

2. HOMELAND DEFENSE, COMBATING TERRORISM, AND ASYMMETRICAL WARFARE

**[Related Topics: 1.7, 1.9, 1.16, 1.21, 1.24, 1.44, 1.46, 4.1, 4.8, 4.11,
5.2, 5.5, 5.10, 5.11, 5.15, 5.17]**

HIGHEST PRIORITY TOPICS FOR FY 09 (2.1 THROUGH 2.9):

2.1 How should we structure US military forces for homeland security/homeland defense?

- Do we need to rethink Total Force component roles and missions? Structures, relationships, and legal/resourcing structures?
- Are soldier skill sets and associated mental requirements so different in the HD environment to dictate a dedicated force?
- What is the optimal Title 10/Title 32 force mix?

POC: Dr Houston Polson, N-NC/J72, 719-554-7182, DSN 692-7182

(houston.polson@northcom.mil)

Priority: 1a

Key Terms: Total Force, National Guard, Title 10, Title 32

2.2 What is the “next phase” in the war on terror, and how do we best prepare for it?

- Define/characterize the “next phase”; how do we recognize the transition?
- How should we best refocus our efforts; plan for the transition?
- Do current force capabilities and structures match future requirements? How do we mix preparation, transformation, and hedging?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 1a

Key Terms: terrorism phases, insurgency, political violence

2.3 Design and operationalize quantitative models for intelligence threat analysis.

- Model to analyze terrorism and terrorism organizations.
- Design metrics to determine progress in combating terrorism.
- Test models against known data sets/cases.
- Designate data requirements for analysis.

POC: Mr Rob Cordray, N-NC/J22AV, 719-554-8640 (robert.cordray.ctr@northcom.mil)

Priority: 1a

Key Terms: modeling and simulation, measures of effectiveness

2.4 What are the next/emerging homeland defense areas and issues of concern, and what strategies might best address them?

- Identify and develop emerging HD issues and areas of concern that DoD should be preparing to address.
- What emerging HS issues will likely affect DoD, and how should we prepare?
- Suggest a process for DoD to scan over-the-horizon to identify and assess emerging issues.

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 1a

Key Terms: emerging issues, international and domestic environmental scanning, strategic planning

2.5 How will changing environmental and energy factors impacting Canada and Mexico affect US homeland defense?

- With Mexico at peak oil, what are the resulting long-term energy/economic factors affecting Mexico, the United States, and the relationship between the two nations?
- How might global warming effects limiting Mexican food production interact with the energy issues to shape Mexican and US-Mexican relations?
- With the prospect of global warming increasing Canada's food production potential, how does Canada play in the US-Mexico scenarios above?
- What issues are raised by the possibility of the opening of a northern sea passage between Canada and Russia? With what impact on US security?
- What is the prospect for broadened hemispheric cooperation, and does it extend toward the security dimension?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 1a

Key Terms: peak oil, global warming, hemispheric security cooperation

2.6 What are the critical emerging issues in civil-military medical disaster response, and how might we address them?

- Analyze legal issues, interstate compact agreements and standards, and the lack of universal accession to those agreements.
- Analyze moral issues (e.g. human remains handling and disposal, public health and welfare) arising in these scenarios.
- Identify and assess domestic cross-border issues and solutions.

POC: Dr Houston Polson, N-NC/J72, 719-554-7182, DSN 692-7182

(houston.polson@northcom.mil)

Priority: 1a

Key Terms: federalism and homeland security/defense

2.7 How can we effectively integrate domestic intelligence sharing to achieve a common operating picture?

- Identify and assess challenges from operating in an incomplete intelligence environment. Are there primary methodologies that limit risk here?
- Assess information sharing across stovepipes at each of the federal/state/local levels, and up and down between those levels both within and across functional or organizational stovepipes. Are there models or cases that inform improvements?
- Analyze limits and barriers both to information and collection. What are the primary issues with DoD collection systems and processes within the US (when specifically authorized and directed)?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 1a

Key Terms: federalism and intelligence, risk management, domestic intelligence collection

2.8 What should be the policy for post-conflict personnel accounting following terrorist events?

- Current policy does not place DoD in the “supported” role for victims of terrorism. Post 9-11 and given the global war on terror today, what are the issues and impacts of changing this policy?
- Address both the domestic and international dimensions of this policy arena.

