

Nuclear Proliferation

and the **Future of U.S. Defense and Deterrence Planning**

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*Future Strategic Concepts
for WMD-Related Planning and Operations*

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EXECUTIVE SUMMARY

Under its contract with the Defense Threat Reduction Agency (DTRA) entitled *Future Contexts for WMD–Related Planning and Operations*, the Institute for Foreign Policy Analysis (IFPA) has been engaged in Combatant Command (CoCom)–oriented assessments of key regional and global threats and operational planning challenges facing the United States and its security partners in the post–9/11 security environment. In this particular study, IFPA has produced an integrated, cross–regional assessment of the deterrence and operational planning issues that confront U.S. Combatant Commanders as a result of global proliferation trends, especially those associated with actual or potential nuclear proliferation. The objective of this study was to identify issues of concern to U.S. security planners, and to put forward recommendations for how to best assist the Office of the Secretary of Defense (OSD) and the broader Interagency as they consider options to deter, dissuade, assure, and defeat enemy development, possession, and prospective use – or threatened use – of nuclear weapons in crisis and military contingency situations.

Especially as the United States confronts new and emerging proliferation–related threats and associated operational planning challenges, this assessment seeks to identify new national–level strategic concepts of operations (CONOPS), including those associated with peer competitor deterrence, allied assurance, dissuading and influencing elites in states that now possess or seek to acquire nuclear and other WMD, dissuading and influencing non–state actors who aspire to nuclear / WMD status, and protecting the U.S. homeland from the effects of potential WMD attacks. In this context, IFPA assesses new CONOPS for contingency planning in nuclear weapons environments, and explores options for implementing the recommendations of the Nuclear Posture Review (NPR), most notably with respect to developing and deploying the “New Triad.”

Informing this study is an assessment of the global trends that are impacting proliferation decisions in key countries of concern, and a more precise delineation of countries on the brink of re–considering or exploring their nuclear options. This is followed by an extensive examination of WMD–related contingency planning challenges across the regional CoComs’ areas of responsibility (AORs), and from a global strategic planning perspective. The final chapter of this study assesses the implications of all of the above for U.S. national security planning, and lays out a menu of DoD / CoCom support options for wider USG consideration.



Among the study's more salient findings are the following:

- There are perceptible trends in the international environment that are fueling nuclear proliferation incentives, with the result that in a decade or less the United States very likely will face the need to update regional contingency and Global Strike planning to take account of nuclear weapons use or their threatened use against U.S. forces operating in key regional theaters or against the U.S. homeland itself.
- These trends are creating a new security planning landscape that will require innovative thinking about force posture mixes and deployment modalities, operational planning concepts, and changes to the risk calculus in U.S. deterrence planning. Specifically, there is an emerging requirement to: (1) reassess peer competitor deterrence concepts, (2) address more directly the nuclear terrorism threat, (3) rethink crisis contingency and escalation control planning in key regional theaters, and (4) consider new and advanced techniques and concepts for ensuring nuclear stockpile safety and security in proliferating nations (e.g., Pakistan, North Korea, etc.), including under conditions of regime collapse.
- The relative severity of each of these risks and challenges varies from region to region, and will require, as a result, the development of unique force packages tailored for specific operational contingencies. At a minimum, these would include a crisis on the Korean Peninsula, a cross-Strait scenario involving the People's Republic of China (PRC) and Taiwan, a Persian Gulf contingency (with Iran as the state of greatest concern), a Pakistani-Indian conflict over Kashmir, and terrorist employment of a dirty bomb. But they also may encompass new threats, emanating from the disintegration of Pakistan or Saudi Arabia, or an electromagnetic pulse (EMP) attack against U.S. or allied critical infrastructure, possibly from an unattributable source.
- Principal CoCom planning considerations must evolve under these circumstances to place greater emphasis on the following factors: allied/coalition partner reassurance; escalation control and war termination options; CONUS vulnerability and forward deterrence considerations; Global Strike forces integration and de-confliction; missile defense architectures and force protection; information operations (including cyber- and both space-based and space-oriented warfare); critical infrastructure protection (CIP); chemical, biological, radiological, nuclear, and (high) explosive CBRNE detection; military operations in contaminated environments; and consequence management planning.
- In the post-9/11 world, updating U.S. deterrence planning has emerged as a particularly important planning imperative, to include innovative thinking about dissuasion and strategic influence and about reassuring jittery allies and coalition

partners, in part to dissuade them from crossing the nuclear weapons threshold themselves. It will also require the design and development of additional next-generation capabilities, both offensive and defensive, postured in support of a broader and more flexible concept of deterrence, as outlined in the Bush administration's Nuclear Posture Review.

