-led counterinsurgency (COIN) campaign in Afghanistan will enter a new and more activist stage.²³ A more assertive China will test American defense commitment in northeast Asia, the Pacific Rim, and in space and cyberspace.²⁴ Likewise, Russia will continue to exercise substantial military influence around its periphery.²⁵

In addition to these "known knowns," there are under-considered, defense-relevant "known unknowns" on the strategic horizon as well. ²⁶ Like 9/11, these are sudden "strategic shocks" that force abrupt, fundamental reorientation of some or all of the defense and national security enterprise on new and unfamiliar strategic challenges. The newly published Joint Operating Environment (JOE) acknowledges the likelihood of disruptive "strategic shocks" when it observes:

Changes will occur throughout the energy, financial, political, strategic, operational, and technological domains. While some change is foreseeable, even predictable, future joint force planning must account for the certainty that there will be surprises. How drastic, how disruptive they might be is at present not discernible and in some cases it will not even be noticed until they happen.²⁷

In this regard, *DoD must be prepared for the next "unconventional" shoe to drop*—e.g., the unanticipated collapse of a strategic state, increased nuclear proliferation and the prospect of nuclear use, the skillful employment of "hybrid" or "proxy" war against the United States, a crippling global pandemic, and strategically dislocating emergencies at home. ²⁸ Global economic challenges may play a hand in triggering or intensifying one or more of these. ²⁹ It certainly will impact the new administration's freedom to invest in those defense and national security capabilities and missions it wants. The primacy of needs over wants is a growing defense reality.

Both the President and the SecDef recognize the increasing need for risk management in DoD strategy, planning, and capabilities development. Secretary

Gates, for example, recently observed, "The United States cannot expect to eliminate national security risks through higher defense budgets. . . . The Department of Defense must set priorities and consider inescapable tradeoffs and opportunity costs." Likewise, during the presidential campaign, candidates Obama and Biden committed to "rebalance(ing) our capabilities to ensure that our forces have the agility and lethality to succeed in both conventional wars and in stabilization and [COIN] . . . review(ing) . . . each major defense program in light of current needs, gaps in the field, and likely future threat scenarios." Their view of balance is just now taking form in Secretary Gates' recent program decisions.

Unconventional threats and challenges are at the center of a contemporary risk management strategy. Unconventional challenges are both the most urgent current as well as the likeliest future threats. These unconventional security challenges will emerge from both state and non-state sources, most often as hybrid combinations of irregular, catastrophic, disruptive, and/or traditional threats. They will manifest according to and in the absence of strategic design.

The more these are born of "purposeful" non-state actors or emerge from unforeseen or under-appreciated "contextual" triggers (e.g., economic dislocation, failed governance, natural or human disaster, public health crises), the more they lay beyond the proximate control of the USG and its international partners.³² And, the more they fall substantially outside DoD's conception of warfighting. Further still, when states engage in "purposeful" unconventional war or warlike behavior against the United States, they do so so surreptitiously that they rob the United States of the *casus belli* necessary for the legitimate use of military force.

Thus, as a founding assumption, the new defense strategy should acknowledge that DoD is predominantly in the business of "unconventional" crisis prevention and contingency response for some time to come. There are no "silver bullets" for the problems of catastrophic terrorism, "hybrid" competition and conflict, state failure and collapse, complex insurgencies and civil conflicts, and strategically consequential criminal activity. Clearly, prevention and deterrence are cornerstones of a risk management defense strategy. However, there are certain to be unconventional, defense-relevant challenges that are neither preventable nor deterrable.

Preventing or deterring less conventional hazards is simply more problematic. Some consequential "contextual" threats like political disaffection, un- and under-governance, and environmental degradation thrive independent of countervailing efforts for crisis and conflict prevention and deterrence. This is even truer as the resources available for broad whole-of-government prevention dry up under the strain of economic recovery. Deterring "purposeful" non-state actors—preventing them from acting against the United States according to hostile design—also presents unique challenges. On this point, the 2008 IOE observes:

Non-state actors differ from state actors in several key ways from a deterrence perspective. It is often more difficult to determine precisely who makes the key decisions one seeks to influence through deterrence operations. Non-state actors also tend to have different value structures and vulnerabilities. They often possess few critical physical assets to hold at risk, and are sometimes motivated by ideologies or theologies that make deterrence more difficult.³³

The certainty of a dangerous unconventional defense future is consistent with the broad views of the new national security team. In this regard, both the President and the SecDef have advocated change in DoD's strategic orientation. For example, in a July/August 2007 Foreign Affairs article, candidate Obama observed:

To recognize the number and complexity of [21st century] threats is not to give way to pessimism. Rather, it is a call to action. These threats demand a new vision . . . in the 21st century—a vision that draws from the past but is not bound by outdated thinking. The Bush administration responded to the unconventional attacks of 9/11 with conventional thinking . . . largely viewing problems as state-based and largely amenable to military solutions. ³⁴

The SecDef is similarly inured to an unconventional defense and national security future. In his recent *Foreign Affairs* article—an article many consider to be an outline of the upcoming QDR, he observed, "What is dubbed the war on terror is, in grim reality, a prolonged, worldwide irregular campaign—a struggle between the forces of violent extremism and those of moderation."³⁵ He continues, "The recent past vividly demonstrated the consequences of failing to address adequately the dangers posed by insurgencies and failing states."³⁶ Finally, he concludes, "What all these potential adversaries—from terrorist cells to rogue nations to rising powers—have in common is that they have learned that it is unwise to confront the United States directly on conventional military terms."³⁷

The certainty of an unconventional defense future and an end to unlimited defense spending indicate that DoD must, as both President Obama and Secretary Gates suggest, set a new balance in its strategic orientation and capabilities. Prudent risk assessment indicates that DoD can accept increased traditional warfighting risk, provided it does so within a risk management strategy that is closely aligned with wider complementary actions across the USG. Direct DoD involvement in the persistent management of less traditional threats, on the other hand, is less avoidable. Less risk-taking is advised here.

EIGHT PRINCIPLES OF A RISK MANAGEMENT DEFENSE STRATEGY

A DoD commitment to risk management should underwrite the on-going QDR. At its foundation, a risk management defense strategy enlists supporting efforts from all coercive and persuasive instruments at the nation's disposal and proceeds informed by eight key strategic principles. These were outlined in the introduction. Before describing the eight principles in detail, a fuller discussion of risk management in the context of defense strategy is appropriate.

Risk Management Versus Risk Elimination.³⁸

Risk, as the likelihood of "failure or prohibitive cost in pursuit of strategic, operational, or management objectives," is an ever-present consideration for senior defense officials.³⁹ Given that the most compelling 21st century, defense-relevant challenges are unconventional and, by implication, often deeply rooted in the complex motivations of vulnerable populations around the world, there is little prospect for DoD buying, building, or training the defense establishment out of

harm's way in the same way it might in a more ordered environment of traditional military competition. Indeed, as the nation's most capable and well-resourced national security institution, DoD should expect that it will continue to shoulder the lion's share of the nation's unconventional security responsibilities abroad.⁴⁰

In this regard, risk management is the only viable course for defense strategy over the near- and mid-term. Risk should be identified and mitigated according to a very clear set of strategic priorities. The overall goal of risk management is prudently buying down risk where possible, while preparing to respond effectively in those areas where no level of risk mitigation is likely to drive hazards toward being unlikely.

A risk management defense strategy will only succeed if and when the other—often more appropriate—instruments of national power are integrated into a single, seamless strategic design. However, in the near-term, DoD should accept that it will be the nation's predominant instrument for foreign crisis response. At a minimum, this is true when the threat or presence of violence dramatically inhibits the freedom of action and effectiveness of other non-military capabilities.

Currently, the other agencies of government simply have less "skin in the game." In spite of aspirations to the contrary, that condition will persist for the foreseeable future. Moreover, in much the same way that wars in Iraq and Afghanistan consumed the attention of the USG in the last administration, the current team is likely to be similarly distracted by economic challenges. It would be unrealistic to anticipate dramatic change soon. Over the near term, the administration will by necessity focus the other instruments of power—diplomatic, political,

economic, etc.—heavily against emergence of an even darker economic future. However, non-military instruments also offer key advantages in the strategic management of U.S. relations with competitor states. When employed adroitly, these advantages can offset some traditional risk.

On balance, the prospect for drastically reducing the risk of great power war is better than is the prospect for eliminating or significantly reducing threats from more unconventional actors and hazards. As suggested by the 2008 JOE quote above, traditional military threats are simply more within the control of the nation's broad, classical instruments of power. The United States enjoys inherent whole-of-government advantages vis-à-vis traditional competitors — diplomacy, coercive and persuasive economic instruments, international trade, international norms and organizations, etc. These advantages are less useful under more unconventional circumstances.

States—even badly behaving states—have a range of tangible assets and interests that are more easily attacked, undermined, or co-opted through measures short of war.⁴² In the contemporary environment, these tangible assets grow more vulnerable every day. In addition, given the volatility of global markets, the United States may enjoy more common interests with traditional competitors than it did in the past. 43 Today, for example, the United States, China, and Russia all share a desire for restored economic prosperity. According to John Robb, "In today's world, states are too interdependent to easily engage in stateversus-state warfare. The economic and social bonds of most states make them too integral to the global community for them to become targets of invasion."44 As a consequence, prudent strategic investments

across instruments of power and the nimble practice of traditional statecraft offer greater opportunities for driving traditional military hazards further toward the unlikely.

The United States and the Soviet Union did, after all, navigate 46 perilous years of Cold War without its devolution into a "hot one." Naturally, the defense investments necessary to drive traditional warfighting risk to zero would bankrupt DoD's capacity to persistently manage likelier unconventional conflicts and contingencies. Thus, accepting some increase in traditional risk is essential to the success of a risk management defense strategy that is by necessity more focused on a range of defense-relevant unconventional threats and challenges.

