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USAWC KEY STRATEGIC ISSUES LIST 2014-2015

**Strategic Studies Institute
and
U.S. Army War College Press**

ACADEMIC YEAR 2014-15

U.S. ARMY WAR COLLEGE

KEY STRATEGIC ISSUES LIST

**PART I:
ARMY PRIORITIES FOR STRATEGIC ANALYSIS**

**CHIEF OF STAFF OF THE ARMY SPECIAL INTEREST
TOPICS**

Updated October 31, 2014

For over a decade, SSI has published the annual Key Strategic Issues List (KSIL) to inform students, faculty, and external research associates of strategic topics requiring research and analysis. Part I of the Academic Year (AY) 2014-15 KSIL, referred to as the Army Priorities for Strategic Analysis (APSA), has been developed by SSI in coordination with Headquarters Department of the Army (HQDA). The APSA will help prioritize strategic research and analysis conducted by USAWC students and faculty, USAWC Fellows, and external researchers, to link their research efforts and results more effectively to the Army's highest priority topics.

PART I: ARMY PRIORITIES FOR STRATEGIC ANALYSIS
CHIEF OF STAFF OF THE ARMY SPECIAL INTEREST TOPICS

CONTENTS

FOREWORD

Today we continue to face an uncertain, complicated and rapidly changing international security environment. At the same time, the Army has been asked to rapidly draw down force levels, in light of domestic fiscal challenges. In the face of continuing international tensions and budget austerity, the Army's greatest challenge is to provide steadfast support to worldwide operational commitments, to include Afghanistan, while simultaneously preparing a smaller force to conduct a wider array of security missions to counter present and future threats. We are committed to ensure the U.S. Army remains the most highly trained and professional land force in the world.

Research on the topics contained in *Army Priorities for Strategic Analysis* (APSA) will assist us in shaping the Army of the future. We organize the topics to support the five strategic priorities identified in the 2014 Army Strategic Planning Guidance (ASPG).

We must decide how to organize, train, and equip our Army efficiently and effectively, to be prepared for the uncertain global environment ahead of us. To assist in doing so, we publish the APSA. The first in a three-part presentation of key strategic issues, the APSA provides my priorities, questions raised by the Undersecretary, and additional Army priorities for strategic analysis. Part II of the Key Strategic Issues List (KSIL) presents issues submitted by the combatant commands, as well as Army commands and centers. Part III will contain issues submitted by our sister services. Together the three KSIL parts provide an extensive array of issues worthy of research and analysis, but the APSA is the lodestar for Army strategic research and analysis.

I have keen interest in each of the topics listed in the APSA; however, I highlight up front a subset of topics, the analyses of which are truly critical to our future success. I strongly encourage those conducting research at our Service colleges, in our Fellows programs, and elsewhere to consider those important issues. The Army needs your study and analysis today more than ever.

Given today's fiscal environment and the dynamic strategic environment, our vision, direction, and objectives must continue to evolve so that we can adapt to global challenges.

The Army is the strength of the Nation.

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Raymond T. Odierno
General, United States Army Chief of Staff

CHIEF OF STAFF OF THE ARMY SPECIAL INTEREST TOPICS

Adaptive Army Leaders for a Complex World:

1) How can the Army prepare, train, and retain leaders, both uniformed and civilian, with the necessary multifaceted experience to take on a broad range of missions and roles? What is the best way to prepare such leaders to succeed in a world of change, complexity, and uncertainty? (POC: Dr. Don Snider, SSI, don.m.snider.vol@mail.mil, 717-245-3142)

2) How should the Army refine the officer education system to enhance the critical thinking skills and joint/strategic perspective of our officer corps much earlier in their careers? (POC: Mr. Tim Muchmore, HQ G-8, QDR, *timothy.s.muchmore.civ@mail.mil*, 703-614-5591)

3) How can the Army develop and retain transformational leaders at multiple levels to maintain a professional Army culture that fosters "Honorable Service" (defined in ADRP1) by its Ethic? (POC: COL John A. Vermeesch, CAPE, john.vermeesch@usma.edu, 845-938-0475)

4) Examine the implications of adopting programs to optimize human performance, such as mental and physical improvement, sleep, nutrition, resilience, etc. (POC: LTC Todd Ryktarsyk, OTSG, todd.a.ryktarsyk.mil@mail.mil, 703-681-0950)

Globally Responsive and Regionally Engaged Army:

5) What is the role of Landpower in support of the U.S. National Security Strategy? What roles should the Army shed? (POC: LTC Thomas Westen, HQDA G-3/5/7, Strategy Branch, *thomas.c.westen2.mil@mail.mil*, 703-692-8593)

6) Examine the role of megacities as a component of the future strategic environment. Stabilizing conflicts in megacities will require forces very different from what the United States has now and plans to keep. What organizational changes are needed to optimize the Army to conduct expeditionary urban operations? (POC: Dr. Steven Metz, SSI, steven.k.metz.civ@mail.mil, 717-245-3822)

7) What knowledge, skills, abilities and other capabilities are critical for successful performance in a megacity environment? Are these fundamentally different than the capabilities needed for operations under current doctrine? If so, what implications does this have for development and management of human capital (e.g., recruiting, selection/assessment, training, etc.) and force development? (POCs: COL Patrick Mahaney and Dr. Christopher Rice, CSA's SSG, 703-571-7123, patrick.j.mahaney3.mil@mail.mil and christopher.b.rice2.civ@mail.mil)

8)   What can public safety organizations (e.g. police, fire, etc.) teach us about the capabilities needed for effective performance in megacities? What can we learn from these organizations about deterrence and threat reduction? About individual, community and organizational resilience? (POCs: COL Patrick Mahaney and Dr. Christopher Rice, CSA's SSG, 703-571-7123, patrick.j.mahaney3.mil@mail.mil and christopher.b.rice2.civ@mail.mil)

9)   What tactics and strategies do public safety organizations use to disrupt and combat common criminal entities (e.g., organized crime, street gangs, etc.) in megacities? Are any of these methods conducive to predicting and preventing terrorist activity or attacks? (POCs: COL Patrick Mahaney and Dr. Christopher Rice, CSA's SSG, 703-571-7123, patrick.j.mahaney3.mil@mail.mil and christopher.b.rice2.civ@mail.mil)

10)   What organizational and interagency systems need to be developed or implemented to ensure the rapid recovery of a megacity following a catastrophic event (e.g., pandemic, terrorist attack, natural disaster)? What training is required to ensure key stakeholders can effectively communicate and work together at individual, community and organizational levels? (POCs: COL Patrick Mahaney and Dr. Christopher Rice, CSA's SSG, 703-571-7123, patrick.j.mahaney3.mil@mail.mil and christopher.b.rice2.civ@mail.mil)

11) How can we optimize enabling functions across the Range of Military Operations (ROMO) to support operations in megacities? Assess any one or several of the following: maneuver support, logistics, intelligence, medical, communications (tactical and public information), civil affairs, etc.? What areas should be prioritized? (POCs: COL Patrick Mahaney and Dr. Christopher Rice, CSA's SSG, 703-571-7123, patrick.j.mahaney3.mil@mail.mil and christopher.b.rice2.civ@mail.mil)

12) What might cause the United States to commit military force to a megacity? (POC: Dr. Steven Metz, SSI, steven.k.metz.civ@mail.mil, 717-245-3822)

13) How can ground forces operating in a megacity limit damage to the urban system? (POC: Dr. Steven Metz, SSI, steven.k.metz.civ@mail.mil, 717-245-3822)

14) How will it affect ground force operations to have limited operational security while in an urban setting? (POC: Dr. Steven Metz, SSI, steven.k.metz.civ@mail.mil, 717-245-3822)

15) To meet demands of the future strategic environment in alignment with the Army's strategic vision and priorities, what steps should the Army take to make formations leaner while retaining capability, become more expeditionary, prevent overmatch through 2025, and set conditions for fundamental change by 2030-40? (POC: LTC Thomas Westen, HQDA G-3/5/7, Strategy Branch, *thomas.c.westen2.mil@mail.mil*, 703-692-8593)

16) How should SOF and conventional forces (CF) become more interdependent across each operation plan phase, and what are the ways and means through which SOF and CF can efficiently increase their capabilities through interdependent actions? (POC: LTC (P) James Maxwell, HQDA G-3/5/7, Special Operations Division, *james.a.maxwell22.mil@mail.mil*, 703-695-8490)

Ready and Modern Army:

17) If the United States does not plan to engage in "long wars," nor plan to "mobilize for the duration," then how should the Army change the way it thinks about the roles of the Reserve Component and how to utilize them? (POC: LTC Shawn McCormick, HQDA G-3/5/7, War Plans Division, Force Planning Integration Team, shon.a.mccormick.mil@mail.mil, 703- 614-9371)

18) The 2014 QDR indicates the need to protect the ability to regenerate capabilities that might be needed to meet future demands. Examine past efforts to regenerate or expand the force. What key attributes of the force need to be maintained to facilitate rapid regeneration? (POC: LTC Shawn McCormick, HQDA G-3/5/7, War Plans Division, Force Planning Integration Team, shon.a.mccormick.mil@mail.mil, 703- 614-9371; and Dr. Michael Lynch, AHEC, michael.e.lynch24.civ@mail.mil, 717-245-3803)

19) What are the physical and moral boundaries that need to be addressed regarding the use of autonomous and semi-autonomous weapons systems (robotics)? (POC: LTC Thomas Westen, HQDA G-3/5/7, Strategy Branch, *thomas.c.westen2.mil@mail.mil*, 703-692-8593)

20) How should the Army adapt its training strategy and activities to serve as a catalyst for change in support of Force 2025? (POC: LTC Chris Smith, HQDA G-3/5/7, Transformation Division, christopher.l.smith104.mil@mail.mil, 703-614-9236)

Soldiers Committed to the Army Profession:

21) How effective has the Army's program been to educate the institution on the new doctrine, ADRP1 - *The Army Profession?* Since individuals cannot be committed to something if they do not understand it, what is the current degree of commitment to the new concepts of profession? Does it make any difference whether Army soldiers and

civilians serving see themselves as Army professionals with unique identity and inherent moral obligations? (POC: COL John A. Vermeesch, CAPE, john.vermeesch@usma.edu, 845-938-0475)

22) What is the character and motivation of Millennial volunteers, both uniformed and civilian? Is there a growing gap between the moral obligations of Army professionals and the commitment of this generation of volunteers? Are there new developmental challenges for the Army? (POC: COL John A. Vermeesch, CAPE, john.vermeesch@usma.edu, 845-938-0475)

23) Since there is an increasingly observable "Values to Virtues" gap in the Army, how should it be addressed? Are the Seven Army Values effective as a basis for the moral development of Army professionals? (POC: COL John A. Vermeesch, CAPE, john.vermeesch@usma.edu, 845-938-0475)

Premier All Volunteer Army:

24) What, if any, policy adjustments are needed to sustain the all-volunteer Army during fiscal austerity? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010).

Army Operating Concept and Army Warfighting Challenges

Ensuring that future Army forces are prepared to win in a complex world requires a focused, sustained, and collaborative effort across the institutional Army, the operating force, the joint community, industry, academia, and other interorganizational and multinational partners. The Army Warfighting Challenges (AWFCs) provide an analytical framework to integrate efforts across warfighting functions while collaborating with key stakeholders in learning activities, modernization, and future force design. The AWFCs help the Army ensure it does not find itself too far off the mark by asking first order questions, the answers to which will drive development of the future force.

Army Warfighting Challenges (AWFCs) - enduring first order problems, the solutions to which improve the combat effectiveness of the current and future force.

Collaboration. Army Capabilities Integration Center (ARCIC) will maintain a milSuite site for collaboration that can be accessed at https://www.milsuite.mil/wiki/AWFC. Running estimates and related products will be maintained on this site and updated quarterly.

The **ARCIC POCs** are LTC Fred Wong 757-501-5483 / frederick.wong@us.army.mil, MAJ Erica Iverson 757-501-5487/ erica.r.iverson.mil@mail.mil, and Mr. Mike Elko 757-501-5497 / michael.b.elko.civ@mail.mil.

