



RESEARCH HIGHLIGHTS

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About

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Nuclear Proliferation and Crisis Stability on the Subcontinent

The Center for Strategic Research's 10 May symposium brought together South Asia and Middle East regional specialists and nonproliferation experts to consider the recent trajectory of Indian and Pakistani nuclear weapons and ballistic missile defense programs, assess their effect on nuclear proliferation and Subcontinent stability, and examine the potential impact of a nuclear-armed Iran on regional proliferation and crisis stability. Symposium attendee conclusions converged around five major judgments:

1) *Pakistani nuclear weapons growth isn't new, but it contributes to an extremely fragile period of crisis stability.* Pakistan's nuclear arsenal is expanding on course to move from the world's 7th largest nuclear weapons stockpile to the 5th (or even the 4th) largest one in a few short years. Such growth is not new and is in keeping with Pakistani military belief about requirements for "credible minimum deterrent" against India. Yet the pace coincides with India's accelerating acquisition of conventional weapons and an extremely high level of Indo-Pakistani tensions since the 2008 Mumbai terrorist attack. Together, these factors increase the risk of a nuclear crisis on the Subcontinent.

2) *South Asian nuclear "exceptionalism" is eroding.* Although India has not expanded its nuclear stockpile, has chronic unresolved challenges with its nuclear weapons infrastructure, and adheres to a longstanding policy of "minimum nuclear sufficiency," there is growing and worrisome unofficial discussion of a revised nuclear doctrine featuring notions of a nuclear triad, ballistic missile defense, and the prospect of using nuclear weapons. Coupled with Pakistan's nuclear weapons expansion and ambiguous nuclear use doctrine, the expanded range of unofficial Indian discourse about a more assertive nuclear strategy has become a destabilizing factor on the Subcontinent.

3) *Iran's nuclear future holds a certain impact with uncertain outcomes for Subcontinent proliferation incentives and crisis stability.* Acute bilateral tensions between India and Pakistan leave little room for consideration of how a nuclear Iran would impact Subcontinent security. To the extent that New Delhi and Islamabad contemplate Iran's nuclear future at all, they seek to promote Iranian nuclear restraint without agitating Tehran. Overt Iranian acquisition of nuclear

weapons would probably not trigger any immediate direct security response from Pakistan or India.

4) Saudi reactions would be critical in determining the impact on Subcontinent security dynamics. If Tehran's program stopped short of overt weapons development and testing, Riyadh might remain content to pursue diplomatic alternatives. Should Tehran's nuclear acquisition profile pique Saudi ire, then a request for Pakistani nuclear assistance by Riyadh is both plausible and could pit Islamabad against Tehran. At the very least, this dynamic would increase security tensions between nuclear-armed Sunni and Shi'a neighbors, introducing a new and destabilizing element into an already fragile nuclear security calculus on the Subcontinent.

5) U.S. policymakers may soon confront an altered security landscape in South Asia, one again centered on nuclear nonproliferation imperatives rather than counterterrorism. Despite its general assurances, Pakistan's specific nuclear program safeguards remain opaque. Saudi concerns about Iranian nuclear weapons developments could pressure Pakistan to proliferate nuclear material and know-how onto the Arabian Peninsula. Can a decade-long American policy of assisting Pakistan with safeguards to "deny" unintentional "leakage" of nuclear weapons survive post-bin Laden raid tensions and mounting international pressures to resume a nonproliferation approach focused on punishing Islamabad for any willful transfer of nuclear materials and knowledge to a non-nuclear state? American policymakers need to consider these possibilities and think soberly about their significant implications for the future of South Asian security.

Iran's Islamic Revolution: Lessons for the Arab Spring of 2011?

The emergence of popular protest movements that have overthrown authoritarian regimes in Tunisia and Egypt and challenge regimes in Libya, Yemen, Bahrain, and Syria have revived memories of the Shah and the 1978–1979 revolution in Iran. Neither Iranian nor U.S. officials considered the possibility that Iran's armed forces, the largest and most

modern in the region (next to those of Israel), would prove unable to deal with whatever trouble lay ahead. The failure of the Iranian military to prevent the fall of the Shah highlights factors that could shape the outcome of political struggles defining the Arab spring of 2011.