Secretary Gates suggests that favorable outcomes versus the most dangerous unconventional challenges—like catastrophic terrorism and insurgency—"will take the patient accumulation of quiet successes over a long time."⁴⁵ Even with these "quiet successes," the best outcomes against them may still only be perpetually tolerable (versus perfect). As such, they will present persistent management challenges for senior decisionmakers—eluding decisive and definitive outcomes. As a consequence, DoD should increasingly see itself as an instrument of unconventional conflict management and not always or even commonly an instrument of conflict resolution.

This theme is reflected in the new Capstone Concept for Joint Operations (CCJO). The 2009 CCJO observes: "(T)he major initiatives of U.S. foreign policy . . . are likely to unfold against a global backdrop of chronic conflict. Such protracted struggles will not lend themselves to decisive military victory, but at best will be amenable to being managed continuously over time." 46

The USG along with DoD, for example, may well succeed in preventing nuclear terrorism against the homeland. However, elimination of all anti-American terrorism worldwide is likely both cost-prohibitive and unachievable. In short, pursuit of that objective promises unacceptably high risk.

Management of terrorist challenges at levels that are strategically tolerable is more within reach. But, risk-informed pursuit of this more modest objective will require the relentless employment of defense and interagency resources and capabilities in distributed spoiling actions worldwide. A version of the current American approach to terrorist sanctuary in Pakistan is instructive here. In Pakistan, less direct action would be irresponsible and substantially more dangerously unpredictable.

Furthermore, U.S. decisionmakers should accept as certain that states will fail or suffer crippling instability in the future. The failure or instability of many would pose significant hazards to core U.S. interests. This is perhaps more certain today, given the global economic outlook.⁴⁷ The point of strategy then should be preventing failure or destabilization of those vulnerable states that are most important to the continued security of the United States and international system⁴⁸ while managing the most dangerous consequences associated with those that do fail. Unlike the terrorist sanctuary challenge described above, strategic management solutions under these circumstances, by necessity, may be more comprehensive and resource intensive.

DoD's approach to risk management should proceed accordingly. As traditional war grows less likely, DoD should accept more risk in this arena. On the other hand, unconventional hazards are both likelier and more out of USG control. These should benefit from increased

policy attention and strategy focus. Corporately, DoD strategy is already trending in this direction. For example, the 2008 National Defense Strategy (NDS 09) concluded: "The 2006 QDR focused on non-traditional or irregular challenges. We will continue to focus our investments on building capabilities to address these . . . while examining areas where we can assume greater risk."

The First Principle: Integration of DoD into a wholeof-government approach for avoiding or preventing the most dangerous future conflicts.

The United States cannot afford a defense strategy that is conceptually out-of-synch with wider grand strategy. To adopt an effective risk management defense strategy, DoD will require help from the USG's other consequential national security actors. Success of a risk management approach relies on close alignment of defense strategy with other interagency efforts focused together on *avoiding or preventing the most dangerous conflicts from occurring in the first place*. Traditional war avoidance hinges on the success of a grand strategic political, diplomatic, economic, and military "offensive" focused on material reduction of lingering traditional military tensions with China, Russia, North Korea, and Iran specifically.

There is low-hanging fruit with respect to the first two —China and Russia. However, this is only true if the parties involved—including the United States—are willing to pursue constructive engagement on defense-relevant issues like Taiwan, in the case of China, and nuclear threat reduction, limited missile defense, security of the global commons and energy security more broadly.

Rhetorically, this is consistent with the new defense strategy. NDS 08 observes, "We shall seek to anchor China and Russia as stakeholders in the system." Here also current economic challenges might provide opportunities. The necessity for forging common approaches to the global economic downturn opens doors for more constructive engagement on key security issues previously considered intractable points of friction.

Iran and North Korea are trickier. However, recent strategic experience has demonstrated the enormous "back end" cost of even the most brilliantly executed conventional military campaigns. Careful blending of carrots and sticks by the new administration with respect to Iran and North Korea—employing approaches that moderate the perceived utility of their overt bellicosity—is preferable to prosecuting open and costly military confrontation during a period of enormous global economic vulnerability.

Here again, it is important to recognize that no state is immune to increased volatility in the global economy. As with the Soviet Union in a previous era, outlasting illiberal Iran and North Korea is more palatable than war. The costs of open conflict simply outweigh the benefits. On Iran and North Korea, specifically, John Robb observes:

North Korea's nuclear weapons and Iran's importance to the global economic system make any conventional attack on either one extremely difficult if not impossible. For example, any attack against Iran [over its pursuit of nuclear weapons] will result in massive shocks to the global economy.⁵¹

If, as suggested above, the United States is advantaged by a range of whole-of-government instruments that can—if employed adroitly—effectively "buy down" traditional risk, then U.S. political, diplomatic, and economic strategies should blend with sensible defense investments in pursuit of policies focused on doing just that. A more deliberate and synchronized approach to traditional war avoidance and prevention by the other instruments of power will relieve some (but clearly not all) of the pressure on DoD to maintain an excessive traditional military hedge.

None of this implies that DoD is out of the business of traditional deterrence or preparation for war of some description in response to hostile great power provocation. It does, however, mean that closer integration of the instruments of national power at very high levels will provide DoD with the resource breathing space necessary to focus on persistently managing chronic unconventional threats that continue to present the United States with a 'clear and present danger.'

Ideally, through diplomacy, economic incentive, and the harmonization of key interests, the United States might also enlist other great powers like China and Russia in combating a number of common unconventional, global security challenges.⁵² For example, it might be prudent to focus whole-of-government efforts on great power cooperation in securing the "global commons" and security of the international economic system.⁵³ Both of these areas are essential to restored economic prosperity. And, they may provide the first principles for a shared great power security vision. Wider USG focus here would also lower DoD's perceived traditional warfighting demands.

Concerning the most dangerous unconventional challenges, it is incumbent on the USG to endeavor now to engage with "smart power" around the world

to prevent (1) the prospect for nonmilitary, but still war-like, competition between the United States and its most capable state-based competitors, as well as (2) the prospect for the violent dissolution of a large and important state whose stable functioning is critical to the continued security and prosperity of the United States and its international partners.⁵⁴ According to the recent report by the Center for Strategic and International Studies (CSIS):

The United States must become a smarter power by once again investing in the global good—providing things people and governments in all quarters of the world want but cannot attain in the absence of American leadership. By complementing U.S. military and economic might with greater investments in soft power, America can build the framework it needs to tackle tough global challenges.⁵⁵

In an era of shared economic vulnerability, it is important both to peacefully expand economic integration and cooperation ⁵⁶ and ensure that the international system avoids the disruptive "shock" associated with sudden failure of one or more of its key members. Failure to do either would undermine the security and prosperity of the United States, force it into costly military competitions and interventions at a time it can ill-afford them, and prolong the current period of political and economic uncertainty worldwide. Thus, two key objectives for U.S. strategy are increased cooperation and confidence-building between great powers and deliberately underwriting the continued stability of the world's most important states.

The Second Principal: Optimization of defense strategy and key defense capabilities for persistent management of violent unconventional threats.

To the extent the SecDef and his new team are successful in leveraging other, non-military instruments of power to avoid and prevent dangerous conflicts, DoD corporately has more freedom of action. It can both assume more traditional risk and reorient key pieces of the defense enterprise for persistent engagement of less conventional threats and challenges. DoD should encourage and then seize on the opportunity afforded by a wider USG focus on preventing dangerous but less likely conflicts, ultimately optimizing defense strategy and key defense capabilities for persistent management of chronic unconventional hazards. Ideally, this optimization should occur alongside and in harmony with complementary efforts by partner militaries and nonmilitary USG and international actors-recognizing, of course, that they too are burdened by increasing resource scarcity.

As suggested earlier, no amount of prevention is fool proof. Among the least preventable defense-relevant challenges are failures of governance whose second- and third-order impacts threaten U.S. interests unconventionally. These unconventional threats are currently manifesting themselves as the most durable challenges over time. They include nuclear proliferation and catastrophic terrorism, "hybrid" or "proxy" war, state failure and collapse, un- and under-governance, energy (in)security, and strategically consequential criminal behavior. Though they do not conform to the traditional norms of conventional warfighting, cumulatively they are no less injurious and dangerous than traditional warfights.

This reality requires a new warfighting focus for much of the joint force. In this regard, a necessary outcome of QDR 10 is some new "division of labor." A new "division of labor" will most impact general purpose forces (GPF).

The bulk of landpower GPF, for example, will need to optimize for the limited armed stabilization of crippled states.⁵⁸ This will include both the maintenance of significant combat capability tailored for prosecution of intense unconventional and limited traditional campaigns, as well as the acquisition and maintenance of essential capabilities that are inherently non-military in nature but nonetheless critical to successful stability operations (SO) and COIN in non-permissive environments.⁵⁹

Direct action joint special operations forces (SOF) will need to continue honing their capabilities for deep penetration of un-, under-, and/or irresponsibly governed territory to kill or apprehend terrorists and criminals, disrupt effective sanctuary, secure or disable weapons of mass destruction, and support GPF prosecution of more resource-intensive SO and COIN. Both GPF and SOF forces also need to become accustomed to partnering with foreign military and paramilitary forces for joint operations, training, security force assistance, and wider foreign partner capacity-building.

Air and naval GPF will likely lean toward optimizing for more conventional warfighting roles, while continuing to support prosecution of land-centric unconventional missions. Harmonized with whole-of-government approaches targeted at conventional war prevention, air and naval forces, however, must not err on the side of "excessive overmatch." Their relevance in the future defense equation cannot rely

solely on their utility for conventional deterrence and warfighting. At the same time that the likelihood of traditional conflicts is decreasing, discretionary defense dollars critical to building adequate defense capacity for complex unconventional environments are dwindling as well. Therefore, air and naval forces must increasingly demonstrate their value both for conventional and unconventional environments and contingencies.