1. **Develop Situational Understanding**: How to develop and sustain a high degree of situational understanding while operating in complex environments against determined, adaptive enemy organizations. (Lead: ICoE, Primary Support: USASOC)

2. **Shape the Security Environment** : How to shape and influence security environments, engage key actors, and consolidate gains to achieve sustainable security outcomes in support of Geographic and Functional Combatant Commands and Joint requirements. (Lead: MCCoE, Primary Support: USASOC)

3. **Provide Security Force Assistance**: How to provide security force assistance to support policy goals and increase local, regional, and host nation security force capability, capacity, and effectiveness. (Lead: USASOC, Primary Support: CAC)

4. **Adapt the Institutional Army**: How to maintain an agile Institutional Army that ensures combat effectiveness of the total force, supports other Services, fulfills DoD and other agencies' requirements, ensures quality of life for Soldiers and families, and

possesses the capability to surge (mobilize) or expand (strategic reserve) the active Army. (Lead: MCCoE, Primary Support: AMC, ARCIC/TRADOC)

5. **Counter WMD**: How to prevent, reduce, eliminate, and mitigate the use and effects of WMD and CBRNE threats and hazards on friendly forces and civilian populations. (Lead: MSCoE)

6. **Conduct Homeland Operations**: How to conduct homeland operations to defend the Nation against emerging threats. (Lead: MSCoE)

7. **Conduct Space and Cyber Electromagnetic Operations and Maintain Communications**: How to assure uninterrupted access to critical communications and information links (SATCOM, PNT & ISR) across a multi-domain architecture when operating in a contested, congested and competitive operating environment. (Lead: CyberCoE, Primary Support: SMDC)

8. **Enhance Training**: How to train Soldiers and leaders to ensure they are prepared to accomplish the mission across the range of military operations while operating in complex environments against determined, adaptive enemy organizations. (Lead: MCCoE, Primary Support: CAC-T)

9. **Improve Soldier, Leader and Team Performance**: How to develop resilient Soldiers, adaptive leaders, and cohesive teams committed to the Army professional ethic that are capable of accomplishing the mission in environments of uncertainty and persistent danger. (Lead: MCCoE)

10. **Develop Agile and Adaptive Leaders**: How to develop agile, adaptive and innovative leaders who thrive in conditions of uncertainty and chaos and are capable of visualizing, describing, directing, leading and assessing operations in complex environments and against adaptive enemies. (Lead: MCCoE)

11. **Conduct Air-Ground Reconnaissance**: How to conduct effective air-ground combined arms reconnaissance to develop the situation rapidly in close contact with the enemy and civilian populations. (Lead: MCoE, Primary Support: AVCoE)

12. **Conduct Entry Operations** : How to project forces, conduct forcible and early entry, and transition rapidly to offensive operations to ensure access and seize the initiative. (Lead: MCCoE)

13. **Conduct Wide Area Security**: How to establish and maintain security across wide areas (Wide Area Security) in coordination with other military and civilian capabilities to protect forces, populations, infrastructure, and activities necessary to shape security

environments, consolidate gains, and set conditions for achieving strategic and policy goals. (Lead: MCoE, Primary Support: AVCoE)

14. **Ensure Interoperability and Operate in a JIM Environment**: How to integrate Joint, Interorganizational, and Multinational partner capabilities and interagency campaigns to ensure unity of effort and accomplish missions across the range of military operations. (Lead: MCCoE, Primary Support: USASOC)

15**. Conduct Combined Arms Maneuver**: How to conduct combined arms air-ground maneuver to defeat enemy organizations and accomplish missions in complex operational environments. (Lead: MCoE, Primary Support: AVCoE)

16. **Set the Theater, Sustain Operations, and Maintain Freedom of Movement** : How to set the theater, provide strategic agility to the joint force, and maintain freedom of movement and action during sustained and high tempo operations at the end of extended lines of communication in austere environments. (Lead: SCoE, Primary Support: AMC)

17. **Integrate Fires**: How to coordinate and integrate Army and JIM fires, and conduct targeting, across all domains to defeat the enemy and preserve freedom of maneuver and action across the range of military operations. (Lead: FCoE, Primary Support: SMDC)

18. **Deliver Fires**: How to deliver fires to defeat the enemy and preserve freedom of maneuver and action across the range of military operations. (Lead: FCoE, Primary Support: SMDC)

19. **Exercise Mission Command**: How to understand, visualize, describe, and direct operations consistent with the philosophy of mission command to seize the initiative over the enemy and accomplish the mission across the range of military operations. (Lead: MCCoE)

20. **Develop Capable Formations**: How to design Army formations capable of rapidly deploying and operating to achieve missions across the range of military operations. (Lead: ARCIC- Capability Development Directorate)

UNDERSECRETARY OF THE ARMY QUESTIONS

(POC: COL Paul M. Paolozzi, Chief, Under Secretary of the Army's Strategic Initiatives Group, 703-695-1719, *paul.m.paolozzi.mil@mail.mil*)

1. Are we going to be a threat-based structure or a capabilities-based structure?

2. What is the ideal size of the generating force?

3. How is that generating force sized and varied with the size of the operating force? We know it's not particularly linear. If we draw down the operating force by 10 percent, the generating force doesn't necessarily fall by 10 percent.

4. How quickly could the Army grow if it needs to?

5. If we're going down to 420,000 or lower, how do you build it back up -- how quickly can we recruit the right people, to make sure we have enough units, field-grade officers, senior NCOs?

6. Are the Army's concepts of operations adequate for a world where precision-guided missiles are proliferating, in a world where the price of computing, power sensors, weaponry is all going down relative to the cost of the means to protect against them, whether it's better armor, stealth of hypersonic speed? Are we ready for that kind of world?

7. Should the National Guard be operational or strategic, and should combat-power roles be shared in some way between the two components?

8. Should we focus on resetting the vast property book of the Army or should we be thinking about next-generation investments and how do we balance these things? (modernization)

9. Is ARFORGEN the right model of readiness for the future?

10. Is the Army's emphasis on decisive-action training adequate to prepare for the range of military operations the U.S. is going to face over the next 10, 20 or 30 years?

11. Is PPBES still the optimal planning system for DoD management in this age of uncertainty?

12. How do we retain a healthy industrial base?

ADDITIONAL ARMY PRIORITIES FOR STRATEGIC ANALYSIS

Adaptive Army Leaders for a Complex World

1) Conduct an objective analysis of how the Army should develop the next generation of leaders. (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

2) How will the "live casting" (internet and media coverage) of military operations effect the way the Army develops leaders and operates? (POC: Dr. Steven Metz, SSI, steven.k.metz.civ@mail.mil, 717-245-3822)

3) In a world where threats to the international security environment are dominated by terrorists, transnational organized crime networks, and super-empowered zealots of many persuasions:
     -- What constitutes the ethical and legal difference between just and unjust warriors?
     -- Examine the ethical and legal issues associated with post-war treatment of 'unjust warriors', (i.e. Guantanamo). (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

4) Does the Senior Service College experience prepare officers for strategic leadership? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

5) Examine the ethical complexities of targeted killings and drone strikes levied on high value targets. What are the ethical considerations for determining what constitutes a legitimate military target for a drone strike? (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

6) Examine the role of technology in training and PME. (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

7) How should the Army identify and remove toxic leaders? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

8) Organizational science has long identified resistance to change as a fundamental characteristic of bureaucracies, to include the US Army.
     - How much resistance to change (organizational inertia) is necessary for the Army to function effectively; and when does it result in organizational stagnation, waste and abuse?
     - How much resistance to change is good or bad for the Army? What are the implications for Army policy and strategy?
     (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

9)   In organizations of any size, policy and strategy are not choices made by a single individual, but the outcome of the interrelationship of multiple senior leader choices, which are influenced by myriad organizational processes and procedures. Headquarters, Department of the Army has developed sophisticated decision models and decision aid processes to enhance senior leader choices related to concepts, requirements, and human capital development as well as resource allocation, force development and acquisition decisions.

> -- How should the army staff organize to generate and execute more effective and holistic policies and strategies?
> -- How can the US Army enhance the interdependence of various decision aid processes to achieve more informed senior leader decisions and better outcomes?
> -- How does the policy process interface with senior decision makers, and how does the interface affect the quality of senior leader decision making?
> (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

Globally Responsive and Regionally Engaged Army

10)   Given the growing importance of homeland defense, what would be the benefits and drawbacks of realigning the Guard under the department of Homeland Security to enhance domestic security and disaster response, while retaining utility for overseas missions in support of the Department of Defense? (POC: Mr. Tim Muchmore, HQ G-8, QDR, *timothy.s.muchmore.civ@mail.mil*, 703-614-5591)

11) What is the Army's peacetime role, and how can that role be infused into the national security dialogue? (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

12) In what ways should the Army be used to fulfill global "Dynamic Presence?" (POC: LTC Thomas Westen, HQDA G-3/5/7, Strategy Branch, *thomas.c.westen2.mil@mail.mil*, 703-692-8593)

13) Should the Army focus Force 2025 efforts to address the challenge of revisionist powers? (i.e, China, Iran, Russia) (POC: LTC Thomas Westen, HQDA G-3/5/7, Strategy Branch, *thomas.c.westen2.mil@mail.mil*, 703-692-8593)

14) In a Post-OIF/OEF world, what should be the Army's Narrative, what objectives should it accomplish, and what should be its messaging strategy? (POC: LTC Thomas Westen, HQDA G-3/5/7, Strategy Branch, *thomas.c.westen2.mil@mail.mil*, 703-692-8593)

15) The 2014 Quadrennial Defense Review states that "If deterrence fails at any given time, U.S. forces could defeat a regional adversary in a large-scale multi-phased campaign, and deny the objectives of – or impose unacceptable costs on – another

aggressor in another region." For Army forces, develop a definition of "denying the objectives of . . ." and consider how the Army might contribute to such a "deny" mission. (POC: Prof. Nathan Freier, SSI, nathn.p.freier.civ@mail.mil, 717-245-4127)

16) What essential Security Force Assistance (SFA) skills are required to support Combatant Commanders' Theater Security Cooperation Programs? What changes need to be made to the Army's SFA training to meet the Combatant Commanders requirements? (POC: Dr. James Embrey, PKSOI, james.h.embrey.civ@mail.mil, 717-245-3524)

17) How should the Army impart regional expertise to a regionally aligned Army? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

18) How can the Army institutionalize the notion of 'globally responsive and regionally engaged'? (POC: Dr. John Deni, SSI, john.r.deni.civ@mail.mil, 717-245-4183)

19) The US national security strategy since the Clinton administration has emphasized engagement and a foreign policy characterized by intervention.

-- What are the ethical implications of a foreign policy of intervention?
-- When is (armed, unarmed) humanitarian intervention morally justified by the US military?
(POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

20) What is the role of Landpower in support of the Strategy to Combat Transnational Organized Crime?
(http://www.whitehouse.gov/administration/eop/nsc/transnational-crime/strategy)
(POC: Dr. Robert Bunker, SSI, Robert.j.bunker2.civ@mail.mil, 717-245-4150)

21) What regions/countries of the world are most important for Army engagement? (POC: Dr. John Deni, SSI, john.r.deni.civ@mail.mil, 717-245-4183)

22) Over a decade of operations in Iraq and Afghanistan provide a rich opportunity to develop new knowledge and capture lessons for inclusion in concepts, doctrine, and requirements generation scenarios.

-- What are the strategic lessons learned from over a decade of war.
-- What are the essential skills, knowledge and attributes necessary for soldiers to perform cross-discipline missions (reconstruction, policing, governance, detention, development, etc.), and what is the most effective way to train and educate soldiers to perform them?
(POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

23) Current defense strategic guidance and QDR outcomes suggest future national military strategy will rely heavily on partner nation militaries to share the burden of future conflicts with US forces.