From this assessment, there are clear policy, organizational, and acquisition planning-related implications for the future of U.S. defense and deterrence planning. At one end of the strategic planning spectrum, they include the need to support strategic force posture development and implementation of the NPR recommendations. At the other end of the strategic planning spectrum, they include ways to help the CoComs, the Interagency, and alliance/coalition partners to face down and defeat looming terrorist threats and to counter future proliferation challenges, particularly with respect to crisis management and escalation control considerations. Among the most important and specific recommendations are the following:

- **Enhancing Support to STRATCOM Deterrence and Operational Planning.** CoCom contingency planning needs to be better synchronized with, and supportive of, STRATCOM's strategic missions, especially with respect to developing a more complete understanding of the implications of new proliferation threats, dealing with the collateral effects of electromagnetic pulse (EMP) challenges, and countering and defeating targets of value in specific geographic locales. Simulations of weapons effects and modeling continue to be important, as new weapons are being developed (to include U.S. and British work to develop a follow-on to *Trident* technologies) and given the prospect that the United States may move forward with the development of a small yield nuclear warhead and/or develop advanced generation non-nuclear technology warheads for strategic deterrence purposes. Operationally, integrating Global Strike forces with missile defenses and U.S. nuclear assets in a comprehensive set of strike plans, regionally-informed, continues to be a major planning challenge for STRATCOM. Very specifically, the regional CoComs need to work seamlessly with STRATCOM planners to bring to bear their broader regional expertise to help develop CONOPS for strategic non-nuclear systems. This should be particularly useful to STRATCOM as it develops its new WMD Center, leveraging all OSD assets and capabilities.
- **Retaining Nuclear Mission Planning Expertise.** The Services' nuclear expertise is waning and their consequence management planning for irregular warfare or catastrophic contingencies is generally inadequate for a host of



reasons. In recent years, both the Air Force and the Navy have sought to cast off their tactical nuclear weapons/missions, primarily for budget reasons, with the result that fewer and fewer officers in the U.S. military understand nuclear weapons fundamentals and, by extension, their operational implications for crisis or wartime contingencies, including with respect to escalation management and control issues. In this context, a broader understanding of nuclear weapons effects is essential, especially as new strategies for dealing with WMD use are considered. In this respect, relevant OSD agencies and Department of Energy (DoE) centers have the potential to enhance awareness about nuclear and other counter-proliferation planning issues, while providing expertise to help the Services and OSD identify specific capabilities (and hence, acquisition priorities) to mitigate the consequences of WMD use and to ensure that key weapons systems do not fail to operate in contaminated environments.

- **Implementing the New Triad without Sacrificing Extended Deterrence.** Air force and Navy interest in shedding tactical nuclear capacities and enhancing “conventional deterrence” strike assets has potentially profound implications for allied security calculations, particularly in NATO Europe where Dual-Capable Aircraft (DCA) certification has helped to dissuade some countries, especially Turkey, from taking more concerted steps to acquire nuclear weapons of their own. Strategic deterrence planning and implementation of the New Triad may require retention of U.S. tactical nuclear weapons; at the very least, they will require more informed analysis of future operating environments and a comprehensive assessment of force posture drivers and non-nuclear weapons options. Apart from the need to test many of the assumptions underlying the NPR’s conceptual framework, there is a requirement for more rigorous analysis of Global Strike concepts and their integration with U.S. deterrence frameworks.
- **Security Cooperation and Phase 0 Planning.** A key assumption of OSD’s strategic planning construct is that increased levels of Security Cooperation (SC) with principal partners will be necessary in the counter-WMD arenas. The National Military Strategy further identifies SC as central to U.S. efforts to defeat traditional, irregular, disruptive, and catastrophic threats, particularly in the context of working with allies on consequence management and providing deterrence reassurance. The Services, therefore, must continue to refine their Security Cooperation plans to deal more effectively and comprehensively with WMD challenges. Each CoCom must ensure that its Service components design and tailor regionally-relevant and regionally-oriented exercises, table-top discussions, and educational opportunities to expand knowledge

about deterrence issues, and to build consensus within the military about the on-going importance of developing new deterrence and dissuasion concepts, integrating nuclear and non-nuclear weapons options, as necessary.

- **DoD Support to the Interagency.** Interagency collaboration on security planning is also a key aspect of this year's QDR. The requirement for Interagency collaboration is most apparent when considering planning for stability operations, homeland defense, consequence management, and coalition partner training and development. DoD has expertise to support Interagency planning in these mission areas, especially with respect to efforts to defeat Islamic extremists, homeland defense planning, deterring and dissuading enemies or potential adversaries, and countering all WMD-related threats. DoD capabilities are also central to USG-wide efforts to develop total force responses to the full range of CBRNE challenges, including with respect to nuclear forensics, the development of countermeasures, detection, and render-safe missions. Working with U.S. Northern Command and other domestic agencies, particularly the Departments of Homeland Security and Justice, DoD has unique capabilities to provide to Interagency efforts, capabilities that should be leveraged but not overused in preparing adequate defense and crisis response capabilities for "special events" (e.g., the State of the Union address, presidential inaugural activities, etc.) and in support of counter-terrorism planning more generally.