POC: Lt Col William Thomas, OSD-DPMO, 703-699-1164, DSN 499-1164
(william.thomas@osd.mil)

Priority: 1a

Key Terms: personnel accounting, MIA, KIA

2.9 Analyze the groups that have dropped off of the annual Department of State list of terrorist groups of concern.

- Can we determine the reasons they have been dropped, and categorize the groups around the primary factors that have altered or mitigated their threat profile?
- What does this analysis tell us about terrorist group life cycles, and group generational changes and dynamics?
- Does this analysis suggest elements of strategy for the US to pursue to influence these dynamics in combating terrorism?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 1a

Key Terms: terrorist group life cycles, terrorist organizational dynamics

OTHER TOPICS FOR FY 09 GROUPED BY PRIORITY TIER (2.10 THROUGH 2.26):

2.10 Do U.S. government definitions of Homeland Defense (HD) and Homeland Security (HS), as reflected in current strategies, generate clear expectations regarding DoD and DHS respective roles and missions?

- Are there ambiguities and overlaps between DoD and DHS roles and missions?
- What is the operational effect; e.g., are there important overlaps and/or seams between HD and HS activities?
- Do the definitions set clear expectations for the public? Are steps needed to clarify these roles and missions? If so, make appropriate recommendations.
- What case studies provide illustrations of the expectations regarding DoD and DHS roles and missions?

POC: Dr Houston Polson, N-NC/J72, 719-554-7182, DSN 692-7182
(houston.polson@northcom.mil)

Priority: 1

Key Terms: homeland defense, homeland security, definitions, expectations, roles and missions, DoD, DHS

2.11 How can an analyst achieve a temporal paradigm shift such that he can model the situational perceptions, ideology, and decisionmaking of extremist groups?

- How can terrorist paradigms be infused into a “Red Team” of diverse analysts such that, for example, the team is able to emulate the decision-making of a Sunni extremist planning cell in the United States?
- How can this infusion process take place in a conference room setting, given multimedia equipment and/or other instructional/sensitization materials?
- Given only 4, 8, or 16 hours for instruction/sensitization, what data should be introduced and how should it be presented to maximize the effectiveness of the infusion process?

POC: POC: Mr. Rob Cordray, N-NC/J22AV, 719-554-8640
(robert.cordray.ctr@northcom.mil)

Priority: 1

Key Terms: Key Terms: Terrorism, Threat Analysis, Red Teaming, Cultural Intelligence, Ethnography, Cultural Anthropology, Psychology

2.12 How do we combat the “spontaneous terrorist?”

- Focus on those who are not affiliated with, supported by, or led by established groups.
- What are the triggers for these sympathetic “bystanders” to take violent action?
- What are the indicators and where do we look for them?
- How can we best intercede to dissuade such action?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 1

Key Terms: Spontaneous terrorist

2.13 Identify and assess adversaries’ concepts related to Chemical, Biological, Radiological and Nuclear (CBRN) weapons use.

- Select a region, nation, or non-state actor and analyze its potential for employment of CBRN weapons. (Or analyze an al Qia’da franchise.)
- Consider the political and military purposes of use or threat of use.
- Analyze an adversary’s internal political-military dynamic (leadership), rhetoric or stated doctrine, and historical use (if any).
- How likely is an adversary to use CBRN weapons or devices? How can the US deter state and non-state actors from using such weapons? Are current counter-CBRN (C-CBRN) operations an effective deterrent against the use of CBRN devices by state or non-state actors?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 1

Key Terms: CBRN, NBC, radiological, U.S. response, historical use, adversarial use of NBC, deterrence, terrorism, state actor, non-state actor

2.14 What are the implications for DoD of catastrophic terrorist incidents, including at casualty levels well beyond current planning?