Examination of the confrontations between popular opposition movements and state military/security forces in Iran reveals troubling prospects for regimes that depend on a military that may be unwilling or unable to use massive violence against the populace. Several factors contributed to the failure of the Iranian armed forces to quash the Islamic Revolution including the Shah's weak and indecisive character; his unwillingness to take the steps necessary to stay in power; his illness and his suspicion that his military leaders and the United States were conspiring to remove him; a military paralyzed by indecision, ill-suited to deal with domestic unrest, and unable to preserve the regime or promote its corporate interests; and the opposition's ability to manipulate the media and the troops.

In the Center for Strategic Research's Strategic Forum No. 267, Michael Eisenstadt, a Senior Fellow and Director of the Military and Security Studies Program at The Washington Institute for Near East Policy, warns that some of these factors may be relevant to the ongoing confrontations between popular protest movements and regime military/security forces in several Arab states. He recommends:

1) Strong and decisive civilian and military leadership. While this would seem to be a sufficient condition for success in quashing a popular uprising, its absence could doom a regime.

2) Cooperation between the leaders of the civilian movements and military/security forces. Clear, consistent guidance, adequate resources, and strong political support from the civilian sector could significantly hinder an effective negative military response.

3) Appropriate training and equipment for military/security forces if they are to be deployed against domestic unrest. Proper training and equipment could avoid actions that could inadvertently contribute to an escalation of violence and help to retain the morale and cohesion needed by the military for a prolonged struggle against

popular opposition movements attempting to neutralize or co-opt them.

4) Foreign support and/or criticism of the regime or for the popular opposition can have an important impact on the course of the struggle. Foreign intervention may be sought by some, but a dislike of anything resembling colonialism makes the consequences of foreign involvement difficult to predict.

Illicit Networks in an Age of Globalization

Over the past two decades, illicit networks and the organizations that utilize them have become vastly more sophisticated. Their globalization and horizontal diversification constitutes a qualitatively new threat to U.S. national security. Illicit networks are largely immune to borders, quick to adapt, and able to exploit seams in international counternetwork policy. Even the most advanced members of the international community have a limited understanding of these networks.

In partnership with the Defense Intelligence Agency, the Center for Complex Operations is publishing an edited volume based on commentary and findings from an initial framing conference recently held at National Defense University. At the conference, Under Secretary of Homeland Security Rand Beers and Dr. Moises Naím argued that disrupting illicit networks must become a government priority, with greater support from the public and Congress. Senior government officials must bring discipline to the bureaucracy, understand the tools and organizations available for the mission, and ensure coordination between individuals developing policy and those who implement policy. Furthermore, the response community must possess an acute understanding of the different aspects and motivations of the actors involved in a particular network. Only then will the United States and international community be able to respond successfully to the challenge of illicit networks and increase the capacity of weak states to counter them effectively.

Reflections on CIA Analysis: Is It Finished?

In an article published in the journal *Intelligence and National Security*, National War College Professor Roger

George argues that despite the CIA's improved analytical tradecraft and increased resources, the future of its analytic mission remains in doubt. Post-9/11 improvements have been coupled with a continued focus on current intelligence priorities that minimize attention to the development of strategic research and deeper knowledge. Simply increasing the number of analysts has not produced deeper expertise. The CIA's traditional recruitment and training methods, as well as its rewards and promotion system, encourage analysts to avoid concentrating on any single area, region, or functional expertise, and a continued reliance on risk-avoidance security practices restricts analysts' contact with nongovernmental and foreign experts. To rectify these inadequacies, George contends, the CIA's analytic directorate must develop incentives for analysts who wish to develop more strategic analysis and remove the security barriers to closer collaboration with experts outside the U.S. Government. Developing cross-agency analytic collaboration would also maximize expertise and would benefit from training programs across the Intelligence Community similar to what the U.S. military does at its senior Service colleges.

The Borderlands of Southeast Asia: Geopolitics, Terrorism, and Globalization

In this co-edited volume published by National Defense University Press, Institute for National Strategic Studies Adjunct Fellow James Clad and his co-authors address one of the principal sources of international conflict—disputed borders—and offer new ways of looking at the reality and illusion of bordered Southeast Asia. The field of border studies typically falls between the cracks of several fields of research, but the rigorous attention paid to this ambiguous category allows the volume to touch on the political, social, economic, and cultural implications of a diverse array of border disputes in the region. The work places particular attention on the intensifying diplomacy over offshore petroleum—especially among the claimants to South China Sea territory and resources, in addition to depicting changes in technology that enable a more

aggressive monitoring of boundaries. The editors go on to argue that cross-border terrorism and criminality will engender new forms of interdiction. In general, the volume points to conditions along Southeast Asian borders and among disputant states that are likely to be persistent—and in many cases increasing—sources of international tension.