Specifically with respect to Homeland Security, DoD equities and missions remain undefined, due in part to jurisdictional resistance and legal constraints. Yet, as hurricane Katrina's recovery efforts have so dramatically revealed, large-scale disaster relief and recovery efforts are most effectively organized and implemented when DoD is on-scene and has assumed major leadership roles. In a domestic terrorist contingency, even one in a large metropolitan area, some DoD capabilities and expertise will be essential to support DHS, DoJ, and state and local first-responders, especially in bio-terrorism or dirty bomb scenarios. More thought, therefore, needs to be given to enhancing Joint Task Force for Civil Support (JTF-CS) capacities and to ensuring that relevant National Guard units are fully trained and equipped to operate in their Title 32 roles. In this context, DoD should move forward more expeditiously to implement its proposed "First-Responder Transfer Program," designed to coordinate and oversee defense-related technology transfers to state and local governments.

- **Enhancing Interagency Efforts to Contain and Defeat Terrorist Threats.** Interagency collaboration is key to identifying, dissuading, and defeating global and regional terrorist threats. In this arena, a number of practical initiatives are under way, including focused efforts to detect and defeat improvised explosive

devices (IEDs). However, in the wake of the London subway and bus bombings and juxtaposed to perceptible trends in the global security environment, new and concerted efforts to understand and counter the collateral implications of a so-called dirty bomb have generated greater urgency. Together with detecting and identifying a biological weapons attack, terrorist use of radiological materials to enhance the explosive effects of a conventional bomb and even the use of a nuclear suitcase bomb have emerged as priority planning challenges for which U.S. and allied governments must prepare. DoD has in train a number of developments that might usefully help to detect or counter these types of emerging WMD spectrum threats, and, by means of Advanced Concept Technology Demonstrations (ACTDs) in collaboration with appropriate CoComs, the Department should accelerate the development and fielding of such capabilities. In this context as well, the Defense Threat Reduction Agency's (DTRA's) nuclear forensics capabilities, in particular, will likely prove to be extremely important to the newly established National Counter-Terrorism Center, especially with respect to efforts to attribute responsibility for anonymous WMD attacks, should they materialize.

- **Developing a Strategic Information/Communications Campaign Plan.** With the dismantlement of the United States Information Agency and given a perceptible American failure to engage and influence "hearts and minds" adequately in much of the Muslim world, the United States needs to re-design its information management strategy to counter more effectively and aggressively the arguments of anti-American extremist elements who seek to promote violence against U.S. citizens and national assets, to include the American homeland. The very real prospect that suicide bombers, for example, may in the future seek to utilize advanced conventional and/or WMD munitions to strike U.S. targets makes clear the linkage between strategic communications efforts among disaffected populations and the containment and eventual reduction of terrorist-based WMD risks. Fortuitously, the recent creation of an Under Secretary of State for Public Diplomacy and Public Affairs (State/R) provides the United States with an ideal opportunity to energize and refocus U.S. public diplomacy (PD) efforts throughout the world, but particularly as they relate to Muslim states and populations where WMD-related risks remain particularly high. Winning the "hearts and minds" of these groups and countries remains a critical factor in the ongoing global struggle against violent extremism, just as the conduct of that strategic conflict remains an important variable in how the United States is perceived abroad, especially among Muslims. If the Department of State (DoS) is to seize the opportunity to invigorate public diplomacy efforts in the administration's second term, it understandably will need an informed baseline regarding the current state of play from which to work. More specifically, a comprehensive

survey is required of extant polling on foreign public perceptions of the United States (particularly in the Muslim world), leading to recommendations for a more precisely targeted strategic communications plan. This should include concrete responses and “best practices” suggestions with regard to PD efforts that have a greater potential to address effectively negative foreign perceptions of the United States and anti-Americanism worldwide and, in so doing, help to forward (among others objectives) U.S. non- and counter-proliferation goals.

- **Develop and Establish Innovative “Threat Reduction,” Confidence-Building, and Verification Support.** From the need to establish comprehensive and verifiable inspection measures for any North Korean nuclear disarmament deal should the Six-Party Talks be successful, to measures to enhance transparency and trust between former or potential foes (e.g., India and Pakistan), the Interagency must focus on devising and implementing prospective threat reduction and compliance arrangements that more effectively support national policy objectives. For example, in addition to helping implement any agreement that may come out of the Six-Party Talks, the USG may also be tasked with supporting International Atomic Energy Agency (IAEA) inspections/verification of Iran’s nuclear fuel development, or with using U.S. sensor and detection capabilities to monitor Iran’s nuclear developments. Furthermore, if there is an Israeli-Palestinian peace agreement, the United States conceivably could be called on to provide monitoring and compliance support, and, as in Iraq, it might be tasked with surveying nuclear developments in threshold nations.