> -- What affect do tacit knowledge, prior experience, task complexity, cultural distance, and organizational distance have on knowledge transfer in strategic partnerships?
> -- How does an appreciation for these factors influence the effectiveness of US Army efforts to enhance interoperability with international military partners? (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

Ready and Modern Army

24) Futures Studies: Is there a more effective and efficient method than what exists today, to identify and describe alternative futures that would better qualify existing data about the possibility, probability, and desirability of global change? Such a method would assist the Army with the development and analysis of institutional strategies. (POC: LTC Thomas Westen, HQDA G-3/5/7, Strategy Branch, *thomas.c.westen2.mil@mail.mil*, 703-692-8593)

25) What is the Army's responsibility to provide a strategic reserve? In the context of the on-going drawdown, what is the capacity of the Army to provide a strategic reserve? (POC: Mr. Tim Muchmore, HQ G-8, QDR, *timothy.s.muchmore.civ@mail.mil*, 703-614-5591)

26) To what degree should Army leaders consider changing the Total Army force mix to integrate Reserve and Guard forces into Regular formations at lower echelons (e.g., platoon, company, battalion level)? (POC: Mr. Tim Muchmore, HQ G-8, QDR, *timothy.s.muchmore.civ@mail.mil*, 703-614-5591)

27) How should the Department of the Army provide oversight of Guard and Reserve training, readiness, and the use of federal funds and materiel? (POC: Mr. Tim Muchmore, HQ G-8, QDR, *timothy.s.muchmore.civ@mail.mil*, 703-614-5591)

28) How far can personnel efficiencies be taken before we risk unit effectiveness? What are the pitfalls for institutionalizing smaller-sized crews and squads in regards to mission accomplishments? (POC: LTC Thomas Westen, HQDA G-3/5/7, Strategy Branch, *thomas.c.westen2.mil@mail.mil*, 703-692-8593)

29) How can the Army leverage our capabilities to address Close Air Support requirements? (POC: LTC Thomas Westen, HQDA G-3/5/7, Strategy Branch, *thomas.c.westen2.mil@mail.mil*, 703-692-8593)

30) To meet demands of the future strategic environment in alignment with the Army's strategic vision and priorities, what steps should the Army take to make formations leaner while retaining capability, become more expeditionary, prevent overmatch through 2025, and set conditions for fundamental change by 2030-40? (POC: LTC Chris Smith, HQDA G-3/5/7, Transformation Division, christopher.l.smith104.mil@mail.mil, 703-614-9236)

31) How will the Army retain and sustain the capability to conduct counterinsurgency (COIN) and stability operations? (POC: Dr. John Deni, SSI, john.r.deni.civ@mail.mil, 717-245-4183)

32) How should the Army's force generation methodologies change to meet evolving requirements in combatant commands? (POC: Dr. John Deni, SSI, john.r.deni.civ@mail.mil, 717-245-4183)

33) Given defense austerity and the post-conflict drawdown, what should be at the top and at the bottom of the Army's priorities? (POC: Dr. John Deni, SSI, john.r.deni.civ@mail.mil, 717-245-4183)

34) What emerging concepts and organizations are needed to optimize the use of robotics in U.S. military strategy? (POC: Dr. Steven Metz, SSI, steven.k.metz.civ@mail.mil, 717-245-3822)

35) How would technological inferiority in some areas affect Army operations? (POC: Dr. Steven Metz, SSI, steven.k.metz.civ@mail.mil, 717-245-3822)

36) Could the Army operate effectively in a region following a nuclear exchange or terrorist event? (POC: Dr. Steven Metz, SSI, steven.k.metz.civ@mail.mil, 717-245-3822)

37) How can the Army change its culture to best infuse notions of energy-informed operations? (POC: Dr. John Deni, SSI, john.r.deni.civ@mail.mil, 717-245-4183)

38) Why and how should the Army's support of air, ballistic, and cruise missile defense evolve in the coming decade? (POC: Dr. John Deni, SSI, john.r.deni.civ@mail.mil, 717-245-4183)

39) How do we create and maintain the right headquarters and staff teams to conduct modern war? How does the Army break the cycle of cutting headquarters in peacetime and then scrambling to create ad-hoc required capabilities when crises begin? (POC: Dr. Conrad Crane, AHEC, Conrad.c.crane.civ@mail.mil, 717-245-4483)

40) How do we conduct seamless unit transitions in protracted crises requiring multiple deployments? How do we compensate when mission requirements exceed the

number of regionally aligned forces? (POC: Dr. Conrad Crane, AHEC, Conrad.c.crane.civ@mail.mil, 717-245-4483)

Soldiers Committed to the Army Profession

41) ADRP1 mandated the certification of Army professionals in three areas: competence, character and commitment. How effective is the Army now in certifying individual professional and units in each of these three areas? How effective are the Army developmental programs for professional development in each area? Currently is development among the three areas appropriately balanced, e.g., are Army professionals as well developed in their personal character and commitment as in their military competencies? (POC: COL John A. Vermeesch, CAPE, john.vermeesch@usma.edu, 845-938-0475)

42) What measures are necessary to ensure that, as the Army draws down during this period of austerity, the institution does not revert from the character of Profession to that of a big government bureaucracy driven by top-down, micromanaged supervision? How does the adaption of "mission command" prevent such from happening; is it effective thus far"? (POC: COL John A. Vermeesch, CAPE, john.vermeesch@usma.edu, 845-938-0475).

43) What new capabilities and tactical innovations have had the greatest impact on ethical military decision making, and how can senior army leaders better prepare soldiers to make those decisions? (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

44) Downsizing – are the right people leaving and staying? Was it done correctly? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

45) Does the lapse in senior leader ethics represent a false sense of entitlement, and if so, how should it be addressed? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

46) Nondeployables – what have we learned? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

47) Assess the growing role of women in the military. (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

48) Examine how the Army should instill Mission Command into the force. (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

49) How can senior military leadership educate soldiers on U.S. civics (representative democracy, rule-of-law, separation of powers, individual rights, etc.), to better understand the essential aspects of post-conflict operations and alternative methods of achieving post-conflict civil order? (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

50) How should the Army reestablish high professional standards without turning into a garrison Army? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

51) What are the civil-military implications for senior military leaders if they believe the military is the wrong instrument of national power to ethically pursue of U.S. foreign policy or national strategy objective? (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

52) What is the proper role of dissent in senior leaders? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

Premier All Volunteer Army

53) Will the Army transition the current build-down as a military profession or will it revert to a micro-managing, centralized military bureaucracy? Can it develop and retain transformational leaders at multiple levels, maintaining a professional culture that fosters ethical practice and behavior by its Ethic? (POC: Dr. Don Snider, SSI, don.m.snider.civ@mail.mil, 717-245-3142)

54) How are Soldiers and civilians of the Millennial generation adapting to the Army Ethic and the obligation to live by it 24/7 to provide "honorable service" to the Nation? What has the Army learned about the developmental uniqueness of this generation; how effectively is it approaching their character development? (POC: Dr. Don Snider, SSI, don.m.snider.civ@mail.mil, 717-245-3142)

55) With the new inclusion of the Army Civilian Corps within the Army Profession (ADP1 – *The Army Profession*, 2013), how effectively has their integration and professional development progressed? What challenges have presented themselves and how are they being addressed? (POC: Prof Julie Manta, USAWC, julie.t.manta.civ@mail.mil, 717-245-4872)

56) Is the RC too large? Should it be larger? What is the "right mix" of force

allocation between the AC and RC? (POC: Mr. Tim Muchmore, HQ G-8, QDR, *timothy.s.muchmore.civ@mail.mil*, 703-614-5591)

57) Conduct an objective analysis of the performance of Reserve Component organizations in Iraq and Afghanistan. (POC: Dr. Michael Lynch, AHEC, michael.e.lynch24.civ@mail.mil, 717-245-3803)

58) Conduct an objective analysis comparing the costs and readiness of AC and RC units of all types. (POC: Dr. Michael Lynch, AHEC, michael.e.lynch24.civ@mail.mil, 717-245-3803)

59) What skills, knowledge, and attributes must the nation maintain within the Army, the industrial base, and society to rapidly expand capable land forces in time of crisis? (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

60) How should the Army renew its focus on families? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

61) How should military compensation be reformed? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

62) What must be done to sustain public support for the U.S. Armed Forces? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

63) Do ROTC and USMA represent society? (POC: Dr. Lenny Wong, SSI, leonard.wong.civ@mail.mil, 717-245-3010)

64) Solider diversity, broadening cognitive frameworks and an inclusive professional culture may stimulate fresh approaches to strategy formulation and policy choices; but this same diversity and broad-mindedness may impede strategy and policy implementation.

> - How may the army better manage the tension between the creativity of diversity and the structural discipline necessary to manage implementation effectiveness?
> - Soldier diversity and institutional conformity both impact unit effectiveness. How can army senior leaders develop an appreciation for an effective blending of these two dimensions of organizational effectiveness (or dysfunction) within the Army's Professional culture?
> (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

65) How can US society reconcile the ethical burden of civic duty and social responsibility with maintaining an all volunteer military force? (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

66) What are the societal implications of maintaining an all-volunteer military force? (POC: Prof. Trey Braun, SSI, william.g.braun2.civ@mail.mil, 717-245-4078)

USAWC KEY STRATEGIC ISSUES LIST 2014-2015

Strategic Studies Institute
and
U.S. Army War College Press

ACADEMIC YEAR 2014-15

U.S. ARMY WAR COLLEGE

KEY STRATEGIC ISSUES LIST

PART II:
COMMAND SPONSORED RESEARCH TOPICS

Updated December 9, 2014

Update includes new submissions from EUCOM, US Army Pacific, US Forces Korea, US Army First Corps - highlighting the new Pacific Pathways engagement strategy, SOCOM and US Army Special Operations Command, the Army Warfighting Challenges under TRADOC, and topics from PKSOI.

CONTENTS

U.S. TRANSPORTATION COMMAND

U.S. ARMY MATERIEL COMMAND
HQ U.S. Army Materiel Command
HQ AMC, G-3/4 Strategic Integration
Army Materiel Systems Analysis Activity (AMSAA)
Army Sustainment Command (ASC)

U.S. ARMY TRAINING AND DOCTRINE COMMAND
Army Capabilities Integration Center
   * Army Warfighting Challenges
Future Concepts
Capability Solutions

U.S. ARMY LOGISTICS UNIVERSITY

U.S. ARMY FORCES COMMAND
Sustaining Army Force Generation (ARFORGEN)
Future Operational Planning
Enhance the All-Volunteer Army
Intelligence Related
Regional Alignment of Forces
Soldier Performance
Army Cyber
Theater Tactical Signal Brigade (TTSB) Reorganization/Reutilization
Army Records Management
Joint and Service Training
Future 2020-40
Homeland Security
Single Reserve Component

CHIEF, U.S. ARMY RESERVE COMMAND

U.S. ARMY ENGINEER CENTER AND SCHOOL

U.S. ARMY RESEARCH, DEVELOPMENT and ENGINEERING COMMAND
U.S. Army Aviation and Missile Research Development and Engineering Center
U.S. Army Armament Research, Development and Engineering Center
U.S. Army Research Laboratory

U.S. Army Communications-Electronics Research, Development, and Engineering Center

U.S. Army Edgewood Chemical Biological Center

U.S. Army Tank Automotive Research, Development, and Engineering Center

U.S. ARMY MEDICAL DEPARTMENT/THE SURGEON GENERAL
Ready and Deployable Medical Force
System for Health (SFH)
Defense Health Agency (DHA)
Big Data Analytics
Trained and Ready Army Medical Department Leaders
Defense Support of Civil Authorities (DSCA)

U.S. ARMY RECRUITING COMMAND

U.S. ARMY COMBINED ARMS CENTER, CENTER FOR ARMY LESSONS LEARNED
Strategic Issues
Operational Issues

*U.S. ARMY PEACEKEEPING and STABILITY OPERATIONS INSTITUTE (PKSOI)

* Updated: September 20, 2014

**Updated December 9, 2014

PART II:

COMMAND STRATEGIC RESEARCH TOPICS

U. S. AFRICA COMMAND

POC: Ms. Anne Moen, J9 PME Engagement Specialist, +49 711-729-3068, *anne.c.moen.civ@mail.mil*

1. How can the joint force adapt to best implement PPD-23 on security sector assistance? Given the new guidance contained in PPD-23 on security sector assistance and the increased focus on building the capacity of willing security partners, how does the DoD further adapt the joint force to conduct this enduring mission?