The Use of Captured Records: Past, Present, and Future

The Conflict Records Research Center's David Palkki presented research at the annual American Historical Association's conference on the historical context of the Secretary of Defense's ongoing efforts to make captured Iraqi and al Qaeda records available to civilian scholars. Mr. Palkki found that capturing adversary records for military use is a common battlefield activity, as is making the records and/or copies of the records available to civilian scholars for subsequent analysis. He found that originals and/or copies of captured records from the British (War of 1812), Confederacy (Civil War), Germans, Italians, Japanese, and Soviets (World War II), Koreans (Korean War), Vietnamese (Vietnam War), and other former U.S. adversaries are now available to scholars at the National Archives and elsewhere. Other countries, including France, Germany, Russia, and the United Kingdom, have similarly retained captured records and made them available to civilian scholars. Mr. Palkki argues that if and when the original records that U.S. troops seized from Saddam's regime are returned to the Iraqi people, this should have no effect on U.S. Government efforts to make digital copies available to civilian scholars at the center.

Optimizing Africa's Security Force Structures

Combating irregular forces has become a common feature of the contemporary African security landscape. Guerrillas fighting perceived disenfranchisement, militias protecting territory and resources, and private armies hired by illegal miners, loggers, and smugglers pose in-

creasingly destabilizing threats. The growing collaboration in West Africa of narcotics traffickers and al Qaeda in the Islamic Maghreb, with revenues running into the tens of billions of dollars, adds a new dimension with unparalleled reach to this mix. Increasingly, many of these groups are embedded with local populations.

As Helmoed Heitman explains in this Africa Center for Strategic Studies' Africa Security Brief, the security sector in most African countries is not configured to conduct effective counterinsurgency operations. Limited resources are one challenge, but often the equipment and structure of Africa's armed forces are not suited to the type of operations they confront. Nor are these problems sufficiently addressed by security assistance initiatives or typical security sector reform programs. Rather, efficiencies can be significantly increased by optimizing force structures that are threat and context appropriate and which build security sector professionalism to gain the trust and acceptance of local communities.

Urban Fragility and Security in Africa

Estimates are that more than half of all Africans will live in cities by 2025. This rapid pace of urbanization is creating a new locus and contours of fragility in many African states—as evidenced by the burgeoning slums around the continent's urban areas. The growing concentration of large numbers of unemployed youth is simultaneously amplifying the susceptibility to poverty-induced instability. These evolving stresses are illustrated, in part, by recent urban riots in Burkina Faso, Cameroon, Senegal, Mozambique, and Mauritania, among other African countries, which broke out in response to rising prices of food, clothes, and gasoline.

In this Africa Center for Strategic Studies' Africa Security Brief, Stephen Commins assesses the implications that these changes have for Africa's security. Growing levels of urban violence, crime, fear, and insecurity are symptoms of weak and illegitimate governance, inequitable development, and inaccessible legal structures. Approaching urban fragility solely as a security problem will result in short-term instruments that are disconnected

from underlying causes of insecurity. Rather, investments in urban governance, development, livelihoods, community policing, and programs to help stem the volume of urban migration are needed as part of a comprehensive security-development strategy to address urban fragility.

Nigeria's Pernicious Drivers of Ethno-Religious Conflict

Communal clashes across ethnic and religious fault lines in central Nigeria since the mid-1990s have claimed thousands of lives, displaced hundreds of thousands of others, and have fostered a climate of instability throughout the surrounding region. These clashes are growing in frequency and intensity. Several largescale attacks in 2010 saw new, increasingly lethal tactics including car bombings and widespread hate propaganda. Boko Haram, Nigeria's notorious home-grown violent Islamist group, has for the first time become involved, claiming credit for an attack that killed 80. Government responses to the conflict are widely perceived as ineffective, allowing it to worsen and prompting communities to turn to self-help measures and nonstate actors.