As a touchstone for future defense choices, the persistent management principle serves as one measure of merit for evaluating future structure, acquisition, and strategy decisions inside DoD. Those choices that most contribute to DoD's role in this regard should benefit from higher priority and increased resourcing. Secretary Gates' recent inclusion of IW as one of eight issue teams focused on "recalibrating the modernization accounts in the fiscal year 2010 budget request" is a fair indication that this principle is gaining increased traction. Further, his recognition of "institutionalizing irregular warfare and civil support abroad" as one of five key areas of emphasis for the QDR is yet another example of the rising prominence of unconventional threats and challenges.

The Third Principle: Acknowledgement of a defenserelevant, unconventional world beyond the WoT.

The SecDef has strongly advocated "winning the wars we are in" before looking too far ahead for other defense-relevant threats.⁶¹ He has, at times decried what he perceives to be the Pentagon's focus on "next waritis." The SecDef argues this bureaucratic worldview ignores on-going wars in Iraq, Afghanistan, and the wider WoT.⁶² In his view, the more traditional

the "next war" is in concept, the truer this is. The author believes that it is less true with respect to future unconventional demands. The nation's unconventional challenge set will likely rapidly transcend the WoT as it is currently conceived in the coming decade. Indeed, senior U.S. officials concede that the state of the global economy adds fuel to the fire in this regard.⁶³

Current trends threaten defense over-optimization for operations in the Muslim world from a regional perspective and counterterrorism (CT) and counterinsurgency (COIN) from a functional one. Many in DoD and the wider USG tend to define the forthcoming national security epoch as one dominated by CT, COIN, and a perpetual struggle against radical Islamists. Thus, just as the Pentagon is genetically inclined to tack back toward its comfort zone—traditional military threats, it is equally vulnerable to defining its unconventional future almost exclusively in terms of recent strategic and operational experience as well.

Islamic extremism will remain a constant hazard to core U.S. interests. Likewise, CT and COIN will persist as key focus areas in a future risk management defense strategy. However, defense strategists and senior decisionmakers must widen their unconventional aperture beyond CT, classical COIN, and the current WoT and account for a range of defense-relevant hazards having little to do with terrorists, organized insurgents, and/or the Muslim world.

If the recent economic crisis teaches defense strategists anything, it is that the United States and its interests are threatened unconventionally worldwide by a range of "systemic risks." These can emerge from hostile design or in the absence of design altogether. All such risks, under the right circumstances, threaten to fatally undermine the security of important interests

in ways that would require substantial U.S. military involvement. Points of unconventional, defense-relevant systemic risk include a competitors potential recourse to "war" without "warfighting," political extremism, toxic anti-American populism, nuclear proliferation, and expanding political and economic vulnerability.

In Emerging Risks in the 21st Century: An Agenda for Action, the Organization for Economic Cooperation and Development (OECD) suggests that "changes likely to affect [security] risks and their management in the coming decade will occur in four contexts: demography, the environment, technology, and socioeconomic structure." With respect to the first, demographics, OECD argues that rapid population growth particularly in Asia and Africa "will put increased strain on resources and systems [that are] already insufficient." In this regard, demographic trends provide fodder for extremists and political malcontents and increase the likelihood of events that place important governments and populations at grave risk.

On the environment, OECD observes, "(T)he frequency and intensity of extreme events such as drought and storms is expected to increase." Further, OECD concludes that the "(a)bsence or inadequacy of sound water resources will increasingly play a role in weakening the health of populations and amplifying infectious disease outbreaks." Finally, the report argues that "(r)eduction in bio-diversity could well be another trend with dramatic consequences." These combined both offer fertile ground for toxic political agitation by U.S. opponents as well as less purposeful but nonetheless strategically consequential crises of human security.

On the subject of technology, OECD notes that "[t]hree aspects of emerging technologies will influence risk: connectedness; the speed and pervasiveness of technological change; and the fundamental changes in the landscape they might produce." Rapid advances in technology increasingly democratize the ability to kill. They also offer the architecture for semi-anonymous and autonomous unconventional resistance to U.S. designs. Finally, they further increase the prospect for contagious proliferation of dangerous pathologies and ideologies.

Finally, on the subject of socioeconomic structures, OECD observes, "Vulnerability to and perception of risk in society are evolving." They conclude that "risk management can be impaired by conflicts of interest" between powerful and diverse actors — public, private, and commercial. These range from the international to the sub-national. For DoD, this means that adherence to the more conservative view of defense-relevant hazards that held until 9/11 and continues to persist on some level today may grossly under-prepare defense officials intellectually for an expanding unconventional challenge set.

In the end, it would be prudent for senior defense officials to recognize that waves of unrelated unconventional threats will combine with *smoldering WoT.* Together these will remain persistent DoD burdens. This wider unconventional challenge set will include well-defined threats from state and non-state opponents free-riding on adverse contextual conditions and less containable threats from contextual conditions themselves. Combined, often these will see DoD less employing its resources to underwrite a vulnerable but functioning order and more—under the most demanding circumstances-leading wider

USG responses to the consequential absence of order all together.

The Fourth Principle: Recalibration of contingency plans for pursuit of limited strategic and operational objectives.⁷³

Until the WoT and extended irregular wars in Iraq and Afghanistan, contingency planning occurred absent analogous operational experience. Worst-case, scenario-based planning resulted in best-case, ideal, or overly general strategic and operational objective formulation. Strategists and planners assumed that regime removal and/or replacement were realistic, risk-informed outcomes.

Given the experience of the last 7 years, DoD now well understands the limits of a finite, all-volunteer joint force in complex operations abroad. Going forward, defense and military planners now have real-world conflict experience from which to draw requisite lessons. As a consequence, the strategic and operational aims of future military campaigns must by necessity become more realistic and limited.

Appetite suppression and strategic discipline should inform all future DoD contingency planning. Both the QDR and subsequent implementation documents like the Guidance for Employment of the Force (GEF) should reject near-automatic default to regime change or regime restoration as measures of merit for judging the sufficiency of future defense capabilities.⁷⁴ The current SecDef already has.⁷⁵ He also recently argued for the adoption and pursuit of more limited and realistic objectives in current operations like the war in Afghanistan.⁷⁶ In general, policymakers and senior military leaders should universally resign themselves

to pursuit of more modest, definable, and achievable strategic and operational aims in all future defense-led or defense-supported operations.

Traditional conflicts against both great and lesser powers should trend in the direction of coercive or punitive joint military campaigns focused on a circumspect set of limited strategic and operational outcomes. These might include satisfactory adjustment of an offending regime's bad behavior, neutralization or destruction of destabilizing military capabilities, and restoration of the status quo ante bellum. In large-scale contingency employment of joint forces under less conventional conditions, strategic and operational objectives should be similarly limited—often the minimum essential and manageable stabilization of an irregular conflict environment. In both cases, not perfect, but instead manageable.

Naturally, if the nation and its defense enterprise commit to less expansive strategic and operational objectives in contingency planning, they can by implication accept more risk in certain military capabilities. To the extent that DoD recognizes that the United States is likely to pursue more limited objectives in the future, it should then be prepared to accept prudent reductions (or at a minimum delays) in some future defense outlays. For example, if planning for traditional campaigns does trend in the direction of coercive or punitive campaigns of limited scope and duration, DoD may require less conventional military capacity to achieve its objectives. Likewise, to the extent that wholesale regime change or regime restoration become less important in conventional and unconventional contingencies and the more intervention focuses on minimum essential containment and reversal of crisis conditions, the likelier it is

that DoD can except some risk in the number and/or types of forces required for future force rotations.

Failure to curb the U.S. appetite for ideal outcomes results in a bureaucratic version of the proverbial "dog chasing its tail." For every attempt at risk acceptance through more limited strategic objectives, a predictable "yes, but what if this happens" is heard in response. The upfront acceptance of more limited strategic objectives and, by implication, conscious choice on the capabilities necessary to achieve them, postures defense and military leaders well for the provision of "best military advice" to the President—advice already grounded in deliberate risk assessment and risk-informed choice.

One caution is important in this regard. In Iraq (and Afghanistan), one can argue that the United States "backed into" limited strategic and operational objectives. Achieving these more minimalist outcomes still required commitment of substantial defense capabilities—predominantly landpower—over an extended period of time. It should not be assumed that pursuit of these more limited objectives would be any less resource-intensive—particularly at the front end of an intervention.⁷⁷

The Fifth Principle: Pursuit of institutional change conforming to the "art of the possible and necessary" versus the "desirable and ideal."

New administrations are prone to pursue revolutionary institutional change and capabilities development. The early course adopted by the last defense team provides a clinic in this regard. On its face, the current national security team is no less ambitious. As in the case of its external strategic and operational objectives, DoD might consider rationalizing down and prioritizing its internal "to do" list as well. Again,

the forthcoming defense and national security era is less one of wholesale transformation, and more one of patient evolutionary adaptation of some defense institutions and precision-guided revolution in others. The FY 2010 budget decisions and the limited information available on the QDR indicate DoD has internalized this worldview already.

Today, the prioritized application of limited defense resources is more important than ever. Earlier, the author outlined an expansive list of defense priorities championed by the President during the campaign. Under a risk management defense strategy, it will remain important to limit, curtail, or delay some of these after a thorough review of their broad utility. The secretary has taken a first stab at this with his controversial FY 2010 budget decisions.⁷⁸

The SecDef has warned both against looking too far ahead and looking for traditional warfights that are increasingly less likely in order to justify programs.⁷⁹ The uniformed military's desire for a "full spectrum" force, where each military service optimizes for the widest range of defense-specific and defense-relevant security challenges, is both less affordable and less necessary. Structurally, DoD remains quite adept at traditional warfighting vis-à-vis its likeliest traditional competitors. This is even truer if and when it lowers its expectations with respect to preferred strategic and operational outcomes in future traditional warfights; the coercive campaign approach versus regime change. According to the SecDef, "(A)lthough U.S. predominance in conventional warfare is not unchallenged, it is sustainable for the medium term, given current trends."80

Currently, the joint force is advertised as "full spectrum" capable. Yet, using a sports analogy, much

of the joint force still "plays down" when it comes to unconventional threats of purpose and context. Joint forces are still largely optimized for major combat operations (MCO) against well-armed state-based opponents. However, today they are far more commonly employed in unconventional endeavors against guerrillas, terrorists, and generalized instability. In this regard, note the second and third principles above.