2. What challenges does increased urbanization bring to African militaries; how will it shape their missions and training; how will it influence the professionalization and quality of personnel in their ranks?

3. What is the strategic implication of possible collaboration between the Islamic State in Iraq and Syria and Al-Qaeda in the Islamic Maghreb, Boko Haram and Al-Shabaab in Africa?

4. African militaries' top leaders are generally linked to their countries' ethnic dynamics.   Doe this dynamic prevent or assist African militaries transforming into effective institutions capable of addressing threats from within their respective countries?

5. What is the prospect that a unified Libyan nation akin to pre-2011 hostilities will re-emerge rather than a new set of smaller, competing nations or unaffiliated states?

6. What set of conditions need to become existent in the trans-Sahel to prevent further radicalization of the region (internal and external conditions)?

7. What are the factors most likely to cause an improvement in governance in Nigeria?

8. What are the long-term impacts (out to 2025) of China's involvement/investment in Africa? Will their current economic interests change over time into military/security interests that lead to potential challenges to the U.S. and European Allies?

9. Assess the democratic transitions in Africa. How should we characterize the 54 African countries? What terms are valid to describe African governments?

10. What are the prospects for enduring stability in southern Africa over the next 10-20 years, and how will competition between South Africa and Angola affect the region?

11. What are best practices and lessons learned from combined (bilateral, multilateral, or multinational) intelligence operations?

12. How can the U.S. most effectively balance the near-term requirement to address growing terrorist threats in Africa with the underlying conditions that allow these groups to proliferate?

13. How can the DoD better collaborate with international partners (UK, France, EU, Germany, etc.) to de-conflict security cooperation programs (train and equip) and processes to avoid duplication of effort in Africa?

14. Assisting African partner nations develop cyber defense capacity. What should a "cyber engagement" program in Africa look like? What partner nations should have priority?

15. How has the "Responsibility to Protect" Doctrine evolved since the 2011 NATO operations in Libya?

U.S. CENTRAL COMMAND

Intelligence Issues.

1. The global technology enhanced environment requires strategic awareness by joint force commanders. This awareness requires an understanding of the operational environment within and adjacent to the joint operating area (JOA) at the tactical and operational as well as the strategic theater level. What should the common operating picture (COP) and common intelligence picture (CIP) portray for leaders preparing for and conducting joint operations from subordinate joint task force (JTF) and functional component through combatant command (CCMD) HQ levels? (POC: Ms. Carolyn Stewart, CCJ2-JTRR, 813-529-9824, *Carolyn.stewart@centcom.mil*)

2. Given the centrality of the Gulf Cooperation Council (GCC) to regional stability, and considering the substantial reduction in Department of Defense (DoD) resources due to possible sequestration, how can CENTCOM best assist to maintain, if not improve, trust between the military services of the GCC nations? (POC: Mr. Kevin Koutz, CCJ2-PW, 813-529-2929, *kevin.koutz@centcom.mil*)

3. What is the optimal solution for the creation of an unclassified information sharing (UIS) network in order to facilitate the need for collaborative distribution of sensitive yet unclassified intelligence reporting? (POC: Major Kristina Cornwell, CCJ2-OM, 813-529-2812, *kristina.j.cornwell@centcom.smil.mil*)

4. Given the differing execution timelines, classification levels, authorities, and readiness states between lethal and nonlethal methods of targeting engagement, CENTCOM has experienced challenges integrating information operations (IO) and cyberspace operations (CO) into a coordinated targeting strategy to operationalize planning and execution assessment. Considering these evolving, somewhat disparate disciplines, what is the optimal method for integrating IO and CO into CCMD planning and execution assessment? (POC: Captain John Dullum, CCJ2-JT, 813-529-9931, *john.dullum@centcom.mil*)

5. What are the prospects for stability in Afghanistan and the Taliban insurgency post-2014 draw down and a likely decrease in international aid in the out-years? (POC: Mr. Charles Hans, CCJ2-JA, 813-529-9289, *charles.hans@centcom.mil*)

6. Short of armed intervention in the ongoing Syrian civil war, what combination of options would be optimal to limit, if not contain, its deleterious effects throughout the Levant? (POC: Mr. Patrick O'Sullivan, CCJ2-PW, 813-529-9667, *Patrick.m.osllivan@centcom.mil*)

7. After 12 years of conflict and recognition of the continuing relevance of al-Qaeda's ideology, how can the United States apply its instruments of national power to counter al-Qaeda's narrative in a meaningful way? What are the implications for the durability of the organization/movement if the narrative cannot be countered? (POC: Mr. Charles Hans, CCJ2-JA, 813-529-9289, *charles.hans@centcom.mil*)

8. How have diplomatic negotiations (i.e., P5+1, sanctions relief) impacted Iran's incentive structure to deploy and/or develop its proxy forces? Do these efforts make Iran less likely or more likely to employ these activities, and in which direction can we expect to see the change? (POC: Mr. Charles Hans, CCJ2-JA, 813-529-9289, *charles.hans@centcom.mil*)

9. Iran has reached a strategic cross-road regarding its foreign policy. What are the strategic calculations and implications of maintaining status quo, accelerating pursuit of nuclear weapon development, or abandoning this initiative altogether in pursuit of nuclear development for peaceful means? (POC: Mr. Charles Hans, CCJ2-JA, 813-529-9289, *charles.hans@centcom.mil*)

10. Yemen may be the first state in modern times to run out of water and faces the prospect of reaching its limits in oil production. What are the implications of natural resource decline in states such as Yemen that were once considered peripheral to U.S. interests? (POC: Mr. Charles Hans, CCJ2-JA, 813-529-9289, *charles.hans@centcom.mil*)

Operational Issues.

11. What is the impact of "Arab Spring" on Middle East regional and U.S. security? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

12. What are the implications to Middle East regional security resulting from Iranian assertiveness and malign behavior? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

13. What are the implications of the Iranian nuclear program on regional and global security? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

14. What are the implications of the Iranian ballistic missile program on global security? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

15. What are the regional implications following a withdrawal of U.S. combat forces in Afghanistan? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

16. What are the strategic military impacts to the Middle East region of a changing Egypt? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

17. What are the strategic military impacts to the Middle East region of a changing Syria? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

18. What are the implications created by an increasing Sunni-Shiite conflict? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

19. What are the implications created by the Israeli-Palestinian conflict? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

20. What is the future impact of the Gulf monarchies in Middle Eastern security? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

21. What is the future impact of Chinese interests in Middle East oil and economic matters in the Middle East? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

22. What is the future impact of Russian interests in Middle East oil, arms shipments and economic matters in the Middle East? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

23. What are the implications of emerging military relationships within the Middle East dealing with counterterrorism? (POC: Mr. B. J. Keepers, CCJ3-O-CAL, 813-529-3216, *bj.keepers@centcom.mil*)

Resource and Analysis Issues.

24. How can a CCMD effectively and synchronously acquire, aggregate, and synthesize pertinent information on the results and effects created across all elements of power employed to achieve theater objectives? (POC: Lieutenant Colonel John Michaud, CCJ8-ARB, 813-529-8121, *john.michaud@centcom.mil*)

25. Wargaming provides CCMDs the opportunity to visualize various courses of action (COAs) and, in doing so, identify risks, opportunities, and potentially better means and ways for accomplishing the mission. What are the best practices being leveraged within DoD and among the CCMDs? How do the CCMDs integrate wargaming into their deliberate and hasty planning processes? What tools, techniques, and practices are available to improve wargaming efforts? (POC: Lieutenant Colonel John Michaud, CCJ8-ARB, 813-529-8121, *john.michaud@centcom.mil*)

26. Two members of Congress introduced the DoD Cloud Security Act (H.R. 4505). This legislation is designed to pave the way for the DoD to make greater use of commercial cloud computing providers to save money. The widespread availability of cloud data storage services by commercial sector vendors offers the prospect of significant cost savings. It seems possible that commercial cloud data storage services are far less expensive than DoD's physical data centers. What are the potential risks and benefits of using commercial cloud computing service providers to host DoD information? (POC: Ms. Andrea Braboy, CCJ8-ARC, 813-529-8130, *andrea.a.braboy@centcom.mil*)

27. Over the past decade, the DoD used supplement funding (specifically overseas contingency operations [OCO] funding) to develop and maintain significant infrastructure in the CENTCOM Area of Operations. DoD plans significant reductions in these supplemental funds. The Services are reluctant to absorb the additional infrastructure costs into their base budgets. How can DoD absorb these infrastructure costs? Should DoD absorb these infrastructure costs? (POC: Ms. Andrea Braboy, CCJ8-ARC, 813-529-8130, *andrea.a.braboy@centcom.mil*)

28. The worst damage to the DoD is often done by insiders who are authorized to have access to sensitive information. Private First Class Bradley Manning, who downloaded and provided sensitive materials to unauthorized persons, is an example of such an individual. The DoD must find ways to prevent such incidents. One approach involves network transaction modeling and user behavior analysis. Network transaction modeling is effective in reducing suspicious events by 91 percent. User behavior analysis can detect more than 80 percent of actions associated with network attack scenarios. The key for both approaches is determining which behaviors are suspicious. Should DoD adopt these network security approaches? What potential problems could arise if network transaction modeling and user behavior analysis were used? (POC: Ms. Andrea Braboy, CCJ8-ARC, 813-529-8130, *andrea.a.braboy@centcom.mil*)

Medical Issues.

29. To what degree are Component Surgeon and the Army's Medical Command (Deployment Support) roles duplicative IAW Field Manual (FM) 4-02.12, and how does this impact/interfere with medical support operations in a joint/combined environment? (POC: Mr Ray Huntsinger, Deputy Surgeon, 813-529-0345, *Charles.huntsinger@centcom.smil.mil*)

30. How to best inculturate unit/commander commitment to tactical combat casualty care (TCCC) principles and practices? (POC: Mr Ray Huntsinger, Deputy Surgeon, 813-529-0345, *Charles.huntsinger@centcom.smil.mil*)

31. How to best integrate rotary and fixed wing capabilities for patient movement in the tactical environment? (POC: Mr Ray Huntsinger, Deputy Surgeon, 813-529-0345, *Charles.huntsinger@centcom.smil.mil*)

32. Evaluate the impacts of the re-organization of MEDEVAC under the CAB, along with its employment in a partitioned battle space, upon patient safety. (POC: Mr Ray Huntsinger, Deputy Surgeon, 813-529-0345, *Charles.huntsinger@centcom.smil.mil*)

33. Evaluate which advanced resuscitative en route care capabilities are most effective in terms of patient outcomes in the tactical pre-hospital environment. (POC: Mr Ray Huntsinger, Deputy Surgeon, 813-529-0345, *Charles.huntsinger@centcom.smil.mil*)

Legislative Affairs.

34. Identify strategic opportunities in the CENTCOM region that could generate much needed positive momentum in this extremely challenging and dynamic region thereby protecting our vital national interest and those of our trusted partners and allies. What are the various impacts in theater to the components commanders' posture statement and testimony? (POC: Mr. Jonathan Shaw, CCLA, 813-529-0313, *jonathan.shaw@centcom.mil*)

35. Without overseas contingency funding, potentially beyond 2015, what will be the short-, mid-, and long-term impacts to COCOMs? (POC: Mr. Jonathan Shaw, CCLA, 813-529-0313, *jonathan.shaw@centcom.mil*)

36. Would a biannual budget cycle beyond 2015 be feasible and better align the Legislative Branch with DoD priorities? (POC: Mr. Jonathan Shaw, CCLA, 813-529-0313, *jonathan.shaw@centcom.mil*)

37. What are the short-, mid-, and long-term threats of the current foreign military financing (FMF) and foreign military sales (FMS) programs in light of the growing ethnic divides in the CENTCOM AOR? Is DoD fueling an arms race in an unsettling environment? (POC: Mr. Jonathan Shaw, CCLA, 813-529-0313, *jonathan.shaw@centcom.mil*)

38. How can DoD and COCOMs anticipate and counter various global instability factors stemming from climate change, including increased droughts and lack of desalination capabilities? (POC: Mr. Jonathan Shaw, CCLA, 813-529-0313, *jonathan.shaw@centcom.mil*)

Logistics and Deployment.