In this Africa Center for Strategic Studies' Africa Security Brief, Chris Kwaja examines the drivers and persistence of Nigeria's intra-societal violence. While the conflict is often characterized as inter-religious or inter-ethnic, these explanations veil the legal statutes that enable local political leaders to deny citizens access to resources, basic rights, and participation in political processes. Left unaddressed, this conflict has the potential to spread to other regions of the country. Fundamental legal reforms are needed to reverse the political incentives feeding this violence. In the meantime, improvements in the security services' responsiveness and commitment to protect minorities are needed to alter the trajectory of this conflict and reduce affected communities' inclination to turn to vigilantism.

Africa's Evolving Infosystems: A Pathway to Security and Stability

The Africa Center for Strategic Studies hosted a roundtable on 3 May to examine the implications

flowing from Africa's quickly evolving information environment. One in four Africans now has a mobile phone. This is rapidly transforming the continent from an information-scarce to an information-rich context.

Roundtable panelists, Steven Livingston from The George Washington University, Jonathan Gosier of Swiftriver Ushahidi, and Eric Chinge from the World Bank offered insights on how growing access to mobile phone and social media in Africa is reshaping governance, accountability, and security relations around the region—vividly seen in the popular protests in North Africa, to real-time election monitoring in Nigeria, and the documenting of alleged police abuses in Nairobi. Takeaways from the event included:

1) Support IT innovation centers. The catalyst for many of the Information and Communication Technology (ICT) changes unfolding in Africa is coming from within the continent itself. Supporting these centers will help ensure the continued expansion and application of these emerging information technologies toward Africa's pressing governance and security challenges.

2) Expand and sustain radio's reach. While the growing accessibility of ICT is changing communication patterns in Africa, the majority of people still rely on radio. Equipment and training to support community radio in Africa will help build more cohesive societies while complementing the new capabilities generated by ICT.

3) Expand on communication links between peace operations and communities. Innovative ICT initiatives such as 24-hour "call centers" and "Rapid Response and Early Warning Cells" undertaken by the UN peacekeeping mission in the Democratic Republic of the Congo have established unprecedented connections between peacekeepers and local communities, dramatically improving real-time information, responsiveness, and trust.

NATO/ACT Experiment: Countering Hybrid Threats

The Center for Complex Operations and Center for Transatlantic Security Studies supported the recent NATO/ACT experiment on Hybrid Threats (HTs),

which surfaced considerable insight into the nature of HTs, including how they are perceived by different nations, institutions, and agencies—as well as how they can be defeated. The challenges are immense, not only because the threat is complex and many-faceted, but also because the design of relevant strategies to counter it is fraught with practical and institutional problems.

HTs encompass a variety of adverse circumstances and actions, such as terrorism, migration, piracy, corruption, ethnic conflict, and so forth. What is new is the possibility of facing the adaptive and systematic use of such means by single actors in pursuit of long-term political objectives, as opposed to their more random occurrence, driven by coincidental factors. HTs are not in any way an exclusive tool of asymmetric or nonstate actors, but can be applied by state actors as well. Their attraction from the point of view of state actors is that they can be nonattributable, and therefore applied in situations where overt action is ruled out for any number of reasons.

Countering HTs is about new understanding of such threats and the innovative use of existing capabilities to meet these new challenges, rather than about new hardware. The relevant countermeasures are largely included in the already existing comprehensive approach, an increasingly consolidating NATO concept; however, NATO needs a deeper conceptual grip on the kind of hybrid threat/comprehensive response cycle, of which Afghanistan is but one example.

China and Pakistan: Emerging Strains in the Entente Cordiale

In a study commissioned and published by the Project 2049 Institute, the Center for the Study of Chinese Military Affairs' Isaac Kardon provides context for ongoing American efforts to attain mutually supportive Chinese efforts in Pakistan by combining a historical examination of China's relationship with Pakistan during the Cold War and post-Cold War periods with political analysis of PRC foreign policy ambitions and the diverse challenges posed by Pakistan.

Despite perceptions in Washington and New Delhi that China enjoys unique privileges and exercises

inordinate influence in Pakistan, Beijing has shown little inclination to directly shape Pakistani behavior. As China's global portfolio of economic and security interests expands, it is increasingly sensitive to new opportunity costs entailed in sustaining the Sino-Pakistani partnership. The maturing commercial and political interests of the civilian leadership in Beijing are not always aligned with the strategic interests expressed in the longstanding and substantive Sino-Pakistani military relationship. The study focuses on three actual and potential sources of change in Chinese policy toward Pakistan: 1) a dramatically altered geopolitical context for the post-Cold War Sino-Pakistani entente; 2) evolving priorities in Beijing over the past decade; and 3) Chinese concerns about Pakistan's reliability as a partner. Special attention is devoted to Beijing's efforts to ensure the security of Chinese citizens, investments, and commercial interests within Pakistan. Under these circumstances, the author concludes that shared animosity toward India alone is insufficient to sustain and promote the Sino-Pakistani entente.