Based on this cross-regional assessment, there are some practical steps that U.S. security planners can take to enhance Interagency contributions to USG-wide counter-WMD and counter-terrorist planning, while augmenting the potential to support CoCom operational and contingency planning. Among the more immediate and important are the following:

- Develop outreach and information programs designed to support STRATCOM’s efforts to revise and update U.S. strategic deterrence concepts, to advance associated force structure development, and to facilitate the integration of U.S. and allied/coalition partner counter-WMD capabilities for real-world contingencies.
- Consider creation, at each unified Combatant Command, of an operational-level Joint/Interagency Steering Group designed to address regional security challenges and the Global War on Terror. Each Steering Group or Task Force would draw on personnel or “reach-back” support from the Interagency, and be in a position to help the CoCom deal with irregular, catastrophic, or strategic threats to U.S. and allied interests.

- In this context, as well, DoD should engage more systematically with the Service leaderships on Program Objective Memorandum (POM) planning for WMD-related Phase 0 planning, force protection considerations, and consequence management activities, to support more effectively U.S. strategic objectives and operational planning requirements. With its creation at STRATCOM of the Center for Combating Weapons of Mass Destruction, the Department of Defense should also consider augmenting its Interagency participation and focus on development of kinetic and non-kinetic means to support operational concepts, contingency planning mission essential task lists (METL), and force posture development. Greater attention, as well, to allied/coalition partner “niche” capabilities will provide new means of leveraging U.S. capabilities in this regard, and help develop a strategic hedge relevant to the unconventional, irregular, and catastrophic threats that the West might face in coming years.
- Embed WMD operational planning concepts and initiatives into CoCom Security Cooperation activities and exercises, even helping to define priority activities and exercise regimes in the counter-WMD realm across the conflict spectrum.
- Engage with the CoComs to help shape alliance transformation planning, particularly as it relates to strategic force posture development, weapons research and collaborative programs, and deployment modalities. With EUCOM, for example, this could include broader discussion and analysis on the role of DCA holdings in a transformed/restructured NATO and, with the UK, on exploration of *Trident* follow-on options. With PACOM, key issues to address include a range of deterrence and dissuasion challenges surrounding a number of China-Taiwan cross-Strait contingencies, missile defense architecture planning with Northeast Asian allies and friends (most notably, Japan), U.S.-Indian cooperation on nuclear weapons safety and security measures and on nuclear doctrine, and methods for ascertaining dismantlement of North Korean nuclear and other WMD assets, either in the context of a Six-Party Talks agreement, or in a crisis or wartime contingency. With CENTCOM, of course, counter-WMD planning as it relates to a range of Iranian, Iraqi, and Syrian contingencies looms as a particularly fruitful area for broader Interagency-CoCom collaboration.
- Concentrate on developing new technologies relevant to homeland security (HLS) missions, including capabilities to detect WMD materials at ever-greater distances from the United States. Also of importance in this area will be new concepts and technologies for defending critical infrastructure assets from EMP attacks, for upgrading the security of U.S. and NATO land-based nuclear weapons and Allied storage sites, and for providing force protection for



civilian nuclear power generators. Innovative thinking about future missile threats and proliferation risks will also demand a broadening of missile defense concepts and an expansion of technology development programs, to include consideration of cruise missile defenses and space-based and/or space-oriented systems.

- In a world in which jihadist threats might one day include a “not-for-attribution” nuclear detonation or dirty bomb explosion, fixing blame will constitute a highly important step in the process of establishing and executing viable U.S. retaliatory options. Nuclear forensics tasks, therefore, would appear to be an especially important area of expertise for further development, and one that should be forwarded with new urgency in the wake of the London suicide bombings and concerns about additional attacks both against allied/coalition partner and U.S. targets.
- Finally, concerns about “home-grown” terrorists and suicide bombers lend greater urgency to U.S. (and allied) efforts to understand more precisely the phenomenon with which we are dealing. Toward that end, the USG should support interdisciplinary and so-called Track 2 efforts designed to help understand the motivations, background, and methods of suicide bombers. A focused effort on this topic would immediately benefit U.S. Central Command, but it would also contribute to thinking in the wider U.S. policy community and focus attention on ideas and concepts to identify, deter, and dissuade individuals who could be employed as suicide bombers in other theaters as well, including conceivably the U.S. homeland.