39. Examine the posturing options and recommend the best employment of Army land-based prepositioned (PREPO material and Operational Project Stocks) in the conduct of a maritime campaign in an anti-access/area denial (A2/AD) environment. (POC: Mr. Richard Lliteras, CCJ4-S, 813-529-4054, *Richard.lliteras@centcom.mil*)

40. Examine the relevance of the Army's expeditionary railroad capability in support of expeditionary operations, coalition deployment and redeployment support, line of communication (LOC) expansion, and regional economic development. (POC: Mr. Larry Pleis, CCJ4-S, 813-529-4053, *Lawrence.j.pleis@centcom.mil*)

41. Concerning operational contracting—is the Army postured adequately to support the Joint Force? (POC: Mr. Larry Pleis, CCJ4-S, 813-529-4053, *Lawrence.j.pleis@centcom.mil*)

42. Conduct a comparative analysis of a Joint Logistics Command and a Joint Task Force for Logistics to support enduring and contingency combatant commander requirements. (POC: Mr. Larry Pleis, CCJ4-S, 813-529-4053, *Lawrence.j.pleis@centcom.mil*)

43. What is the best command and control construct for DoD to globally manage high demand, low density capabilities and enablers in real time against competing combatant command requirements? (POC: Mr. Larry Pleis, CCJ4-S, 813-529-4053, *Lawrence.j.pleis@centcom.mil*)

44. What skills, education, and experience do our future logisticians require to support operations in a future DoD characterized by increased competition for resources coupled with continued global security commitments? Have we been successful in equipping our senior logisticians over the last decade plus of conflict? (POC: Mr. Larry Pleis, CCJ4-S, 813-529-4053, *Lawrence.j.pleis@centcom.mil*)

45. As seabasing capabilities become a reality, what is the Army's role in the Joint Force with respect to seabasing? Do the Army's JLOTS capabilities enhance the Navy/Marine Corps' emerging seabasing capability or are they holding it back? What is the utility of the seabase in a future A2/AD environment with respect to introducing and sustaining land forces in a campaign? (POC: Mr. Larry Pleis, CCJ4-S, 813-529-4053, *Lawrence.j.pleis@centcom.mil*)

Strategy and Policy.

46. As the potential for a thawing of the U.S.-Iranian relationship grows, what could a strategic relationship between the two countries look like within the next 10 years, and how should U.S. forces prepare for such a dramatic shift? (POC: Mr. Donald Hooker, CCJ5-SC, 813-529-5147, *Donald.hooker@centcom.mil*)

47. U.S. military forces are heavily focused on countering violent extremism within the Central Region, but success in this regard requires the effective application of all elements of U.S. national power—including political, economic, informational, and social power—in addition to military. How can U.S. forces feasibly and acceptably support other U.S. Government entities in the application of these other elements? (POC: Mr. Donald Hooker, CCJ5-SC, 813-529-5147, *Donald.hooker@centcom.mil*)

48. High corruption within partner nation militaries has threatened and will continue to threaten their governments' political and economic vitality and increases the chances for state failure. During the last few decades, U.S. military forces have garnered a significant level of experience confronting such corruption. Based on this experience, which best practices should we employ? How should we tailor our strategy? (POC: Mr. Donald Hooker, CCJ5-SC, 813-529-5147, *Donald.hooker@centcom.mil*)

49. What is the best way to train regionally aligned forces in a resource-constrained environment? Is maintaining regional alignment within the total force sustainable from 2015-25? Should regional alignment of U.S. Army brigades be a permanent alignment or a rotating mission tied to the ARFORGEN cycle? (POC: Mr. Donald Hooker, CCJ5-SC, 813-529-5147, *Donald.hooker@centcom.mil*)

50. What are the implications to CENTCOM's future strategy of the New Silk Road for new energy and overland trade as a rival to major maritime trade routes? (POC: Mr. Donald Hooker, CCJ5-SC, 813-529-5147, *Donald.hooker@centcom.mil*)

51. How will the transition of the U.S. military presence in Afghanistan after 2016 alter U.S. strategic interest in Central Asia? (POC: Mr. Donald Hooker, CCJ5-SC, 813-529-5147, *Donald.hooker@centcom.mil*)

52. What is the U.S. strategy to support the opposition forces in Syria while insulating those same forces from fomenting sectarian violence in Iraq? (POC: Mr. Donald Hooker, CCJ5-SC, 813-529-5147, *Donald.hooker@centcom.mil*)

53. What are the long-term effects to Iraq if the United States trains opposition forces in Syria? Will Iran increase operations in response? (POC: Mr. Donald Hooker, CCJ5-SC, 813-529-5147, *Donald.hooker@centcom.mil*)

54. How does the U.S. Government affect positive resolution to the sectarian conflict in Iraq? (POC: Mr. Donald Hooker, CCJ5-SC, 813-529-5147, *Donald.hooker@centcom.mil*)

55. How do we prevent formation of undergoverned spaces such as Syria and western Iraq that serve as havens for violent extremist organizations? (POC: Mr. Donald Hooker, CCJ5-SC, 813-529-5147, *Donald.hooker@centcom.mil*)

56. What is the long-term effect of civil conflict in Iraq? How can U.S. Government authorities be improved to expand U.S. Government influence within Iraq? (POC: Mr. Donald Hooker, CCJ5-SC, 813-529-5147, *Donald.hooker@centcom.mil*)

U.S. EUROPEAN COMMAND

1.   National resource costs to influence global policy: Research the U.S. costs in: manpower, dollars, learning curves to competencies needed for combat, national will to engage abroad, loss of highly qualified manpower to combat training and operations for domestic needs, and world and NATO partnership impacts. (POC: LTC Martin Snider, EC J4-EN, DSN 314-430-5789, *martin.d.snider.mil@mail.mil*)

2.   Exploiting the cyber warfighting domain: Identify potential challenges and possible solutions for incorporating cyber as a supported and/or supporting effort in joint operations. (POC: MAJ Gabriel Campuzano, JCC, DSN 314-430-7248, *Gabriel.campuzano.mil@mail.mil*)

Regional topics:

3.   What is America's role and what are American interests associated with the on-going conflict in Ukraine?? (POC: Dr. John Deni, SSI, *john.r.deni.civ@mail.mil*, 717-245-4183)

4.   How would a transatlantic trade agreement impact the U.S. and allied militaries? (POC: Dr. John Deni, SSI, *john.r.deni.civ@mail.mil*, 717-245-4183)

5.   Assess the prospects for Russo-American security and/or defense cooperation. (POC: Dr. John Deni, SSI, *john.r.deni.civ@mail.mil*, 717-245-4183)

6.   Is the NATO alliance likely to engage in retrenchment or a renewed sense of global engagement following ISAF? (POC: Dr. John Deni, SSI, *john.r.deni.civ@mail.mil*, 717-245-4183)

7.   What is the role of the European allies in the rebalance to the Pacific? (POC: Dr. John Deni, SSI, *john.r.deni.civ@mail.mil*, 717-245-4183)

NORAD AND U.S. NORTHERN COMMAND

Cyber Operations.

1. Investigate the likelihood, impacts, and federal government response in the event of deliberate or accidental large scale cyber or power outage (e.g., electromagnetic pulse). Define the requirements for national Federal Integrating Operational Plans. What are the potential DoD requirements? (POC: Mr. Jeffrey Quesnell, N-NC/J55, 719-556-6832, *Jeffrey.quesnell@northcom.mil*)

Defense Support to Civil Authorities (DSCA) and Homeland Defense.

2. The creation of the Department of Homeland Security (DHS) has left an operational level gap that would, in general terms, focus and direct subordinate agencies to implement DHS strategic goals. How should this operational level gap within DHS be filled? (POC: Major Victor Frausto, J5 Plans & Policy, JTF-N, 915-356-3066, *victor.frausto@jtf.northcom.mil*)

3. Border security infrastructure options: How can Congress be proactive and secure the border prior to any new immigration law? What is the appetite to secure the border? (POC: Major Victor Frausto, J5 Plans & Policy, JTF-N, 915-356-3066, *victor.frausto@jtf.northcom.mil*)

4. One of USNORTHCOM's goals is to build partnerships. Due to the political environment, it is difficult to establish trusted partnerships with Mexico. Given this environment, how can JTFN, as the Counter Transnational Organized Crime lead, build capacity for Mexican Law Enforcement? (POC: Major Victor Frausto, J5 Plans & Policy, JTF-N, 915-356-3066, *victor.frausto@jtf.northcom.mil*)

5. Advantages and disadvantages for repealing the Posse Comitatus Act (PCA). Should the PCA be changed to allow for expanded military support to investigations—why or why not? (POC: Major Victor Frausto, J5 Plans & Policy, JTF-N, 915-356-3066, *victor.frausto@jtf.northcom.mil*)

6. Regarding the drug threat as it relates to DHS, when and how should the U.S. Government (USG) transition from Homeland Defense to Homeland Security in order to defend in depth? Can a case be made that we are under attack from Transnational Criminal Organizations? (POC: Major Victor Frausto, J5 Plans & Policy, JTF-N, 915-356-3066, *victor.frausto@jtf.northcom.mil*)

7. Conduct a comprehensive analysis of the authorities statutory and obligatory of multiple agencies responding to a Complex Incident within the NORTHCOM area of responsibility (AOR). Analysis should define the relationships between Title 10 Active

Component, Title 32 National Guard and State Active Duty (SAD). (POC: Mr. Kevin McCann, J553, 719-554-3128, *Kevin.j.mccann2.mil@mail.mil*)

8. Current doctrinal approach to Defense Support of Civil Authorities (DSCA) puts active duty forces in a support role for local first responders. However, local first responders are also members of the National Guard and Reserve. How does the call up of National Guard and Reserve forces affect local first responders? (POC: Mr. John Fawcett, J5, 719-556-6989, *john.m.fawcett.civ@mail.mil*)

9. What does energy superiority mean and should it be a service domain? Is energy superiority a stand-alone element of national power? How might controlling an energy domain impact our ability to exercise Diplomatic, Information, Military or Economic (DIME) power or impact our ability to fight? Are other countries (i.e., China and Russia) currently exercising energy superiority, and, if so, are they doing so successfully? (POC: Dr. Bill Waugaman, J9 Energy Security Lead, 719-556-7311, *William.a.waugaman.civ@mail.mil*)

Intelligence.

10. What are the best practices of intelligence fusion? What were the centers of excellence and what made them successful? Are there lessons learned that can be shared with Domestic Law Enforcement Agencies (DLEAs) intelligence centers or a proof of concept that can be applied? Conduct analysis on best practices for intelligence fusion centers, lessons learned from the Iraq and Afghanistan wars and their application along the Southwest Border. (POC: Major Victor Frausto, J5 Plans & Policy, JTF-N, 915-356-3066, *victor.frausto@jtf.northcom.mil*)

11. Analyze how to best employ unmanned aircraft systems (UASs) along the southwest border (SWB). What should the way ahead be for use of these systems, to include possible FAA policy changes? What technologies may allow FAA to reconsider UAS use? (POC: Major Victor Frausto, J5 Plans & Policy, JTF-N, 915-356-3066, *victor.frausto@jtf.northcom.mil*)

12. China's Arctic Interests and Goals: China has indicated interest in the Arctic, but there is a wide range of speculation concerning Chinese goals. Analyze Chinese interests in the Arctic and the motivation for those interests. (POC: Mr. John Fawcett, J5, 719-556-6989, *john.m.fawcett.civ@mail.mil*)

Law Enforcement.

13. Developing a way ahead for bi-national DLEA solutions. What should be done to increase Mexican law enforcement capacity? (POC: Major Victor Frausto, J5 Plans & Policy, JTF-N, 915-356-3066, *victor.frausto@jtf.northcom.mil*)

Security Cooperation.