Areasonable appreciation of contemporary strategic conditions indicates two immutable certainties about the environment and its impact on the defense change agenda. The first is recognition that a revolution is occurring in how competitors and competitive conditions threaten U.S. interests. The United States is increasingly threatened unconventionally by low-tech terrorism, insurgency, and civil violence; higher-tech, "global guerrilla" warfare; proxy "irregular" war and sophisticated "hybrid" challenges; the democratization of nuclear capabilities; and niche exploitation by competitors of the global commons—particularly space and cyber-space. All of these are focus areas that demand continuing institutional revolutions within DoD.

The second is that "purely" traditional challenges are evolving and not necessarily transforming. Indeed, it might be reasonably argued that "purely" traditional challenges of concern to the United States are fast becoming extinct. Preparation for and prosecution of traditional warfights are increasingly more costly both to the United States and its likeliest traditional adversaries. With the benefit of an earlier revolution in military precision, the United States is well ahead of an ongoing evolution in traditional military threats. It will, as suggested by Secretary Gates, maintain its advantage for the foreseeable future. The SecDef

argues that U.S. preparations "for conventional scenarios must [therefore] be driven more by the actual capabilities of potential adversaries, and less by what is technologically feasible given unlimited time and resources."⁸² Again, needs must trump wants in future defense decisionmaking.

Deliberate improvements in traditional capabilities are clearly important. They are not, however, nearly as important as precision-guided institutional revolutions in IW and stabilization; nuclear nonproliferation; consequence management and civil support; space; and cyber security. In addition, DoD must begin mastering the most vexing hybrid combinations of irregular, catastrophic, disruptive, and traditional threats and challenges. As suggested above, "division of labor" between military services may become increasingly necessary.

Out of an abundance of caution, some of the force—largely air and sea components — must continue to "play down" when necessary to hedge against the distant prospect of coercive campaigns against malignant great powers. The same forces also play an essential but supporting role in prosecuting future land-centric unconventional conflicts with intelligence, surveillance, and reconnaissance (ISR); conventional strike; logistics and lift; and SOF. In the near-term, the latter mission requires priority over the former mission. Their near-term, precision-guided revolutions should occur in confronting the growing cyber and space threat. Here more revolutionary change in mission and capabilities is required.

As late as January 2009, Secretary Gates commented on both of these. In testimony to the Senate Armed Services Committee (SASC), he observed, "With cheap technology and minimal investment, current and potential adversaries operating in cyberspace can inflict serious damage to DoD's vast information grid."⁸³ In that same testimony, he warned of increasing vulnerability in space, when he remarked:

Our communications, navigation, weather, missile warning, surveillance, and reconnaissance systems rely on unfettered access to space. At the same time, more nations—about 60 in all—are active in space, and there are more than 800 satellites in orbit. The importance of space defense was highlighted during my first year in this job when the Chinese successfully tested an antisatellite weapon.⁸⁴

Meanwhile, the Army and Marine Corps should recognize that they will have to "play up" on the rare occasion the United States again chooses to engage in a large-scale joint campaign against a conventional opponent. This will require retention of some conventional warfighting capacity but, more importantly, it will demand continued revolutions in force structure, mission, and capabilities necessary for complex, land-centric unconventional operations like opposed stabilization and COIN.85 For the most part, land-based GPF and SOF will continue to shoulder much of the burden for direct-action CT, COIN, SO, security force assistance, foreign internal defense, and counter-proliferation.

As suggested earlier, the new "high-end" optimization point for land forces should be focused against the prospect for the limited armed stabilization of a crippled strategic state "where order has failed or is failing and where restoration and maintenance of a new order is possible only through comprehensive, whole-of-government responses relying on the threat or use of force for success." This will be a persistent

demand both connected to the WoT and the wider unconventional challenge universe outlined above.

To be sure, selected landpower capabilities remain essential to both high-end, limited armed stabilization and more conventional combat operations. For example, the most dangerous and violent instances of armed stabilization will still require armored fire and maneuver, attack aviation, and indirect fire support, as well as the combat support and combat service support capabilities necessary to enable and sustain them in the field.87 Moreover, by design, there are also joint dependencies in both conventional and unconventional campaigns currently underwritten by U.S. land forces. These include the capacity for forced entry, land-based missile defense, theater sustainment and engineering, population control, and prisoner detention.88 Like the Air Force and Navy, however, U.S. land forces must avoid the trap of "excessive conventional overmatch" in designing the future force. Failing to do so would jeopardize more far-reaching reorientation on unconventional challenges.

This point featured prominently in the President's campaign rhetoric. As a center piece of his defense agenda, President Obama pledged not only to increase Army and Marine Corps end strength, but also to "build up [U.S] special operations forces, civil affairs, information operations, engineers, foreign area officers, and other units and capabilities that remain in chronic short supply."89 Further, he argued for greater DoD investment in "foreign language training, cultural awareness, human intelligence, and other needed stabilization skillsets."90 counterinsurgency and Achieving this vision will likely require sacrificing some land force capabilities more appropriate to MCO. This reality is embodied in the recent decision by the

SecDef to cancel the Future Combat System vehicle program.

It would be ideal for DoD to continue pursuing full-spectrum dominance as the gold standard for all of its service components. In reality, this approach may be unaffordable and astrategic. Instead, DoD should pursue those institutional reforms that are both possible and necessary to optimize land forces for complex, land-centric unconventional threats and challenges. At the same time, sea and air forces should continue to deliberately optimize for short-duration coercive campaigns, the maintenance of space and cyber dominance, and essential support for deployed land forces fighting in and stabilizing hostile unconventional environments. The SecDef appears to be similarly inclined. In the conclusion to his recent senate testimony, he observed:

(F)or all the difficulties we face, I believe this moment also presents an opportunity—one of those rare chances to match virtue to necessity. To critically and ruthlessly separate appetites from real requirements—those things that are desirable in a perfect world from those things that are truly needed in light of the threats America faces and the missions we are likely to undertake in the years ahead.⁹¹

The Sixth Principle: Recognition that prevention and response are zero sum propositions.

Under many of the most complex circumstances, DoD is the nation's global first responder. It has a role both in preventing deadly conflict around the world and responding to its emergence when prevention fails. As of late, a great deal has been made of DoD's preventative role in particular — especially as it applies

to unconventional internal conflicts like insurgency. QDR 06's devotion to "building partnership capacity" and the "indirect approach" is defined by its commitment to increasingly employ more U.S. military forces around the world for conflict prevention. 92 Much of this is accomplished by partnering with foreign security forces and deliberately raising indigenous capacity to combat common threats.

Conflict or crisis prevention and response are increasingly zero sum propositions. In a policy environment marked by declining defense resources, the balance between investment in prevention and investment in effective response is particularly delicate. Indeed, it is likely that resources committed to building exclusive capacity for one amounts to a net loss in capabilities for the other.

For DoD, unconventional conflict prevention in particular relies on the diffuse employment of finite military resources against myriad points of vulnerability. Unconventional conflict response, on the other hand, can result in an extended, manpower-intensive commitment of significant defense resources—often disproportionately land forces—against one or more urgent unconventional challenges. Adopting either approach comes with "opportunity costs." Both involve choice, risk, and value judgments.

In the spirit of "teaching others to fish, instead of giving them fish," it is true that a more preventive and indirect "advisory" approach is potentially among the most cost effective ways to secure common interests with partners. It is also quite consistent with a risk management defense strategy, as it ostensibly lowers the American military profile abroad while at the same time potentially expanding U.S. military influence over the conduct of foreign partner military operations. The

current administration has endorsed this approach. A pre-election statement on defense policy by the Obama campaign asserted that the new President would "create a specialized military advisor's corps, which will enable [the United States] to better build up local allies' capacities to take on mutual threats."⁹⁴

Advocated by former Army officer and now President of the Center for a New American Security John Nagl, a "permanent Army advisory corps" is one among a handful of concrete proposals in this regard. In Nagl's vision, an Army advisory corps would number between 20,000 and 60,000 active duty troops dedicated to "standing up indigenous forces against insurgents around the world." Nagl asserts in the opening of his report *Institutionalizing Adaptation: It's Time for a Permanent Army Advisor Corps*, the most important military component of the Long War will not be the fighting we do ourselves, but how well we enable and empower our allies to fight with us."

Nagl's approach and those like it have distinct merits that are worthy of continued exploration in QDR 10.97 Nonetheless, they also rest on four assumptions that may or may not fully pass muster under the light of closer scrutiny. First, they assume that the current WoT (or "Long War") and its focus on violent Islamists will define the U.S.'s national security future, and further that the general American approach to the WoT will be consistent with that of partners most important to winning it. Both the second and third principles above in part argue that this perspective may be invalid. The nation's unconventional challenge set will likely fast transcend the current WoT and expand over time. On the second point, it is prudent to ask what role, if any, an Army advisory corps would have in places like Pakistan and Saudi Arabia. Both are

partner states with relatively well-developed security sectors. Nonetheless, both are also among the principle crucibles of anti-American extremism.

Second, the advisory corps approach carries within it the implicit assumption that classical insurgency is the dominant unconventional threat to the internal *stability of key U.S. partners*. To the extent the terrorist challenge becomes more atomized, migrating away from the traditional sanctuary model of ungoverned space and operating more from the sanctuary of anonymity, the likelier it is that the classical COIN model in response may not hold up.98 If true, fighting foreign terrorists may increasingly become law enforcement, intelligence, and counterintelligence problems - not military problems - for U.S. partners. This negates many of the advantages resident in the U.S. armed forces. Moreover, the author attempted to demonstrate in the third principle that classical insurgency may be among the least likely of the United States' future unconventional threats.