Joint Interagency Task Force-South

In the Center for Strategic Research's Strategic Perspectives No. 5, Dr. Chris Lamb notes that while Joint Interagency Task Force (JIATF)-South is well known within the U.S. Government as the "gold standard" for interagency cooperation and intelligence fusion, how it actually operates has received only superficial attention. In fact, very few people actually understand why JIATF-South works as well as it does or how its success might be replicated. Now, in what a long-time civilian leader at JIATF-South has cited as "the very best" study ever done on the organization, the way JIATF-South generates interagency collaboration to great effect is revealed and offered as a model for other interagency missions.

The study traces the evolution of JIATF-South from its roots in the "War on Drugs" in the 1980s, through its original manifestation as Joint Task Force-4 in the early 1990s and its later reinvention as Joint Interagency Task Force-East (and still later, its renaming as JIATF-South), up to the present day. It then uses 10

organizational performance variables taken from organizational and management research on cross-functional teams to examine how JIATF–South actually works. The resultant analysis yields a compelling explanation for JIATF–South’s stellar performance and helps explain how successes like JIATF–South can be replicated elsewhere in the national security system. In fact, Department of Defense officials have already stated that the study is useful for the construct of similar international and interagency organizations under development by U.S. European Command.

PEAK Operational Demonstration

The Center for Technology and National Security Policy serves as the technical manager for the Pre-Positioned Expeditionary Assistance Kits (PEAK)–Joint Capability Technology Demonstration. PEAK is a joint, interagency, and partner nation project over fiscal year 2010–2011.

PEAK components will help provide water purification, local communications, and local situational awareness in time-sensitive events. It will enhance partner nation capabilities to carry out key missions through proactive U.S. military to foreign military engagement and through U.S. civilian organization to foreign government engagement, will improve partner nation ability to provide critical services for targeted purposes during the first days of a natural or manmade crisis through a structured planning process involving public, private, whole of government, and transnational participants, and will collaboratively enhance regional stability.

After conducting an Operational Demonstration and assessment of the prototype full-capability PEAK in conjunction with Joint Task Force–Bravo and Honduran Emergency Management Officials at Soto Cano Airbase, Honduras, in early 2011, the prototype kit was redesigned and configured to enhance its composition, mobility, and deployment capabilities.

Currently, the mature PEAK system is undergoing technical testing and health hazard assessments at the Aberdeen Test Center to acquire a Safety Certification.

Preparation and training is under way for a final Technical Demonstration of PEAK and its component capabilities at Fort A.P. Hill, Virginia, in July. Preparations are also under way for the final Operational Demonstration and Utility Assessment in Honduras in September. The PEAK management team is exploring several transition partners including the United States Army Training and Doctrine Command. Countries such as the Philippines have demonstrated interest in purchasing PEAK kits.

PEAK will continue to demonstrate and transition an array of capabilities that can be prepositioned to help provide sustainable essential services in time-sensitive events and enhance U.S. combatant command capability for ensuring security and enhancing stability within their respective geographic areas of responsibility during crisis events.

Analysis of the Threat of Genetically Modified Organisms for Biological Warfare

This Center for Technology and National Security Policy’s Defense & Technology Paper, by Jerry Warner, James Ramsbotham, Ewelina Tunia, and James J. Valdes, establishes an analytical framework for evaluating the threat posed by Genetically Modified Organisms (GMOs), particularly those created using synthetic biology. The threat comprises an extremely diverse set of potential actors, objectives, targets, agent organisms, and a wide range of practical approaches for acquiring, modifying, and delivering threat organisms to their intended targets. The central question that the study addresses is the nature and scope of the threat, if any, posed by GMOs, to include the potential to develop completely de novo organisms or completely artificial abiotic systems.

The analysis focuses on a catastrophic biological attack with a level of damage associated with biological warfare rather than bioterrorism. The paper lays out essential technical requirements and alternative approaches available for developing a practical threat GMO. The focus is on the engineering of novel single-cell microorganisms previously unknown in nature.