14. With the creation of USNORTHCOM, both Joint Task Force 4 and 5 expanded to become JIATF South and JIATF West, falling under SOUTHCOM and PACOM. Joint Task Force 6 was renamed to JTF-N and was rolled under USNORTHCOM. JTF-N did not become a JIATF due to political reasons. How can JTF-N overcome barriers between USNORTHCOM and USSOUTHCOM and more specifically with JIATF-South? (POC: Major Victor Frausto, J5 Plans & Policy, JTF-N, 915-356-3066, *victor.frausto@jtf.northcom.mil*)

15. Impact of Self-Defense Forces on the future security environment in Mexico: Increasing levels of narco-traffic related violence has led to the development of Civilian Self-Defense Forces in Michoacán. What is the potential impact of these groups on the future of the security environment in Mexico? Based on the development of similar groups in other parts of Latin America, how should the Mexican government respond to these groups? (POC: Mr. John Gaughan, 719-554-0024, *John.F.Gaughan2.mil@mail.mil*)

Transnational Criminal Organizations (TCO) and Ant-narcotics.
(POC: Major Victor Frausto, J5 Plans & Policy, JTF-N, 915-356-3066, *victor.frausto@jtf.northcom.mil*)

16. Counter Drug Policy Challenges: Transnational Organized Crime and related threats have significantly evolved and outpaced appropriate changes to U.S. law and policy. Current policies prevent Joint Task Force North (JTF-N) from providing more effective and responsive support to our DLEA partners. What major policy changes sould be recommended for improved support to DLEA?

17. Organizational alternatives for a Counterdrug/Counterthreat focused Interagency Task Organization. Using Joint Interagency Task Force South (JIATF-S) and Joint Interagency Task Force West (JIATF-W) as proof of concept, analyze solution sets for an agency that would pool Joint, Interagency, Intergovernmental, and Multinational (JIIM) environment to the counter drug/counter threats problem sets.

18. Should the concept of design be applied to combat Transnational Criminal Organizations (TCOs)?

19. Is there a convergence of Drug Trafficking Organizations and Terrorist Organizations? Is it a valid threat in 2015? A great concern is the possible use of Drug cartel's avenue of approaches, existing pipelines, and delivery methods to smuggle terrorist or weapons of mass destruction into the homeland. Analyze on the likelihood of Drug Trafficking Organizations (DTOs) and Terrorists Organizations converging to inflict harm in the United Staates.

20. In the past, the so called "drug war" was synonymous with low level drug dealers who pushed drugs to the United States via mules or through Ports of Entry (POEs) with amounts often considered small. As drug traffic organizations (DTOs) evolved, we now see much more sophisticated business models involved in much more than just drugs. Analyze the "drug war." As TCOs expand into other areas (e.g., human trafficking), are we defining the war correctly?

21. In order to defeat drug cartels, we must gain support of those who can assist law enforcement efforts the most. Those who reside in the source areas (golden triangle) either turn a blind eye or are actively protecting drug cartel operations. Those who reside in transit zones often suffer, both physically and economically. What are the efforts that can begin a grassroots campaign to get citizens to help counter drug cartels? How can we garner support of the Mexican government and people to support Counter Transnational Organized Crime (CTOC)?

22. New and enhanced approaches for countering TCOs at strategic, operational, and tactical levels. Currently, JTF-N is following the approach of "it takes a network to destroy a network." What are other methods that can be applied against CTOC organizations? Would different approaches work better at the strategic and operational level rather than the tactical? What can DoD do to take advantage of lessons learned from Iraq and Afghanistan?

23. How could the U.S. executive and/or legislative branches build a national consensus that recognizes the drug problem?

24. What are the multinational solutions to combat drug trafficking within the transit zone?

25. Develop the case for a comprehensive national counternarcotics strategy instead of regional or specific border strategies.

26. TCOs Center of Gravity (COG) analysis and how it may differ for different organizations. Understanding the enemy's COG allows commanders to employ the best array of resources against those COGs in order to defeat them. What are the primary sources of moral or physical strength, power, and resistance for TCOs?

U.S. PACIFIC COMMAND

U.S. ARMY PACIFIC

POC: Mr. Rod Laszlo, Deputy, USARPAC G5, 808 438-6337, *rodney.f.laszlo.civ@mail.mil*

1. How can the Army develop a cooperative and comprehensive partnership with China that influences China to collaborate/participate in Army activities and exercises that are within National Defense Authorization Act (NDAA) guidance? Secondly, what activities or specific capabilities outside the NDAA would in your view improve stability within the region with respect to China? Finally, what countries or allies and partners would be best to achieve deterrence and prevent increased Chinese aggression and coercion and how can this be measured? (POC: LTC Chris Bachl, USARPAC G5, 808-438-6317, *Christopher.a.bachl.mil@mail.mil*)

2. Can India can be a power balancer in the Indo-Asia Pacific, to counter China, whose energy life line must come through the Indian Ocean? If so, what will it take from the U.S.? Have U.S. actions with Pakistan in the struggle against Al Qaeda and the Taliban hurt U.S. chances of making India the power balancer? Why or why not? (POC: MAJ Jeremy Sauer, USARPAC G5, 808-438-6329, *jeremy.l.sauer.mil@mail.mil*)

3. How can the U.S. change its strategic vision to think in terms of the Western Pacific and Indian Oceans as a single body that defines U.S. security interests? Will deepening economic and military strategies with Burma, Vietnam, and the Philippines, and keeping Indonesia neutral and moderate Islamic by persuading allies (e.g. Australia) to contribute to its economic development, lock in the Indian Ocean world for U.S. interests? Will doing this abate or upset current US-China problems and rivalry?   (POC: MAJ   Jeremy   Sauer,   USARPAC   G5,   808-438-6329, *jeremy.l.sauer.mil@mail.mil*)

4. Can and will future advances in cyberspace technologies fundamentally alter the concepts of landpower and land control? If so, how do you reconcile potential adversaries that cannot absorb cyberspace effects (e.g. North Korea)? (POC: MAJ Jeremy Sauer, USARPAC G5, 808-438-6329, *jeremy.l.sauer.mil@mail.mil*)

5. Innovations in Pre-positioned Equipment: How can the Army and the rest of DOD, in conjunction with other government agencies and host nations, optimize funding, composition, location, and utilization of pre-positioned equipment activity sets for use in Operations short of Major Combat Operations (HA/DR, Small scale assessment or security ops), Training, and Capacity Building? (POC: COL Jack Goetz, USARPAC G5, 808-438-6337, *john.c.goetz3.mil@mail.mil*)

6. Development of Army Service Component Command (ASCC) Strategies: analysis of the similarities, differences and utility of same. Does an ASCC need a strategy separate from the Combatant Commander's Strategy? Can the Theater Campaign Support Plan serve as the strategic vision for the ASCC Commander? From a broad perspective on the Theater Army: what do they do, what should they do, do they all do the same thing, and what can they do better? (POC: LTC Ben Bennett, USARPAC G5, 808-438-3341, *Benjamin.a.bennett.mil@mail.mil*)

Regional Topics:

7. What would the Army's role be in an international response to the collapse or outbreak of civil war in North Korea? (POC: Dr. Steven Metz, SSI, 717-245-3822, *steven.k.metz.civ@mail.mil*)

8. How can the Army better contribute to regional peace and stability across the Indo-Asia-Pacific region? (POC: Dr. John Deni, SSI, *john.r.deni.civ@mail.mil*, 717-245-4183)

9. In the event of a DPRK collapse and Korean peninsula reunification under Seoul's leadership, what are the prospects for the U.S.-ROK alliance? What are the military implications associated with the potential outcomes? (POC: Dr. John Deni, SSI, *john.r.deni.civ@mail.mil*, 717-245-4183)

10. What is the role of the United States in island and other territorial disputes between China, Japan, South Korea, Taiwan, the Philippines, Vietnam, and other states? (POC: Dr. John Deni, SSI, *john.r.deni.civ@mail.mil*, 717-245-4183)

11. What role does the Army have to play in engaging and deterring China? What are the requirements for U.S. Army forward presence in the Pacific to meet this mission? (POC: Dr. John Deni, SSI, *john.r.deni.civ@mail.mil*, 717-245-4183)

U. S. FORCES KOREA

POC: LtCol Mike Stehle, DSN 315-723-8037, *michael.w.stehle.mil@mail.mil*

12. Examine the pre-World War I (1900-1914) European security environment and the factors that led to conflict from a DIME perspective. Compare and contrast that environment with today's North East Asian security environment with particular attention on the relationships between the Republic of Korea, North Korea, China, Japan and Russia. What are the potential impacts on U.S. national interests within the region?

Factors to consider:
- The impacts of increasing nationalism and globalization
- Unresolved territorial disputes
- Alliance relationships and obligations
- Balance of power/regional stability
- Arms race/defense build up
- Imperial and colonial rivalries for national wealth, power, prestige and resources
- Economic rivalries in industry and trade
- Misperceptions of national interests and intent
- Misperceptions of diplomatic strategic communications
- Domestic political pressures and will of the populace

13. Examine the pre-World War II (1930-1939) **European security environment** and the factors that led to conflict from a DIME perspective. Compare and contrast that environment with today's North East Asian security environment with particular attention on the relationships between the Republic of Korea, North Korea, China, Japan and Russia. What are the potential impacts on U.S. national interests within the region?

Factors to consider:
- The impacts of increasing nationalism and globalization
- Ability of international organizations to settle nation state grievances (inter-war years)
- Effectiveness of post WWI conflict termination
- Unresolved territorial disputes
- Alliance relationships and obligations
- Balance of power/regional stability
- Arms race/defense build up
- Imperial and colonial rivalries for national wealth, power, prestige and resources
- Economic rivalries in industry and trade
- Misperceptions of national interests and intent
- Misperceptions of diplomatic strategic communications
- Domestic political pressures and will of the populace

14. Examine the pre-World War II (1930-1939) **East Asia-Pacific security environment** and the factors that led to conflict from a DIME perspective. Compare and contrast that environment with today's North East Asian security environment with particular attention on the relationships between the Republic of Korea, North Korea, China, Japan and Russia. What are the potential impacts on U.S. national interests within the region?

Factors to consider:
- The impacts of increasing nationalism and globalization
- Ability of international organizations to negotiate nation state grievances (inter-war years)
- Effectiveness of post WWI conflict termination
- National survival
- Imperial quests for national wealth, power, prestige and resources
- Economic rivalries in industry and trade
- Misperceptions of national interests and intent
- Misperceptions of diplomatic strategic communications
- Domestic political pressures and will of the populace
- National conduct during conflict and effects on long term post war international relations (Japan, Korea, China)

U. S. ARMY FIRST CORPS

POC:

Pacific Pathways

15. Examine ways that Pacific Pathways supports USARPAC efforts to "set theater" conditions and provide quick response options. By placing ready Army forces and enablers in motion throughout the Asia Pacific, at or near the point of crises, Pacific Pathways supports partner capacity building, fosters professional relationships, and develops respect for host nation culture and capabilities. Pacific Pathways gives the National Command Authority, PACOM Commander and USARPAC Commander strategic options to deescalate tensions in a critical region.

16. Evaluate how Pacific Pathways can serve as an operational concept to reinforce Engagement and Partnership strategy and align U.S. Army Pacific's (USARPAC) I Corps forces with specific partner nations to build habitual relationships, combined capabilities, mutual confidence, and trust.

17. Evaluate Pacific Pathways ability to demonstrate commitment to Allies and Partners. Overcoming the tyranny of distance in the Pacific, these forces achieve persistent engagement with U.S. allies and partners, position forward with crisis response capability, and enhance response options for the USARPAC Commander.

18. Examine the proposition that Pacific Pathways builds readiness in our forces. Pacific Pathways builds upon the U.S. Army's Regionally Aligned Force (RAF) missions

by leveraging Asia Pacific partnerships for U.S. Army access to foreign training environments, military-to-military exchanges, and familiarizes I Corps units with our operational environment.