Third, the advisory approach implicitly assumes that the United States will have partners that are both able and willing to take U.S. assistance on board. The more stable and ordered the political conditions in a partner state and the more its forces are organized professionally, the more this latter point will be true. The more a partner state and its security forces verge on failed or collapsed, the likelier it is that there will be no state, state institutions, or political order from which to launch a wholesale advisory effort. Note again, the author's assertion that the defining quality of many future unconventional contingencies may be less about DoD employing resources to underwrite a vulnerable order and more about DoD responding—to the extent possible—to the absence of order all together. Under

these circumstances, re-building a partner's failed security institutions will occur alongside more direct U.S. COIN and stabilization efforts—often under fire.

Finally, fourth, the advisory approach assumes that institutionalizing the advisor function both in common professional military education (PME) and as a core mission essential task (METL) is an unsuitable alternative. An equally valid approach to the "advisor gap" is to embed the competency in preexisting Army and Marine Corps formations. This can be accomplished, first, by making foreign military and paramilitary advising a new core METL task for all operational Army and Marine Corps commands; second, by including intensive advisor training in the program of instruction for all officer and enlisted PME; and third, by validating that capability and skill set through routine military training and operational evaluations.

The U.S. Army is currently pursuing some organizational innovations like this. New Army initiatives seek to better enable operational formations to provide advice and assistance to the military forces of partner nations. The Army is also examining how it might reconfigure standard brigade combat teams to provide security force assistance or advisory support for up to two foreign partner divisions or corps including associated police and U.S. or foreign-led provincial reconstruction teams. 101

In alternative approaches like this, the advisory mission becomes part of a new landpower warfighting ethos that focuses both on the success of independent U.S. military action as well as success founded on enabling foreign partners through existing military formations. This approach also is more conducive to combined military operations at the lowest tactical

level. To the extent landpower reoptimizes for a new high-end competency like armed stabilization, adoption of this course might be far less disruptive than the creation of new structures exclusively designed to advise foreign military and paramilitary partners. This course of action also dulls the sharp choice associated with devoting finite defense resources to either conflict prevention or conflict response.

As a tool for prudent risk management, embedding advisory capacity in existing formations might be the wiser approach. Regardless, QDR 10 will be charged with addressing the zero sum balance between prevention and response. In making forthcoming strategic choices about force structure and missioning, senior defense decisionmakers will have to carefully evaluate the cost-benefit relationship between exclusively missioning finite defense capabilities for conflict prevention and the impact of doing so on broad capabilities for crisis response.

The Seventh Principle: Incorporation of unthinkable but still plausible "strategic shocks" in future defense planning. 102

Forthcoming defense decisionmaking on strategy, structure, and missioning should benefit from deliberate consideration of "unthinkable but still plausible" defense-relevant "strategic shocks." Senior defense leaders must account for the surprise onset of the most plausible and hazardous unconventional contingencies that would, without meaningful defense contributions, defy effective resolution. Some of these potential "strategic shocks" merit preliminary academic exploration. Some should be the object of prudent defense hedging. And, others must

increasingly become the targets of deliberate and detailed contingency planning. All of these approaches combined help underwrite the efficacy of key defense strategy and resource decisions and guarantee the relevance and resilience of DoD against the broadest range of defense-relevant challenges.

The art of warning and contingency planning for conventional "strategic surprise" is well-practiced. The ability to adequately assess both the likelihood and potential impact of more disruptive and far-reaching "strategic shock" is less well-developed. This is true for a whole host of political and bureaucratic reasons. If the fall of the Soviet Union and the onset of terrorists and insurgents as strategic threats taught U.S. defense officials anything, it was that the contemporary security environment is prone to drastic and sudden change. With 9/11, DoD learned that change like this can effect national security structure, missions, and demands in profound ways.

Consistent with general trends in the environment itself, the most disruptive future shocks will be unconventional. They are "unconventional" because they fall outside the parameters of contemporary defense planning. They are "shocks" because their radical and disruptive impact forces fundamental change on the defense enterprise as a whole. Unconventional strategic shocks will originate in irregular, catastrophic, and hybrid threats of purpose or context of the type outlined earlier. Of the two, the potential impact of future contextual shocks—e.g., pandemic disease, natural or human disaster, un- and under-governance, widespread political disaffection, etc.—is the least well-understood.

The previous defense and national security team faced a game-changing unconventional "strategic shock" in its first 8 months. The current DoD team

should expect the same at some point during its tenure. 103 Both sudden onset of a global recession and the swine flu pandemic are illustrative in this regard. In this regard, DoD should revisit "first principles" on where, when, under what circumstances, how, to what extent, and toward what end the defense enterprise as a whole might be employed in the future. By necessity, this includes deliberate consideration of plausible defense-relevant "strategic shocks" not currently on the net and risk assessment agenda.

"Shocks" are not merely "surprises." Surprise forces DoD to act earlier than anticipated—often in unfamiliar or unexpected operating space—but still within established defense conventions. Though unanticipated, most strategic surprises still fall inside the traditional defense remit. In this regard, strategic surprise materially impacts the "when" and "where" of crisis response but not necessarily the "how."

Strategic shocks, on the other hand, are complex, hyper-surprises. Like more conventional strategic surprise, defense-relevant shocks also force DoD to act earlier than expected. Yet, they are distinct from strategic surprise in that DoD is forced by circumstances to adapt on the fly, operating in ways previously unaccounted for in strategic planning and according to vastly different rule sets. 9/11 and the subsequent WoT are illustrative in this regard. Surprise triggers evolutionary change in DoD's outlook and mission. Shock sparks sudden revolutionary change in the same. Its impact is more fundamental. It redefines "when," "where," and "how" DoD responds to consequential crises around the world.

Viewed out of context, prudent net and risk assessment and speculative contingency planning for specific shocks can be mistaken for current reality, rational judgment on increased likelihood, or future intent. In reality, it is a low-cost down payment on prudent hedging and risk mitigation. Planning for defense-relevant shocks involves marrying plausibility and extreme hazard with defense relevance. Contingency events that are more plausible, hazardous, and irresolvable without material defense contributions merit serious consideration. The current global economic crisis likely expands the number and type of plausible shocks that might enjoy increased defense policy focus.

The Eighth Principle: Integration of holistic homeland security (HLS) demands in strategy, planning, and capabilities development.

To date, there have been significant bureaucratic, political, and cultural obstacles standing in the way of meaningful integration of HLS in DoD strategy, planning, and capabilities development. Yet, one central point of failure of a risk management defense strategy would be continuing the genetic underappreciation by DoD of its inherent responsibilities to support civil authorities at home in an extraordinary crisis. For DoD, support to civil authorities in the event of a crippling domestic catastrophe is perhaps its most under-appreciated unconventional challenge. While the USG aspires to create sufficient civilian capacity to contend with extraordinary catastrophes at home, realization of this is a long way off.

DoD is still inherently a hammer. Defense-relevant HLS challenges on the other hand are not nails. Nonetheless, both from the human resource and material capacity perspectives, DoD still is the most capable and pliable federal agency for contingency

response to those complex domestic emergencies that surpass the capabilities of civil authorities.

Consistent with the Strategy for Homeland Defense and Civil Support, DoD will continue to play three essential roles in a broader whole-of-government approach to protecting the U.S. homeland-lead, support, and enable. 105 In the realm of homeland defense (HLD), DoD is the lead federal agency for "dissuad(ing), deter(ing), and defeat(ing) attacks [on] the United States, [its] population, and [its] defense critical infrastructure."106 Under the HLS label, DoD will "[at] the direction of the President or Secretary of Defense," provide essential "support to civil authorities . . . [as] part of a comprehensive national response to prevent and protect against terrorist incidents or recover from an attack or disaster."107 DoD performs its HLD and HLS missions through two unified combatant commands—United States Northern (USNORTHCOM) and United States Strategic Command (USSTRATCOM).108

The precise role of and resource demands on USNORTHCOM and its service components specifically in the realm of civil support-have never been resolved to the satisfaction of those who persistently recognize the yawning gap between what civil authorities might need in the event of an extraordinary domestic catastrophe and what limited capabilities they actually have at their disposal. 109 According to a recent recommendation by Christine Wormuth, a Senior Fellow at CSIS, DoD must identify, resource, and prepare for future civil support demands as a matter of routine policy. 110 Most of the more traditional homeland defense missions – i.e., air sovereignty, national missile defense, and maritime security - have clearly identified military capabilities

associated with them. Civil support on the other hand is more amorphous and potentially more expansive—largely depending on the scope and nature of specific emergencies.

Two things are certain. In the event of an extraordinary catastrophe at home, DoD will not commonly act as the lead federal agency. 111 Nonetheless, it will for the foreseeable future provide U.S. civil authorities with both general purpose and specialized capabilities to assist in disaster relief, consequence management, and security in those rare circumstances where civil capacity is exhausted by the extent of the demand. This requires that DoD adequately identify civil support requirements gaps, persistently resource those requirements to the minimum essential level necessary, and accept that it will have to subordinate appropriate forces and capabilities to the control of a single civil federal authority in extremis. 112 Currently, the latter point—the full emergency subordination of DoD capabilities to civilian control—is not the norm. Those concerned with the defense role in HLS believe this is a real weakness in the whole-of-government approach to domestic crisis response. According to Christine Wormuth:

The Secretary of Homeland Security is designated by law and by presidential directive as the federal coordinator for incident management. That said, the Secretary has relatively little authority to direct decisions or command assets outside the Department of Homeland Security. If there are significant disagreements among Cabinet Secretaries about actions that need to be taken, under the current system only the President is able to resolve those conflicts.¹¹³

Regardless of a cultural predisposition within DoD to focus on exigent foreign security challenges, DoD must account for the most compelling domestic

emergencies first in its future resource and capabilities planning. The security of the American population is a fundamental responsibility of DoD. Yet, to date, DoD has pared its HLD and HLS responsibilities in ways that undermine its ability to respond effectively to domestic emergencies.