Taking into account the range of potential threat actors and objectives, the study concludes that the potential for corruption of biotechnology to catastrophic malevolent use is considerable and that there are tangible opportunities for potential adversaries to acquire, modify, and manufacture to scale a potential GMO pathogen. Also, development of a modified pathogen for use in a full-scale direct catastrophic biological attack is feasible, but it will most likely require the resources of a nation state or a comparably resourced organization. Further efforts in concert with a science-based approach are needed to expand and utilize this analytical framework in order to better characterize the future threat from GMOs.

The Monopoly of Force: The Nexus Between DDR and SSR

The unique role of the institutions of force in society, and in particular in the formation and identity of the state, has in recent decades gained renewed focus. Current international practice implicitly accepts the link between the monopoly of the legitimate use of force and sovereignty. The new polities of Iraq and Afghanistan are being built around the effective rule of law sustained by national armed forces and national police institutions. Substantial resources have been dedicated to building the security forces of both Iraq and Afghanistan, and it is widely acknowledged that the futures of these two countries depend on the successful development of their respective security forces.

Disarmament, demobilization, and reintegration (DDR) and security sector reform (SSR) have emerged in recent years as promising though poorly understood tools for consolidating stability and establishing sovereignty after conflict. Even with the considerable experience acquired, the ability to use these tools with consistent success remains less than optimally developed. Over the past 18 months, the Center for Complex Operations has organized conferences and workshops dealing with DDR, SSR, and developing local law enforcement capacity in nonpermissive and postconflict environments. Initial findings from

these efforts are published in *Monopoly of Force: The Nexus Between DDR and SSR*. The essays in this edited volume reflect the diversity of experience in DDR and SSR, the complexity of the operational dimensions of both, and the nexus between the two. The research validates the potential of DDR to restore the monopoly of force to the state, as well as SSR to establish the legitimacy of that monopoly.

Next Generation Interventions—Learning from Haiti

The lessons of small interventions are as important as those from large interventions. Most observers agree that future U.S. interventions will be small and low budget, will require the United States to work closely with donor nations or international organizations, and others may be in the lead on security. The Haiti Stabilization Initiative (HSI) was a civilian-led interagency effort, working with the United Nations and other donors, to do zone-based stabilization in violent urban slums under criminal control.

Counterinsurgency (COIN) theory touts “clear-hold-build” as the key sequence, but HSI successfully used a “clear-build-hold” sequence because the police and government were not ready to return to the zones, leaving the community to take action itself. A “community counterinsurgency” approach successfully created credible local leaders, gained local buy-in, isolated the once-popular dominant gangs, and brought police back to communities without requiring a massive military presence. One should apply lessons from community policing in COIN situations, just as COIN lessons may serve well in violent urban slums.

As elaborated in the Center for Complex Operations’ journal *PRISM* 2, no. 2, in a multiagency, multisector program without a single chain of command, there is a need to “unify effort” by setting shared multiagency agreed goals and interagency agreed metrics that measure overall outcomes. Interagency agreed outcome measures exist, such as the Measures of Progress in Conflict Environments (MPICE) system, but

individual agencies often ignore common measures in favor of agency or project specific measures. Leadership should require cross-agency outcome measures. A good measurement system needs to be independent and use multiple data sources (statistics, surveys, focus groups, photo analysis, media analysis, etc.) for each metric. This allows triangulation of data for each outcome, which ensures credible results and settles interpretation disputes.

Exercise Shrouded Horizons

The Center for Applied Strategic Learning conducted its second National Security Policy Analysis Forum (NSPAF) exercise, Shrouded Horizons, on 2 June. The exercise focused on mass atrocities prevention and included high-level participants from the Executive Branch, along with representatives from nongovernmental organizations (NGOs) and the academic community. The overall goal was to help identify the tools and strategies that the U.S. Government and its partners can most effectively use to prevent and mitigate mass atrocities while also elucidating the challenges in mobilizing effective action. The use of the NGO and academic community was vital to exploring the holistic approach required to combat, prevent, deter, and/or mitigate the damages caused by mass atrocity events.