U.S. SOUTHERN COMMAND

1. Would stopping the flow of drugs through a friendly country and redirecting it into an unfriendly country ultimately serve our national security objectives? (Lieutenant Brian Reiziss, Process Management Analysis Cell, 305-437-3133, *brian.g.reiziss.mil@mail.mil*)

2. What effects would the legalization of drugs have on the countries in that drug's transit zone? (Lieutenant Brian Reiziss, Process Management Analysis Cell, 305-437-3133, *brian.g.reiziss.mil@mail.mil*)

3. One of the fundamental questions that arise as a mass migration event begins to unfold is: How many people will migrate (as internally displaced persons or refugees) as a result of the crisis and where will they migrate to? There is some literature that speaks to concerns on the part of migrants with regard to personal safety and security as reasons for leaving their home, but are there other important triggers? Additionally, once the decision is made to migrate, what determines how many will migrate, what path they select, and what is the intended final destination for each group of migrants? What role does geography (elevation, water, food, etc.), nearby population centers, available transportation modes/routes/nodes, and political boundaries play in such decisions? (POC: Mr. William Feild, J86, 305-437-2740, *william.b.feild.civ@mail.mil*)

4. Growing Chinese and Russian soft power and its/their political-economic-security-informational engagement in the USSOUTHCOM AOR: A study of the past 10 years and 10-year projection. Chinese and Russian influence are growing in the region. Does this increased soft power put USSOUTHCOM mil-to-mil relationships and partner of choice at increased risk? (POCs: Mr. James Sturdevant, J2 IOD, 305-437-2976, *james.sturdevant.civ.@mail.mil*; and Mr. Robert T. Bradshaw, J2 IOD, 305-437-2684, *robert.bradshaw.civ@mail.mil*)

5. Venezuelan economic and oil collapse and ramifications for USSOUTHCOM AOR region and for its countries and implications for the United States. Despite having the largest (heavy) oil reserves in the world, Venezuela is experiencing an economic decline due to fundamental macroeconomic, microeconomic, balance of payments, and trade mismanagement as a result of continued Bolivarian Socialism and unwillingness to change its economic policies. What are the engagement opportunities for USSOUTHCOM and the United States? How will USSOUTHCOM countries react to and potential Venezuelan economic collapse? What are the political-economic-social instability effects in these countries? (POCs: Mr. James Sturdevant, J2 IOD, 305-437-2976, *james.sturdevant.civ.@mail.mil*; and Mr. Robert T. Bradshaw, J2 IOD, 305-437-2684, *robert.bradshaw.civ@mail.mil*)

6. Antarctica: The case for future mineral exploitation and competition by USSOUTHCOM Countries, China, Russia, and European Union Countries if the United Nations Antarctica Treaty is not renewed. The conventional academic wisdom is that the UN Treaty, which expires in several years, will not be renewed. Minerals will be available for economic exploitation due to global warming, though operating costs will be significantly high due to these climate and temperature effects. How will USSOUTHCOM AOR nations and external actors pursue their economic interests? What will its implications be for the United States and USSOUTHCOM? (POCs: Mr. James Sturdevant, J2 IOD, 305-437-2976, *james.sturdevant.civ.@mail.mil*; and Mr. Robert T. Bradshaw, J2 IOD, 305-437-2684, *robert.bradshaw.civ@mail.mil*)

7. What potential U.S. military initiatives could best counter the trend to exclude the United States from regional fora? Examine the changing dynamics within regional defense groups such as the Conference of Defense Ministers of the Americas (CDMA) and the South American Defense Council (SADC). Propose methods by which the United States may leverage regional efforts through initiatives both within the CDMA framework and other multilateral fora. (POC: Dr. Marisabel Bras, J2, 305-437-2099, *Marisabel.bras.civ@mail.mil*)

8. How can DoD best support broader U.S. Government counter threat finance (CTF) and countering transnational organized crime (CTOC) efforts with the USSOUTHCOM AOR as a specific geographical focus area? Conduct an in-depth study that examines DoD CTF and CTOC efforts, opportunities, and roadblocks in areas such as intelligence production, intelligence collection and reporting, building partnership capacity, and developing strategic policy and plans. (POC: Nicholas Schumann J2, 305-437-3740, *Nicholas.j.schumann2.civ@mail.mil*).

9. Organization of American States (OAS): What security role, if any, will it have in 2020? The OAS, part of the post-World War II Inter-American System, has increasingly become stale as a forum to address regional concerns. Develop an in-depth study that includes historical background information and current obstacles for multilateral initiatives within the OAS, focusing on potential U.S. initiatives to improve communication based on transnational concerns such as criminal organizations, humanitarian assistance, multinational peacekeeping operations, etc. (POC: Dr. Marisabel Bras, J2, 305-437-2099, *Marisabel.bras.civ@mail.mil*)

10. Brazil: To what extent will vigilantism affect the security situation in Rio de Janeiro and Sao Paulo by 2020? Provide an assessment of current criminal activity in Brazil focusing on Rio de Janeiro and Sao Paulo. Include current security TTPs and discuss government shortfalls to address raising crime in these large cities. (POC: Dr. Marisabel Bras, J2, 305-437-2099, *Marisabel.bras.civ@mail.mil*)

11. Cuba: What does the post-Castro political environment look like? Examine the "underground" political environment and determine whether or not there is any capacity or motive to drive change in the government. Determine whether foreign influences exist, and how would they respond to policy changes. Would a change in the political environment encourage the United States to lift or lighten sanctions against Cuba? (POCs: IS2 Jessica Jimenez, USSOUTHCOM GEOINT analyst desk, 305-437-0911, *jessica.e.jimenez6.mil@mail.mil*; IS3 Zackery Johnston, USSOUTHCOM GEOINT analyst desk, 305-437-0914, *zackery.j.johnston.mil@mail.mil*)

12. Impact of transnational organized crime (TOC) in Central America and its effect on U.S. security. (POC: Lieutenant Colonel Eloy Mazo, J55, 305-437-1592, *eloy.m.mazo.mil@mail.mil*)

13. Determining and measuring U.S. influence via U.S. military power in Latin America. How should the military instrument of power be used to mitigate the loss of larger U.S. influence due to budget cuts and sequestration? (POC: Major Kelly McCoy, J55, 305-437-1482, *michael.k.mccoy1.mil@mail.mil*)

14. Identifying black swan events that threaten U.S. national security interests. Determine the types of events that could have catastrophic impacts on U.S. national security interests that either emanate or could take place in the USSOUTHCOM AOR. (POC: Major Kelly McCoy, J55, 305-437-1482, *michael.k.mccoy1.mil@mail.mil*)

U.S. CYBER COMMAND

POC: Mr. Blane Clark, J55 (Strategy, Policy and Doctrine Division), 443 634-2746), *brclark@cybercom.mil*

1. What constitutes key strategic cyber terrain for the Department of Defense (DoD), both currently and 5 years hence? What criteria are germane to ascertaining key strategic cyber terrain?

2. What characterizes strategic deterrence in cyberspace? Is deterrence a precursor to defense? Is it part and parcel of a continuum from deterrence through defense, to include, cyberspace defense operations beyond the DoD Information Networks (DODIN)? Can deterrence be applied through a whole-of-nation approach? Should there be a Department of Cyber at the national level to facilitate a whole-of-nation approach?

3. What might be a useful model for more accurately assessing and portraying measureable cyber threat levels beyond the two attributes of threat intent and capability? How might such a model be implemented across all of DoD? What might be a viable set of thresholds that would allow for pre-approved defensive cyberspace response actions (DCO-RA)? What about for offensive cyberspace operations?

4. In view of the strategic risks in and through cyberspace to U.S. critical infrastructure and key resources, how might the private sector be integrated for a whole-of-nation response? What policy, legal (to include regulatory), and financial security issues would need to be resolved?

5. What are the national strategic implications, both positive and negative, for military involvement in cyber defense of non-DoD critical infrastructure? What are the related political and economic issues that would require resolution?

6. What are the ethical limits of taking action in cyberspace while there is an apparent lack of established norms and rule of law? How might the U.S. Government establish international norms of behavior in cyberspace? What about rule of law for the international community regarding actions in cyberspace?

7. Is there a strategic trade-off economically between costs to defend versus costs to attack? What might the parameters of such a trade-off analysis be? What trending indications might be observable by such a trade-off analysis?

8. What might constitute a value model for investments in cyberspace capabilities and capacity, to include force structure, for cyberspace security, DODIN operations, and defensive and offensive cyberspace operations? What might constitute the

investment for each separately and then as an aggregate? Are there dual purpose investments?

9. Are current cyber policies, related Army and DoD directives and instructions, and Army and Joint military doctrine sufficient to underpin defensive and offense effects operations to achieve desired strategic outcomes?

10. How should the concepts of sovereignty, ownership, possession, privacy, theft, right of self-defense, and other concepts of social, political and international norms be considered and applied when planning and executing operations in cyberspace?

11. How might the Army develop and establish a cyber career path for both officers and enlisted personnel? What would constitute accession and retention criteria? What incentives might be integrated in accession and retention initiatives?

12. What might the corporate approach be for DoD to ensure a career long training and education continuum for a trained and ready cyber workforce?

13. What diplomatic and military implications might there be for formal establishment of a North Atlantic Treaty Organization cyberspace military capability? What might a combined cyber force consist of, what might be the rules of engagement and what might be a potential synchronization/deconfliction process? How might a coalition execute cyberspace operations? How might other elements of national power available to the coalition from its members be integrated?

14. Should the Army, and DoD writ large, wholly embrace a cloud computing architecture in the evolution of the DODIN? What are the strategic and operational challenges to doing so and not doing so?

15. How do the concepts of measures of performance and measures of effectiveness apply in cyberspace?

U.S. ARMY CYBER COMMAND

POC: LTC Mike Hughes, ARCYBER Strategic Initiatives Group; 703-706-1404; *michael.p.hughes.mil@mail.mil*

1. What is the Department of Defense role in protecting the nation's critical infrastructure from 21st century cyber threats?

2. What are the most effective and efficient roles and missions to utilize Reserve Component forces in Total Army cyberspace operations?

3.   How does the U.S. Army recruit and retain the highest quality military and civilian cyber professions?

4.   How can the Army make use of Multi-Protocol Layer Switching (MPLS) to securely incorporate tactical networks onto its strategic infrastructure?

5.   How can the Army utilize Joint Photographic Exports Group (JPEG-LS) compression method to optimize the fidelity of its satellite imagery?

6.   How is the Army preparing for future cyber threats? Are budget constraints negatively impacting the Army's ability to meet the cyber challenges?

7.   What oversight, training and procedures has the Army put in place to protect against insider threats to Army networks like those experienced in the "Wiki-leaks" incident?

U.S. SPECIAL OPERATIONS COMMAND

(POCs: LTC Tom Nagle, Thomas.Nagle@socom.mil, 813-826-3132; and
Mr. Bob Jones, Robert.Jones@socom.mil, 813-826-1294)

1. **<u>WMD</u>** – Are current policies and actions advancing or undermining our counter-proliferation intentions? Are the incentives for the acquisition and/or use of WMD rising or subsiding at the state level? What about the incentives for transfer of WMD to non-state actors? How can the US favorably change these incentives? How can USSOCOM better contribute to counter-proliferation efforts?

2. **<u>Information/Digital Age</u>** – Is the Information/Digital Age changing the nature of stability in troubled regions? What are the implications of increasingly numerous empowered individuals? How does information transparency affect the interactions of states? What are the implications for our military operations and engagements? Are there opportunities?

3. **<u>Shifting Power Distribution & Diffusion</u>** – Is the nature of power changing on the international stage? If so, is it doing so uniformly (i.e., is there a common understanding of "what matters" across regions)? Are power shifts creating a higher likelihood of conflict? If so, among and between which groups? Are today's shifts in power unique, or largely similar to historical experience?

4. **<u>Megacities</u> –** Do rapidly growing cities with massive urban slums pose a substantial challenge to vital US national interests? What are the critical distinctions between such cities in developing versus developed nations? What is the basis of control/ power/ influence within a megacity? Who is most likely to wield it (governments, gangs, tribes, or anarchy)? Is it possible to create advantageous strategic effects under these conditions?