- What will the US public and Congress expect of DoD?
- When and how far should DoD “lean forward” in preparation for catastrophic events?
- Develop specific scenarios and determine likely requirements for DoD support.
- Conduct survey of current DoD and other federal capabilities.
- If DoD is directed to provide maximum support, would DoD become the Lead Federal Agency (LFA)? What would be the likely effect on DoD capabilities for other operations?
- What are the implications for DoD planning and programming?
- What is a reasonable casualty threshold for planning?
- When and under what conditions should DoD transition its responsibilities to civil authorities?

POC: Dr Houston Polson, N-NC/J72, 719-554-7182, DSN 692-7182

(houston.polson@northcom.mil)

Priority: 1

Key Terms: mass-casualty, mass effects, planning, civil authorities

2.15 How important is cruise missile/UAV defense (e.g., homeland, theater) to future U.S. security strategy?

- What is the status of existing cruise missile defense capabilities?
- What emerging technologies exist for cruise missile defense?
- What is the threat? How might an adversary use commercial UAVs as warfighting weapon or weapon of terror? Combined with CBRN?
- What are the costs involved?
- Examine gaps and seams in NORAD/FAA response capabilities.
- Define the cruise missile threat/the UAV threat.
- How is it possible to regulate UAVs? Assess the extent to which current domestic and international flight regulations apply to UAVs.
- Would proliferation prevention measures be effective against this threat? Why or why not?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 1

Key Terms: cruise missile, missile defense, UAV

Note: This research will likely be classified.

2.16 What are the Centers of Gravity (COG) associated with homeland security (HLS) and/or homeland defense (HLD)?

- Does the United States have a National COG(s)? What must the nation do to protect that COG(s)?
- Does designating a National COG help synchronize the application of the instruments of National Power (DIME: diplomatic, informational, military, economic)?
- What is/are the Military COG(s) associated with HLD?
- Developed a new paradigm on how to determine COGs. Is there a new methodology for the new strategic environment? Is there new methodology?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 2

Key Terms: Center of gravity (COG), diplomatic, informational, military, economic (DIME), homeland security (HLS), homeland defense (HLD)

Note: This research will likely be classified.

2.17 How can DoD best contribute to Combating Ideological Support to Terrorism (CIST)?

- NMSP-WOT lists several “indirect” approaches such as understanding that how we plan and conduct our operations can impact on adversary ideology. Are there other indirect approaches and considerations?
- Are there more direct approaches appropriate for DoD?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 2

Key terms: public diplomacy, strategic information, Combating Ideological Support to Terrorism, CIST

2.18 Examine the intersections between Force Protection, Homeland Security (HLS), and Homeland Defense (HLD) in achieving C-CBRN objectives; discuss the organizational stove-pipes and propose solutions to better leverage the efforts of the various military (active, guard, and reserve) and other government organizations.

- Determine/define the intersections between relevant DOD and other government organizations.
- Discuss potential synergies and redundant efforts
- Conduct a gap analysis to determine how C-CBRN could be better integrated into Force Protection, Homeland Security and Homeland Defense.
- Are there different implications for peacetime vs. wartime in terms of organizational lines of authority for C-CBRN?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 2

Key Terms: force protection, homeland security, homeland defense, C-CBRN, CBRN

2.19 CBRN events are not confined to a given “bordered” area. What are the constraints to NORAD/NORTHCOM interactions across international borders (both Mexico and Canada) and how might they be addressed (legal, international, treaty, physical)?

- What are the homeland defense/civil support implications of each border, both from US to the other nation, and from the other nation to the US?
- What about maritime (coastal) areas (including Great Lakes)?

POC: Dr Houston Polson, N-NC/J72, 719-554-7182, DSN 692-7182

(houston.polson@northcom.mil)

Priority: 2

Key Terms: International borders, constraints

2.20 Assess the applicability of Wall Street predictive techniques to combating terrorism.

- Consider risk management analysis, comparative analysis, and other analytical forecasting and analysis tools.