Meaningful preparation for support to civil authorities is not intended to supplant aspirations for more federal, state, and local emergency response and public safety capabilities. It is instead intended to provide civilian leaders with a strategic reserve for those rare domestic emergencies that exceed civil capacity. Defense contributions will include both specialized and general purpose capabilities. the extent possible, specialized capabilities must be equally relevant to the success of foreign and domestic contingency missions. Identifying and resourcing these specialized capabilities and ensuring consistent civilian access to the minimum essential number of general purpose forces necessary to respond to the likeliest domestic emergencies are critical risk management considerations for DoD.

CONCLUSION

Adhering to and judging future choices according to these eight principles will help senior defense and military leaders balance risk. They are consistent with both the new administration's vision and priorities articulated by the SecDef. Adopting them will require some cultural adjustment and compromise. For example, military preferences that do not obviously conform to these principles will need to be recalibrated or abandoned. Moreover, civilian leaders committed to pursuit of an expansive change agenda will need to separate ideal defense outcomes from more necessary

or practical ones. They will also need to initiate or sequence change pragmatically. Employing principles like these can result in a risk management defense strategy that contributes decisively to securing core interests. They also materially reduce the likelihood of a perpetual "strategy-resource mismatch."

ENDNOTES

- 1. Joby Warrick, "Experts See Security Risks in Downturn: Global Financial Crisis May Fuel Instability and Weaken U.S. Defenses," Washington Post, November 15, 2008, p. A01, available from www.washingtonpost.com/wp-dyn/content/article/2008/11/14/AR2008111403864. html?hpid =topnews, accessed January 23, 2009. Clapper was cited in the Joby Warrick piece.
- 2. United States Department of Defense (USDoD), "Fiscal Year 2010 Budget Request: Summary Justification," May 2009, available from www.defenselink.mil/comptroller/defbudget/fy2010/fy2010_SSJ_Cover_Letter_and_TOC.pdf, accessed May 18, 2009.
- 3. Office of Management and Budget (OMB), "A New Era of Responsibility: Renewing America's Promise," available from www.whitehouse.gov/omb/assets/fy2010_new_era/a_new_era_of_responsibility2.pdf, accessed May 16, 2009, p. 54.
- 4. Karen DeYoung, "More Troops Headed to Afghanistan: Obama Boosting U.S. Force By Nearly 50% to 'Address Deteriorating Situation'," Washington Post, February 18, 2009, p. 1.
- 5. See United States Army, "Grow the Army," available from www.army.mil/growthearmy/, accessed January 21, 2009; and Meghan Scully, "Bush Military Expansion May Cost \$104B over Seven Years," The Government Executive, available from www. govexec.com/dailyfed/0407/041807cdam1.htm, accessed January 21, 2008. Increases in U.S. Army active and reserve force structure by 74,200 and a 27,000-man increase in Marine Corps endstrength will be complete by next year.

- 6. See, for example, Janet A. St. Laurent, "Force Structure: Restructuring and Rebuilding the Army Will Cost Billions of Dollars but the Total Cost is Uncertain," testimony before the Subcommittee on Tactical Air and Land Forces, Committee on Armed Services, House of Representatives, available from www.gao.gov/new.items/ d08669t.pdf, accessed January 21, 2009; and Joseph J. Collins, "Defense Futures, Hedging Against Uncertainty: U.S. Strategy in an Interdependent World," National Strategy Forum, available from www.nationalstrategy.com/Programs/NationalStrategyForumReview/ NationalStrategyForumReviewSummer2008/DefenseFutures NSFRSummer2008/tabid/160/Default.aspx, accessed January 21, 2009. Ms. St. Laurent observed, "Based on GAO's analysis of Army cost estimates and cost data, it appears that the Army's plans to equip modular units, expand the force, reset equipment, and replace prepositioned equipment are likely to cost at least \$190 billion dollars through fiscal year 2013." Former Pentagon official Joseph Collins notes, "Inside the Armed Forces, modernization costs will compete fiercely with repair and maintenance costs, which in turn will compete for dollars with adding 92,000 additional troops to the Army and Marines."
- 7. Michele A. Flournoy and Shawn Brimley, "The Defense Inheritance: Challenges and Choices for the Next Pentagon Team," *The Washington Quarterly*, Autumn 2008, p. 59.
- 8. See Greg Bruno, *Backgrounder: Defense Spending During Economic Crisis, Council on Foreign Relations*, available from *www.cfr.org/publication/17793/*, accessed January 26, 2009. Writing for the Council on Foreign Relations, Bruno agreed:

With some important caveats, military analysts broadly agree that [President Obama] will inherit a U.S. military hobbled by aging weaponry, stretched to the breaking point by more than seven years of conflict, and funded by procurement and operational budgets that exceed even the most optimistic assessments of future military spending. All that was true before the global economic crisis took hold. . . . Now, experts suggest, something has to give.

9. Barak Obama, "A 21st Century Military for America: Barak Obama on Defense Issues, Obama '08," Barak Obama.com, available from www.barackobama.com/pdf/Defense_Fact_Sheet_FINAL.pdf,

accessed January 27, 2009. Candidate Obama observed, "One of the best ways to support the brave men and women in our armed forces is to address the great imbalance in our executive branch capacity for dealing with 21st-century challenges that aren't of a purely military nature."

- 10. Robert M. Gates, Submitted Statement, Senate Armed Services Committee (SASC), January 27, 2009 (hereafter referred to as Gates, SASC Statement), available from *armed-services.senate.* gov/statemnt/2009/January/Gates%2001-27-09.pdf, accessed January 30, 2009.
 - 11. Flournoy and Brimley, 2008, pp. 59-60.
- 12. See Gates, SASC statement 2009. On this point, Secretary Gates observed, "It would be irresponsible not to think about the future. . . . But we must not be so preoccupied with preparing for future conventional and strategic conflicts that we neglect to provide all the capabilities necessary to fight and win conflicts such as those the United States is in today."
 - 13. See OMB, May 2009, p. 54.
- 14. See Nathan Freier, Known Unknowns: Unconventional Strategic Shocks in Defense Strategy Development, Carlisle, PA: The United States Army War College's Peacekeeping and Stability Operations Institute and Strategic Studies Institute, November 2008, available from www.strategicstudiesinstitute. army.mil/pubs/display. cfm?PubID=890, accessed January 23, 2009; and Nathan Freier, The New Balance: Armed Stabilization and the Future of U.S. Landpower, Carlisle, PA: The United States Army War College's Peacekeeping and Stability Operations Institute and Strategic Studies Institute.
- 15. For a detailed discussion of the FY 2010 Budget, see USDoD, May 2009. For a an overview of QDR 10 and its focus areas, see USDoD, 2010 QDR Terms of Reference Fact Sheet, April 27, 2009, available from www.defenselink.mil/news/d20090429qdr. pdf, accessed May 18, 2009.
- 16. The author will attempt to make references to these points validation throughout.

- 17. See Nathan Freier, *Primacy Without a Plan?* May 2007, p. 11, available from *www.carlisle.army.mil/usawc/parameters/06autumn/freier.pdf*, accessed January 22, 2009. The author argued in 2006 that "[t]he United States has likely entered a period of persistent irregular and potentially catastrophic conflict that will present it with its most immediate and consequential physical and psychological challenges to its position and interests."
- 18. Obama-Biden, *Defense: A 21st Century for America*, available from www.barackobama.com/issues/defense/#invest- century-military, accessed January 22, 2009.

19. Ibid.

- 20. Gates, SASC Statement. In recent prepared testimony before the SASC, Gates observed, "I believe that the FY 2010 budget must make hard choices. Any necessary changes should avoid across-the-board adjustments, which inefficiently extend all programs."
- 21. USDoD, "DoD News Briefing with Secretary Gates from the Pentagon," April 6, 2009, available from: www.defenselink. mil/transcripts/transcript.aspx?transcriptid=4396, accessed May 18, 2009.
- 22. Barak H. Obama, "Inaugural Address: The Full Text," *Time.com*, available from *www.time.com/time/politics/article/0,8599,1872715-2,00.html*, accessed January 23, 2009. The President observed, "[F]or those who seek to advance their aims by inducing terror and slaughtering innocents, we say to you now that our spirit is stronger and cannot be broken; you cannot outlast us, and we will defeat you."
- 23. Reuters.com, "U.S. to Set Concrete, Near-Term Afghan Goals: Gates," January 22, 2009, available from www.alertnet. org/thenews/newsdesk/N222718.htm, accessed January 23, 2009. According to a recent Reuters report, "President Barack Obama has ordered a review of the U.S. strategy in Afghanistan. He is expected to soon approve plans to nearly double the 30,000 U.S. troops in Afghanistan as part of his pledge to make the war one of his top priorities."

24. See Information Office of the State Council of the Peoples Republic of China, *China's National Defense in 2008*, January 20, 2009, available from *www.china.org.cn/government/whitepaper/node_7060059.htm*, accessed January 23, 2009. The updated Chinese National Defense white paper observes, "There still exist many factors of uncertainty in the Asia-Pacific region." Among them, the white paper continues, "[T]he US has increased its strategic attention to and input in the Asia-Pacific region, further consolidating its military alliances, adjusting its military deployment and enhancing its military capabilities." It continues later,

With the focus of attention on performing the historical missions of the armed forces for the new stage in the new century and with raising the capability to win local wars in conditions of informationization at the core, it works to increase the country's capabilities to maintain maritime, space and electromagnetic space security and to carry out the tasks of counter-terrorism, stability maintenance, emergency rescue and international peacekeeping.