The preponderance of discussion in Shrouded Horizons focused on the ways in which the nature and dynamics of potential mass atrocities crises pose particular challenges to coordinating a U.S. and international response, as well as possible ways to resolve or ameliorate them. Coordinating a U.S. response to a mass atrocity is made more difficult by timing and complexity factors. Early intervention is the most effective and least costly way to address these kinds of crises, but the early stages are the most difficult ones at which to gain attention, let alone galvanize action, from policy leaders. There is also the problem of overcrowding; there are a large number of actors—from NGOs to Embassies to the different parts of the U.S. interagency community and international community—involved. These diverse actors have differ-

ent information sets and capabilities at the various stages in a mass atrocities crisis.

Applications in National Security Strategy Course Exercise

The Center for Applied Strategic Learning conducted its first National War College 6600 “Applications in National Security Strategy” course exercise from 20–22 April. The exercise, employing a scenario based on U.S.-Mexico relations, focused on implementing policy directives with a whole of government approach at the national level.

The exercise explored the vital U.S.-Mexico relationship, acquainting students with the historical, social, economic, and security perspectives of the Nation’s closest neighbor and a key trading partner; moreover, it confronted students with the challenge of orchestrating the activities of both domestic and foreign policy agencies, owing to the unique interdependence that exists between the United States and Mexico. It assigned students to represent various Executive Branch departments and agencies, and work in 13-person seminars to collectively write a five-page Strategic Implementation Plan (SIP) to support Mexico’s development of governmental capacity, build the Mexican and U.S. economies, and counter transnational criminal organizations. Discussion was based on lessons from the students’ previous five core national security courses and centered on balancing the whole of government priorities and resources, roles of the government agencies, and risks and challenges inherent to an SIP.

The exercise sensitized students to the complexities of whole of government approaches by placing them in the position of articulating how individual agencies would be able to support Presidential policies and by requiring them to prioritize their programs in line with national priorities and resource constraints. Additionally, it required them to develop risk mitigation strategies that could protect program priorities in the face of U.S. domestic changes as well as Mexican political developments. In this manner, students came to appreciate the

importance of understanding the range of U.S. Government agencies required to develop effective national policies and the necessity for preparing for changes in their programs should U.S. domestic or foreign policy issues arise.

Biomarkers for Hardiness-Resilience: Psychological Hardiness and Cholesterol

When exposed to stress, many people experience degraded health and performance, while others show more resilient, healthy response patterns. It is important to gain a better understanding of what factors contribute to this stress resilience. One psychological quality that distinguishes healthy, resilient stress responders from unhealthy ones is the hardy-resilient style. This is a generalized mode of functioning that includes (1) *commitment*, an active engagement and interest in life; (2) *control*, the belief that one can control or influence outcomes; and (3) *challenge*, an adventurous, exploring approach to living. People high in these tendencies have been found to be more resistant to the ill-effects of extreme stress.

In a collaborative study, Drs. Paul Bartone and James Valdes from the Center for Technology and National Security Policy and Tony Spinosa and LTC Joel Robb of NDU Health Fitness explore the underlying biophysical processes associated with psychological hardiness, examining possible links between hardiness-resilience and cholesterol levels. As part of the study, adult subjects completed a short mental hardiness scale as well as standard blood cholesterol tests. The study group includes civilian and military workers in the national security sector. Correlation and regression results confirm that hardiness (challenge) is positively associated with increased levels of high-density lipoprotein (“good” cholesterol), and negatively tied to cardiovascular risk (total cholesterol/HDL). While further research is needed to clarify the basic underlying mechanisms, this is the first study to demonstrate a clear link between mental hardiness (resilience) and cholesterol levels, which are involved in a variety of important bodily functions related to stress and health. The posi-

tive coping expectations that high hardy persons form may have a direct impact on HDL production, which in turn serves to protect against cardiovascular disease. This research should lead to more effective approaches for developing mental hardiness in the defense work force, and thus increased resistance against stress-related health problems.

The New Security Environment: Implications for American Security in the Asia Pacific Region

The Centers for Strategic Conferencing and Research co-hosted a symposium focused on Asia Pacific security dynamics from 4–5 April. The event, drawing upon research done by the East-West Center and the Naval Postgraduate School that examines how key nations view the changing international security environment, focused on the state of U.S. global and regional dominance, views from the region, and the implications for U.S. security. Conference takeaways included:

1) No country is likely to replace the United States as the dominant global power over the next 10 to 20 years, but the relative U.S. power advantage will likely decline as others rise. No true multipolarity (with roughly equal great powers), though, will exist.