- Can they be adapted or applied to terrorism?
 - How might we incorporate these techniques into operational and strategic planning?
- POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)
Priority: 2
Key Terms: risk management, modeling, terrorism

2.21 Examine how recent terrorist actions/attacks have affected regional security cooperation.

- How has the perceived need for greater security against terrorism affected border controls and other aspects of national and regional security?
 - How have differing perceptions of the threat from terrorism affected regional security cooperation?
 - Explore the role of regional security organizations in fighting terrorism.
- POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)
Priority: 2
Key Terms: globalization, terrorism, nation building, multilateral organizations, failed states, regional stability, soft power

2.22 Given the limitations of Posse Comitatus, where are the lines between law enforcement and force protection/quarantine?

- How will the exceptions under the Insurrection Act (Title 10 USC, Sections 331-335); Assistance in the case of crimes involving nuclear materials (Title 18 USC, Section 831); and Emergency situations involving chemical or biological weapons of mass destruction (Title 10 USC, Section 382) be applied?
- How will Active Duty forces ramp up, coordinate and integrate with the National Guard forces (not in Title 32 status) that will likely already be performing these duties?
- How far can a military installation commander go to respond to a CBRN incident off the installation under immediate response authority and what, if any, immediate response actions require application of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. & 5121 et seq) before they can be implemented?

POC: Dr Houston Polson, N-NC/J72, 719-554-7182, DSN 692-7182

(houston.polson@northcom.mil)

Priority: 3

Key terms: Posse Comitatus, CBRN, WMD, CW, BW, Robert T Stafford Disaster Relief and Emergency Assistance Act, WMD

2.23 What are DoD's and NORTHCOM's roles in critical infrastructure protection (CIP) and protecting the defense industrial base (DIB)?

- How does DoD plan for CIP when the potential target set is huge?
- How should DIB be defined? How is/should the CIP be prioritized?
- What are/should be NORTHCOM's roles in protecting the DIB? CIP?
- What capabilities/force packages are required for protecting and defending CIP and DIB?

POC: Dr Houston Polson, N-NC/J72, 719-554-7182, DSN 692-7182
(houston.polson@northcom.mil)

Priority: 3

Key Terms: critical infrastructure protection, CIP, defense industrial base, DIB

2.24 What is the optimal USG organization for the new strategic environment?

- How should the USG structure itself in order to effectively execute synchronized and integrated multi-agency operations around the globe?
- How would reorganization empower leadership's authority to compel across the interagency?
- Do we need a "Beyond 'Beyond' Goldwater-Nichols?"
- Should DoD and State align their respective global regions? Would this help integration efforts?"

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 3

Key Terms: Beyond Goldwater-Nichols, interagency, global regions, new strategic environment

2.25 Can international crisis management and domestic incident management be integrated?

- Characterize international crisis and domestic incident management.
- Are these crises and incidents different in terms of objectives, outcomes, processes, and requirements?
- If so, can these objectives, outcomes, processes, and requirements be synthesized?
- What features might characterize a synthesized system for managing both international security crises and domestic incidents?
- How are we integrating with the global community on threats that originate outside the US but could affect us?
- Conduct comparative case analyses of how other US government agencies and/or how other national governments characterize/organize/ operate in incidents/crises; what implications for integration with DoD efforts?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 3

Key Terms: crisis management, incident management, domestic, international

2.26 Assess potential challenges for civil-military relations from DoD's growing involvement in HD activities.

- Does DoD's growing domestic role pose a potential threat to U.S. civil liberties?
 - What problems could arise, for example, if USNORTHCOM is directed to take the lead at a time of national emergency?
- Are current constraints on DoD's role adequate to preserve the principle of civilian control of the military?
- What measures, if any, are needed to ensure that our freedoms are protected?

POC: Dr James Smith, INSS, 719-333-2717, DSN 333-2717 (james.smith@usafa.edu)

Priority: 3

Key Terms: civil-military relations, civil liberties, civilian control of military