25. See Brian P. Klein, Op-ed: "What Goes Around Comes Around for Russia," Council on Foreign Relations, available from www.cfr.org/publication/17281/what_goes_around_comes_around_for_russia.html?breadcrumb=%2Fissue%2F59%2Fnato, accessed January 23, 2009. Brian Klein observes, "2008 has marked the reemergence of Russia after a two-decade hiatus. Flush with cash from oil and gas revenue and a hefty grudge against perceived Western insults to its great power status, Russia has launched the opening salvo in a more muscular foreign policy." Later, he concludes, "For now, a rich emboldened Russia thinks it no longer needs the West and can act against neighboring countries with minimal consequences."

26. See Freier, *Known Unknowns*; and Department of Defense, News Transcript/DoD News Briefing—Secretary Rumsfeld and General Meyers, February 12, 2002, available from *www.defenselink.mil/transcripts/transcript.aspx?transcriptid=2636*, accessed January 23, 2009. The author used the famous term of Secretary of Defense Donald Rumsfeld to classify "strategic shocks" as "known unknowns." In 2002, Secretary Rumsfeld observed, "(A)s we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know."

- 27. Joint Forces Command, "The Joint Operating Environment 2008: Challenges and Implications for the Future Joint Force," November 2008, available from www.jfcom.mil/newslink/storyarchive/2008/JOE2008.pdf, accessed January 28, 2008, p. 8.
 - 28. See *Ibid.*, pp. 26-35; and Freier, *The New Balance*.
- 29. Eamon Jevers, "Four Really, Really Bad Scenarios," Politico. com, available from dyn.politico.com/printstory.cfm?uuid=425C3419-18FE-70B2-A8D1D7936DD5DB31, accessed January 23, 2009; Warrick, 2008; and CNN, "Top UK Spy Says Credit Crunch a Security Threat," available from edition.cnn.com/2009/WORLD/ europe/01/07/jonathan.evans.mi5.terrorists/index.html, January 23, 2009. Jevers describes the work of James Rickards, a financial analyst that advises the U.S. national security community. Rickards outlines four plausible scenarios that would prove particularly damaging to the United States. They are "The Bait Effect"; "The China Syndrome"; "The Existential Crash"; and "The Alternate-Dollar Nightmare." Warrick observes, "Intelligence officials are warning that the deepening global financial crisis could weaken fragile governments in the world's most dangerous areas and undermine the ability of the United States and its allies to respond to a new wave of security threats." Finally, CNN cites the Director of MI5's rising concern over the link between the economic downturn and global extremism.
- 30. Robert M. Gates, "A Balanced Strategy: Reprogramming the Pentagon for a New Age," Foreign Affairs, January/February 2009, available from www.foreignaffairs.org/20090101faessay88103/robert-m-gates/a-balanced-strategy.html?mode=print, accessed January 23, 2009.
 - 31. Obama-Biden, "Defense: A 21st Century for America."
- 32. For a fuller description of "purposeful" and "contextual" threats, see Freier, *Known Unknowns*, 2008, pp. 15-18.
 - 33. Joint Forces Command, p. 45.
- 34. Barak Obama, "Renewing American Leadership," Foreign Affairs, July/August 2007, available from www.foreignaffairs.

org/20070701faessay86401/barack-obama/renewing-american-leadership.html?mode=print, accessed January 27, 2009.

35. Robert M. Gates, "Secretary Gates Delivers Remarks at the National Defense University," September 29, 2008 (hereafter referred to as Remarks at the National Defense University), available from www.accessmylibrary.com/coms2/summary_0286-35340430_ITM, accessed February 19, 2008.

36. Ibid.

37. Ibid.

- 38. See Nathan Freier, "The New Balance: Limited Armed Stabilization and the Future of U.S. Landpower," April 2009, available from https://pksoi.army.mil/Docs/Publications/The%20 New%20Balance%20Limited%20Armed%20Stabilization%20 and%20the%20Future%20of%20US%20Landpower.pdf, accessed May 18, 2009. In a soon to be released monograph, the author discusses the tension between the two concepts and concludes that the nature of unconventional 21st century threats indicates that risk management is a far more realistic goal than is risk elimination.
- 39. Department of Defense, *The National Defense Strategy of the United States of America*, March 2005, available from *www. defenselink.mil/news/Mar2005/d20050318nds1.pdf*, accessed January 23, 2009, p. 11.
- 40. See Gary Schaub, "Really Soft Power," New York Times, January 27, 2009, p. 29. In a recent op-ed, Gary Schaub, an assistant professor at the Air War College concurs. He observes, "Regional commanders oversee policy in their regions because no one else can. They have staffs of thousands, forces numbering in the tens of thousands and vast financial resources. These generals tower over civilians who share responsibility for securing American interests abroad."
- 41. *Ibid.* Schaub continues, "Defense Secretary Robert Gates recognizes the imbalance [between defense and nondefense capacity] and has called for increasing the State Department's budget. But this is a long-term proposition."

- 42. Again, note the contrast between state and nonstate competitors described in the JOE citation at endnote 29.
- 43. See Jevers. In Jevers' piece, James Rickards observes, "There are vulnerabilities for the United States, but also opportunities. . . . I'd rather be the United States than ["Russia, China, Iran and (countries) in the Middle East]."
- 44. John Robb, *Brave New War: The Next Stage of Terrorism and the End of Globalization*, Hoboken, NJ: John Wiley & Sons, Inc., 2007, p. 25.
 - 45. Gates, Remarks at National Defense University, 2008.
- 46. *Capstone Concept for Joint Operations*, Version 3.0, Washington, DC: Department of Defense, January 15, 2009, p. 4.
- 47. Al Pessin, "Top U.S. Military Officer Concerned Economic Crisis Could Cause More Terrorism," VOAnews.com, December 10, 2009, available from www.voanews.com/english/archive/2008-12/2008-12-10-voa63.cfm?CFID=103387186&CFTOKEN=58364563&jsessionid=8830104316dcf7671e00c5a6a57632e54174, accessed January 30, 2009. Pessin cites Admiral Michael Mullen who observed,

I'm very concerned about the global financial crisis and its impact globally on security. . . . Without being precise about where that might happen, I just think the extent of this, or the length of this, is going to have an impact on increased instability in countries that are already under a great deal of pressure because their economies aren't that healthy in the first place.

- 48. These are states whose stable functioning is uniquely important to the security of key U.S. interests.
- 49. Department of Defense, *National Defense Strategy*, June 2008, pp. 21-22, available from *www.defenselink.mil/news/*2008%20 *national*%20*defense*%20*strategy.pdf*, accessed February 6, 2009.

50. *Ibid.*, p. 14.

51. Robb, p. 26.

- 52. See, for example, BBC News, "Chinese Ships Will Fight Pirates," available from *news.bbc.co.uk/2/hi/africa/7789303.stm*, accessed January 24, 2009.
- 53. See James R. Blaker, "Defense Alternatives: Policing the New Global Commons," American Security Project, *Perspectives*, December 17, 2008, available from *www.americansecurityproject.* org/files/BlakerPolicingGlobalCommons.pdf, accessed January 27, 2009. Blaker observes, "A 'commons' is any resource shared by a group of people. It carries the notion that there is value to all who share the resource in expanding to others, so long as none who have or gain access abuse it to the detriment of the others." He asserts that "the 'new global commons' refers to the seas, the air above the seas, space, cyberspace, and, arguably, the emerging global market."
- 54. See Richard L. Armitage and Joseph S. Nye, Jr. (Co-Chairs), CSIS Commission on Smart Power: A Smarter, More Secure America, Washington, DC: The Center for Strategic and International Studies, 2007, available from www.csis.org/media/csis/ pubs/071106_csissmartpowerreport.pdf, accessed January 27, 2009. See also Freier, *Known Unknowns*, pp. 29-35. The author discusses "Strategic State Collapse" in his recent monograph, Known Unknowns. These states include those that: possess significant employable WMD; possess significant strategic resources, economic leverage, and/or dominant geographic leverage; are in close proximity to the United States; could trigger contagious instability in an important region; or are allies or key strategic partners of the United States. In Known Unknowns, the author also discusses the prospect of a "hostile state . . . combin(ing) hybrid methods effectively to resist U.S. influence in a nonmilitary manner."

55. Armitage and Nye, p. 1.

56. *Ibid*. According to the CSIS report, "Continued engagement with the global economy is necessary for growth and prosperity, but the benefits of free trade must be expanded to include those left behind at home and abroad."

57. See Andrew R. Hoehn et al., A New Division of Labor: Meeting America's Security Challenges Beyond Iraq, Santa Monica, CA: RAND Corporation, 2007, available from www.rand.org/pubs/ monographs/2007/RAND_MG499.pdf, accessed January 29, 2009. In Chapter Three of this report, the authors outline five core strategic missions for DoD and a recommend allocation of responsibilities between service components based on their judgment of the relative contributions of each. For example, they suggest that "(b)ecause of the crucial importance of the counterterror and stabilization missions, and because of the changing nature of the threat that regional adversaries posed, the Army and Marine Corps reasonably could be relieved of the requirement of preparing forces to fight in the second of two nearly simultaneous wars." The force savings would be reinvested in an expanded capacity for low-footprint stabilization activities. The author suggests an alternative model.

58. See Freier, "The New Balance."

59. See Department of Defense, Irregular Warfare (IW) Joint Operating Concept (JOC), p. 6, available from www.michaelyon-online. com/images/pdf/iw-joc.pdf, accessed January 27, 2009. According to the recently published IW JOC, Irregular Warfare is "(a) violent struggle among state and nonstate actors for legitimacy and influence over the relevant populations. IW favors indirect and asymmetric approaches, though it may employ the full range of military and other capabilities, in order to erode an adversary's power, influence, and will."

60. Sherman.

61. Gates, Remarks at the National Defense University. Gates observed, "My point simply was we must not be so preoccupied with preparing for future conventional and strategic conflicts that we neglect to provide both short-term and long-term all the capabilities necessary to fight and win conflicts such as we are in today."