2) The United States will likely find its dominance contested on specific issues, domains, and geographic areas by rising powers and coalitions of powers. One foreign expert noted that it is much easier for rising powers to frustrate U.S. leadership than to lead on their own.

3) Experts expressed skepticism about the ability and willingness of China, India, and other rising Asian powers to take responsibility for providing public goods that do not advance their narrow national interests. Many view U.S. leadership as essential for catalyzing collective action, but want that leadership to be expressed in a manner consistent with regional norms and interests.

North Korea Regime Futures

In conjunction with the Korea Economic Institute, the National War College published a white

paper arguing that North Korean society has evolved dramatically over the last decade under the influence of a collapsing state sector and rising markets and market mentalities. Professor and Dean for Research Mike Mazarr, primary author of the white paper, recommends a three-part strategy to prepare for possible future contingencies: 1) address hard questions through U.S. interagency and multilateral policy processes designed to think through difficult issues before crises arrive; (2) develop mutual understandings through multilateral dialogue to such problematic issues as humanitarian response and weapons of mass destruction control in crises; and 3) pursue an active posture to invest in trends in North Korea by taking a number of steps, from enhancing contacts with DPRK officials to encouraging private-sector investment, in order to gain additional information, build relationships, create human and physical capital, and in other ways generate insurance against various regime futures scenarios.

Transformative Innovation for Development and Emergency Support (TIDES) Exercises

The Center for Technology and National Security Policy, through its TIDES program, and the Naval Postgraduate School held their third RELIEF (Research and Experimentation for Local and International Emergency and First Response) experiment at Camp Roberts, California, from 2–6 May. RELIEF enhances capabilities for the first responder and crisis response community by providing possible solutions to challenges brought about by natural and manmade disasters in both domestic and international environments, as well as creates linkages between nongovernmental organizations, local, state, and Federal entities, and the military to achieve common goals of postdisaster recovery. The May exercise examined geospatial awareness functions of the Defense Department’s QuickNets situational awareness project. Participants used crowd-sourced technologies to run mock application of QuickNets in order to test its integrated mapping and GIS (geospa-

tial information systems) imagery tools. Additionally, RELIEF participants took part in testing rescue and relief technologies such as portable tents, participated in a mock evacuation drill, and reviewed and integrated imagery from the unmanned aerial systems into existing GIS platforms for humanitarian assistance and disaster relief purposes.

From 16–19 May 20, TIDES participated in FEMA’s National Level Exercise (NLE) 11, an operations-based exercise that examined response and recovery capabilities both nationally and regionally. NLE is an annual exercise that simulates a mass-scale event on U.S. territory. This year, it simulated a massive earthquake in the Mississippi River area that affected eight states. During the week-long exercise, TIDES visited the NLE Master Control Center and traveled to the Business Emergency Operations Center at the New Jersey Institute of Technology, a project that connects the private sector activities to the Federal, state, and local disaster response teams. The team attended the out brief and exchanged information with FEMA officials.

Interagency Human Terrain Programs and Requirements

The Center for Complex Operations hosted a conference to gather interagency perspectives on human terrain related programs and requirements in complex operations. This is in the context of ongoing research in the center, which continues to identify a lack of societal situational awareness and limited understanding of the human terrain as a major roadblock to mission success.

Presentations and discussion sessions showed that in response to increased requirements for better understanding of the human terrain, civilian and military organizations have developed several formal and informal mechanisms for collecting, analyzing, managing, and sharing human terrain data. Similarly, there has been an enhanced drive to engage and develop relationships with appropriate elements of the indigenous population. Methodologies for assessing societies have also been developed to better understand the conflict, the local

context, what actions should be prioritized, and how to measure progress.

Despite several improvements to human terrain collection, analysis, and information management efforts, attempts to improve human terrain related capabilities have fallen short and have been limited to isolated or only partially coordinated efforts, with little synchronization. A proliferation of human terrain related databases and IT packages has also occurred, complicating access to and understanding of information already collected. Furthermore, various ethical and legal questions surrounding human terrain focused research and analysis have yet to be fully resolved. Conference panelists contributed several suggestions for improvement, including two overarching concepts: 1) an improved human terrain capability is beyond any one agency and must be an interagency endeavor; and 2) a coordinating body for directing human terrain programs and projects across the interagency community must be established.