62. Ibid.

- 63. See Greg Miller, "Global Economic Crisis Called Biggest U.S. Security Threat," Los Angeles Times, National, available from www.latimes.com/news/nationworld/nation/la-na-security-threat13-2009feb13,0,3376918.story, accessed February 13, 2009. Miller observes of recent testimony by Admiral Dennis Blair, the new Director of National Intelligence, "The nation's new intelligence chief warned Thursday that the global economic crisis is the most serious security peril facing the United States, threatening to topple governments, trigger waves of refugees and undermine the ability of America's allies to help in Afghanistan and elsewhere." Miller continues, "[Blair] said that one-quarter of the world's nations had already experienced low-level instability attributed to the economic downturn, including shifts in power. He cited anti-government demonstrations in Europe and Russia, and he warned that much of Latin America and the former Soviet satellite states lacked sufficient cash to cope with the spreading crisis."
- 64. See George G. Kaufman and Kenneth E. Scott, "What is Systemic Risk and Do Bank regulators Retard or Contribute to It," *The Independent Review*, Vol. VII, No. 3, Winter 2003, p. 371. According to Kaufman and Scott, in international finance, systemic risk is the "risk or probability of breakdowns in an entire system, as opposed to breakdowns in individual parts or components." The author would argue that in international security, as it impacts U.S. interests, systemic risk might be the likelihood that incidents of violent or highly disruptive political insecurity at one or more critical points of leverage might trigger contagious instability and violence across interest areas.
- 65. See *Emerging Risks in the 21st Century: An Agenda for Action*, Paris, France: Organization for Economic Cooperation and Development (OECD), 2003, p. 10.

```
66. Ibid.
```

67. Ibid., p. 11.

68. Ibid.

69. Ibid., p. 12.

70. Ibid.

71. Ibid.

72. Ibid.

- 73. A great deal of this discussion is borrowed from Freier, *The New Balance*.
- 74. See Gary Luck et al., Joint Operations: Insights and Best Practices, 2d Ed., Suffolk, VA: Joint Forces Command, July 2008, p. 32, available from www.heritage.org/Research/Europe/upload/JFCOMJul08.pdf, accessed January 27, 2009. According to the authors,

The Adaptive Planning process incorporates two key planning guidance documents, the Guidance for Employment of the Force (GEF) and Joint Strategic Capabilities Plan (JSCP). The GEF combines guidance from the SecDef to Combatant Commanders on theater security cooperation and contingency planning. The JSCP, issued by the CJCS, refines guidance provided in the GEF based on current military capabilities.

75. See Gates, "A Balanced Strategy." Gates wrote in *Foreign Affairs*, "The United States is unlikely to repeat an Iraq or Afghanistan—that is forced regime change followed by nation building under fire—anytime soon."

76. See Julian E. Barnes, "Gates Calls for Scaled Back Goals in Afghanistan: As Obama Begins to Strategize, the Defense Secretary Says Curbing al Qaeda is the Key," Los Angeles Times, January 28, 2009, p. 5. On recent SecDef testimony before the Senate Armed Service Committee, Barnes observes, "Gates said the U.S. risked failure if it did not set more limited objectives. Rather than the pursuit of democracy, Gates said the primary mission should be ensuring that Afghanistan did not again become a haven for Al Qaeda."

77. See, for example, Paul B. Stares and Joel S. Witt, "Preparing for Sudden Change in North Korea," Council Special Report No. 42, New York: Council on Foreign Relations, January 2009, pp.

21-22, available from www.cfr.org/content/publications/attachments/North_Korea_CSR42.pdf, accessed January 29, 2009. Stares and Witt point to a multi-national commitment of troops in the event of a North Korean collapse that ranges from 115,000 to 460,000 depending on "the level of acquiescence to foreign intervention."

78. See USDoD, April 6, 2009.

79. Gates, Remarks at the National Defense University. Gates observed,

When referring to the next waritis, I was not expressing opposition to thinking about and preparing for the future. It would be irresponsible not to do so. . . . My point simply was we must not be so preoccupied with preparing for future conventional and strategic conflicts that we neglect to provide both short-term and long-term all the capabilities necessary to fight and win conflicts such as we are in today.

80. Gates, "A Balanced Strategy."

81. On the subject of "global guerrillas," see Robb, 2007. On "hybrid war," see Frank G. Hoffman, "Hybrid Warfare and Challenges," Joint Forces Quarterly, Issue 52, 1st Quarter 2009, available from www.potomacinstitute.org/media/mediaclips/2009/Hoffman_JFQ_109.pdf, accessed January 27, 2009. On a more expansive discussion of "hybrid" challenges, see Nathan Freier, Strategic Competition and Resistance in the 21st Century; The Traditional, Irregular, Catastrophic, and Hybrid Challenge in Context, Carlisle, PA: Strategic Studies Institute, U.S. Army War College, May 2007, pp. 46-63, available from www.strategicstudiesinstitute. army.mil/pdffiles/pub782.pdf, accessed January 27, 2009.

```
82. Gates, SASC Statement.
```

83. Ibid.

84. *Ibid*.

85. See Freier, "The New Balance."

- 86. Ibid., p. 15.
- 87. Ibid., pp. 73-76, 84-86.
- 88. Conversation with Dr. John Bonin, U.S. Army War College, February 5, 2009.
 - 89. Obama, A 21st Century Military for America.
 - 90. Ibid.
 - 91. Gates, SASC Statement.
- 92. See *Quadrennial Defense Review Report*, Washington, DC: Department of Defense, February 2006, p. 17, available from www. defenselink.mil/qdr/report/Report20060203.pdf, accessed January 27, 2009. ODR 06 observes:

Recent operations demonstrate the critical importance of being organized to work with and through others, and of shifting emphasis from performing tasks ourselves to enabling others. They also underscore the importance of adopting a more indirect approach to achieve common objectives. The Department must help partners improve their ability to perform their intended roles and missions.

- 93. Frank Hoffman observed that at the low end i.e., 20,000 this amounts to investing 4 percent of active Army force structure on prevention. He argued this could be a very good bargain.
 - 94. Obama, A 21st Century Military for America.
- 95. Mark Benjamin, "Does a Bigger Army Mean Another Iraq," *Salon.com*, September 27, 2007. Benjamin cited comments by Nagl.
- 96. John Nagl, Institutionalizing Adaptation: It's Time for a Permanent Army Advisor Corps, Washington, DC: Center for a New American Security, June 2007, p. 1, available from www.cnas.org/files/documents/publications/Nagl_AdvisoryCorp_June07.pdf, accessed January 27, 2009.

- 97. See also Hoehn *et al*. The authors recommend that DoD "[g]reatly expand the capacity and competence of forces devoted to combat advisory and training missions."
- 98. On this point, see Robb. He asserts that "[t]he innovation of global guerrillas doesn't stop with new methods of warfare; it extends into how the movements are organized. Because of external pressure, global guerrillas have atomized into loose decentralized networks that are more robust and learn more quickly than traditional hierarchies."
- 99. The author is grateful for the contributions of Lieutenant Colonel Charles Moore, Director of the U.S. Army War College's Basic Strategic Arts Program that define this section.

100. Bonin.

101. Ibid.

- 102. See Freier, *Known Unknowns*; and "Interview on Known Unknowns," *PKSOI Bulletin*, Vol. 1, Issue 2, February 2009, pp. 7-8, available from *https://pksoi.army.mil/Docs/PKSOI%20Bulletin/PKSOI%20Bulletin%20V1-Issue2.pdf*, accessed February 10, 2009. This principle is adapted from the author's recent monograph on strategic shocks. The description herein is adapted from both the monograph and the article by the author (cited above) in the most recent PKSOI Bulletin.
- 103. Freier, *Known Unknowns*, p. 2. The author first made this observation in a previous monograph on unconventional "strategic shocks." This point was raised by Dr. Carl Van Dyke, Senior National Intelligence Officer in the National Intelligence Council's Office for Long range Warning.

104. Ibid., pp. 28-32.

105. Strategy for Homeland Defense and Civil Support, Washington, DC: Department of Defense, available from www.defenselink.mil/news/Jun2005/d20050630homeland.pdf, accessed January 30, 2009.

106. Ibid., p. 2.

107. Ibid.

- 108. See "About USNORTHCOM," available from www. northcom.mil/About/index.html, accessed January 30, 2009; and "Vision, Mission, Priorities," available from www.stratcom. mil/default.asp?page=mission, accessed **Ianuary** 30, 2009. USNORTHCOM is the primary military HLS/D actor by "anticipat(ing) and conduct(ing) Homeland Defense and Civil Support operations within the assigned area of responsibility to defend, protect, and secure the United States and its interests." USSTRATCOM plays a key role in HLD through its traditional mission of nuclear deterrence, "ensuring U.S. freedom of action in space and cyberspace" and "[synchronization] of global missile defense plans and operations."
- 109. Email exchange with Ms. Christine Wormuth, February 2, 2009.
- 110. See Christine Wormuth and Anne Witkowsky, "Managing the Next Domestic Catastrophe: Ready or Not?," A *Beyond Goldwater Nichols Phase 4 Report*, Washington, DC: Center for Strategic and International Studies, p. viii, available from www.csis. org/media/csis/pubs/080606_managingthenextdomesticcatastrophe.pdf, accessed January 30, 2009. Wormuth observes,

[T]he next Administration should make very clear that DoD will no longer hold the civil support mission at arm's length and will be expected to play a very significant supporting role in the aftermath of a catastrophic event—a role that will require that DoD resource, train, and equip its forces accordingly.

111. *Ibid.* Wormuth continues, "The next Administration should restate emphatically that DHS will be the Lead Federal Coordinator during domestic incidents, but should also make clear that DoD will be expected to play a significant supporting role in catastrophes."

- 112. *Ibid*. According to Wormuth, "As outlined in the National Response Framework, the federal government should have a single, scalable framework for incident management, led by a single federal agency [not DoD]."
- 113. Email exchange with Ms. Christine Wormuth, February 4, 2009.