5. **<u>Tactical Actions vs. Strategic Results</u>** – Has there been a disconnect between our tactical actions and our strategic intentions during the war on terror? Is so, are we resolving it? What have the strategic lessons been? Are we able to improve our strategic without making major changes across the interagency? What types of strategic metrics should we use?

6. **<u>Conflict Prevention</u>** – Does the mere prevention of conflict advance US interests? If not, how can the US best facilitate compromise? How is conflict prevention fundamentally different at the strategic level from deterrence? What can USSOCOM uniquely contribute to reducing the likelihood of conflict?

7. **Human Nature vs. Culture** – Have we focused too exclusively on the role of culture in attempting to explain recent crises? Are the problems we will face in the future more firmly rooted in human nature or human cultures? Is the answer to this question important for our strategic approach?

8. **Risk Management** – In what areas does USSOCOM face a great deal of risk, given current and projected resourcing? Which areas are critical? In what areas are we able to accept risk? In what areas must we "buy down" risk to maximum extent possible? What other risk-management strategies are available to USSOCOM?

9. **Interest-Based Strategies** – How can the US best position itself to preserve and build upon a network of actors with interests that are congruent with our own? How do we ensure stability of this network as governments change and adjust to the demands of their populations? How should USSOCOM posture itself to support an "interest-based" approach?

10. **Weapons Technology Proliferation** – How is the proliferation of innovation and the falling cost of weapons and dual-use technology changing military balances of power?

11. **Disruptive & Game-Changing Technologies** – What disruptive & game-changing technologies have potential global significance? How will these emerging technologies impact future conflict?

12. **Adaptability & Agility** – Is the SOCOM enterprise an adequately flexible system capable of rapid change (in whole or in parts) when required? What "best practices" can be implemented to maximize our ability to generate capacity and capability when needed? How does USSOCOM position itself to provide the widest options possible for policymakers?

13. **Capability Gaps** – What capability gaps might USSOCOM have in the future in terms of disruptive technologies? What gaps will exist for dealing with megacities? Social media capabilities? Do we have gaps for relief operations in response to natural disasters? Conducting operations in the Arctic?

14. **Long-term Fiscal Constraints** – How do the growing fiscal constraints in industrialized nations affect their perceptions of their interests and appropriate security posture, if at all? Are military alliances and partnerships likely to undergo changes due to fiscal pressures? Will powerful states be less likely to offer security guarantees? What types of military commitments will states be willing/unwilling to make for less-than-vital interests? Should this affect US policy? Basing?

15. **Strategic Constraints** – Does our strategic culture blind us to potential threats, sources of risk, and opportunities? Does our national security process have a similar effect? How can USSOCOM avoid overly restricted solutions to problems that are poorly defined or understood due to these constraints?

16. **Demographics** - How does the rise of the middle class in developing nations affect the security threats and opportunities in those countries? What are the most dangerous population shifts or migrations on the horizon? What are the implications of "youth in revolt" in fragile states (situations in which youth lose touch with their culture as families are torn apart by conflict and respond in ways that separate them from traditional guidance)? Does the changing role of women in unstable regions have SOCOM implications?

17. **Energy/Other Resources** – How will changes in energy harvesting and consumption alter the global security environment? How will rising energy consumption in emerging nations alter the strategic landscape? How will competition over other resources (food, water, etc) shape conflict in manners that have implications for USSOCOM?

U.S. ARMY SPECIAL OPERATIONS COMMAND

POC: LTC Michael Doyle, Chief, G9 Analysis Division, 910-4342-0965, michael.c.doyle@soc.mil

1. How should USASOC assess the capability and capacity of insurgencies?
- What are the distinguishable levels/ phases of an insurgency?
   - What are the criteria for assessing an insurgency?
   - What are the questions we ask or what information do we verify to ascertain current status?
   - What are the various answers for each that determine if an insurgency's capability, under the various criteria, puts them in latent thru governing level for that category?

2. Do current indicators provide evidence of a growing trend in international competition from conventional warfare to irregular warfare?

3. What issues might accompany the NATO command of a joint combined unconventional warfare effort?
   - What are the requirements for NATO to be in command?
   - What policies, authorities and processes need to be established to ensure unity of effort?
   - Is a NATO command capable of integrating Unified Action Partner (UAP), host nation (HN) and U.S. agencies?
   - What are the possible impediments to timely decisions?

4. When considering unconventional warfare (UW) operations, is it conceivable to do mission and troop to task assessments that might allow non-special operations forces (SOF)/conventional forces (CF)/U.S. Army Reserve (USAR) elements to augment SOF?
   - How are mission elements identified as special operations or conventional?
   - What are the funding and authority issues?
   - What are the force provider sourcing timelines issues?
   - What is the best, vice preferred, command relationship when SOF and CF operate in unison?

5. Explore issues confronting the development of a scalable Hybrid SOF/CF/UAP HQ/Structures with comparable capability of a DIV/ Corps level HQ.
   - What organizational requirements would a hybrid HQ need to meet?
   - What operational employment issues must be addressed by a hybrid HQ?

U.S. TRANSPORTATION COMMAND

1. How can the Army's newly-established 7th Transportation Brigade (Expeditionary) (7th TB[X]) be resourced/postured to provide a limited, early-in port opening capability (C+7) and theater distribution planning for the geographic combatant commander (GCC)?

Background/Additional Details: USTRANSCOM provides several theater distribution enabler capabilities to the supported GCC which necessitate very short response times. Joint Force 2020 requires the future force to be globally agile and rapidly deployable. USTRANSCOM must quickly project that force despite the enemy's anti-access/aerial denial efforts. The Joint Task Force Port Opening (JTF-PO) aerial port of debarkation (APOD) and seaport of debarkation (SPOD) capabilities currently incorporate Surface Deployment and Distribution Command (SDDC) and Navy elements to accomplish the mission for non-austere and undamaged seaports. However, the most demanding mission, opening/operating an austere and damaged seaport (JTF-PO SPOD Heavy), depends heavily on Navy forces attached to the mission via a memorandum of agreement with USTRANSCOM. If the 7th TB(X) is made modular, scalable, and deployable by air to arrive in theater by C+7, the JTF-PO SPOD would be more effective to support this theater commander-desired mission. Additionally, by incorporating a theater distribution planning capability, this could benefit the GCC and the follow-on TSC/ESC. (POC: Pat Kennedy, TCJ5-SS, DSN 770-4764, *patrick.s.kennedy.ctr@mail.mil*)

2. What are DoD's options to project and sustain forces in a fiscally constrained environment? Research should consider political sensitivities and costed options for time sensitive movements. Options should be examined based on various areas of responsibility. They should also consider Transportation Working Capital Fund funded transportation assets and organic versus commercial movement.

Background/Additional Details: USTRANSCOM on behalf of the DoD entered into a partnership and joined the Movement Coordination Centre Europe (MCCE), in Eindhoven the Netherlands in the fall of 2008. Since that time, the United States has matured its processes and procedures, but what other avenues such as this would exist for the Pacific Command theater of operations or in a disaster response scenario, where international support is needed or requested? (*https://www.mcce-mil.com/Pages/default.aspx*) There are additional capabilities, such as the Heavy Airlift Wing (*www.heavyairliftwing.org/*), Strategic Airlift Interim Solution (*https://www.mcce-mil.com/salcc/Pages/default.aspx*), and European Airlift Transport Command, (*en.wikipedia.org/wiki/European_Air_Transport_Command*). (POC: Mr. Jeremy Baran, TCJ6-SA, DSN 770-4398, *jeremy.r.baran.ctr@mail.mil*)

3. Army Deployment and Distribution Data Sharing Across the Joint Enterprise.

Background/Additional Details: In today's joint environment, the combatant commands and Services need to gain a holistic view of the location, status, and schedule of equipment, personnel, and materiel required to support operations around the globe. The lack of transportation intermodal visibility inhibits the efficient management of accelerated deployment and distribution information resulting from sharing impediments and inefficiencies imposed by point-to-point legacy business system interfaces. Now, more than ever, it is critical that the DoD leverages all enterprise data across the DoD, making it accessible, exposed, and understandable to all authorized users. Develop recommendations that prioritize where the Army must focus efforts including what data needs to be shared, and describe possible solutions. (POC: Mr. John Kramarczyk, TCJ4-TB, DSN 770-4687, *john.m.kramarczyk2.civ@mail.mil*)

4. The Critical Infrastructure Gap: Cyber Vulnerabilities at the World's Busiest Port Facilities.

Background/Additional Details: Determine the current state of cybersecurity awareness and culture at the world's busiest port facilities. Refer to CDR Joseph Kramek, "The Critical Infrastructure Gap: U.S. Port Facilities and Cyber Vulnerabilities," Foreign Policy at Brookings, July 2013, available from www.brookings.edu/research/papers/2013/07/03-cyber-ports-security-kramek (POC: Mr. Matthew Cramer, TCJ2-OS, DSN 770-7280, *matthew.j.cramer2.civ@mail.mil*)

5. Joint and Service training/Joint Force Headquarters Formation.

Background / Additional Details:
a. Looming DoD-mandated cutbacks to combatant commands and the Services will adversely impact the combatant commands' ability to rapidly establish a joint force headquarters during an emergent crisis. The loss of combatant command Standing Joint Task Force Headquarters Core elements and the anticipated cuts to existing component headquarters and Service manning levels will degrade the ability to rapidly establish a Joint Force Headquarters.

b. USTRANSCOM's Joint Enabling Capabilities Command provides mission-tailored, joint capability packages to combatant commanders so as to facilitate rapid establishment of joint force headquarters, fulfill Global Response Force execution, and bridge joint operational requirements. The JECC currently trains with joint force components to enable the rapid establishment of joint force headquarters requirements.

c. U.S. Army sourced forces such as the XVIII Airborne Corps have been designated by the SECDEF as a potential world-wide Joint Force Headquarters to support any combatant command. What command relationships and training mechanisms should be codified to effectively train with a single service sourced, nonservice component

command, such as the XVIII Airborne Corps, to support multiple combatant command mission areas?

(POC: Mr. Steve Daughtridge, JECC J33, DSN 836-9967, *paul.daughtridge@jecc.ustranscom.mil*)

U.S. ARMY MATERIEL COMMAND

HQ U.S. Army Materiel Command.
(POC: Mr. Curt Higdon, HQAMC G3/4 (Strategic Integration), 256-450-6845, *marvin.c.higdon.civ@mail.mil*)

1. Analyze future support requirements for SOF and small footprint operations. How do these differ, and what are the needs of each? What logistics lessons learned apply to these situations?

2. As we restructure the generating force, we must first identify the key functions that are inherently governmental and which are contracted out. Which functions currently performed by contractors will transition to the government, and how will we accomplish them as contracts are no longer funded? Which are not inherently governmental and can be contracted out in times of crisis if insufficient government personnel are available?

3. Should the Army restructure support to the Industrial base? If so, how? Consider future availability of, and support to, commercial off-the-shelf equipment and the levels of acceptable risk on single source facilities.

4. How can the Army best support the joint fight? Are there areas such as joint repair facilities where we can partner with sister services or Joint Interagency Intergovernmental and Multinational (JIIM) partners to achieve a better end? How must Joint Capabilities Integration and Development System (JCIDS) adapt to ensure our equipment is more interoperable in the JIIM? Should we invest in adapting our equipment to allow greater interoperability with and reliance upon our JIIM partners? Which missions can the Army best perform amongst the services in support of the joint force?

HQ AMC, G-3/4 Strategic Integration.

5. Many materiel challenges involve nonhierarchical relationships among government and nongovernment organizations. How can the Army improve collaboration with partners in the logistics community? ((POC: Dr. Chev Kellogg, 256-450-7510, *chever.h.kellogg.civ@mail.mil*)

6. Many times operational decisions are made absent resourcing considerations. This will increase risk as resources become increasingly constrained. What business decision making models that link operational with resourcing concerns would be useful to Army logistics? (POC: Dr. Chev Kellogg, 256-450-7510, *chever.h.kellogg.civ@mail.mil*)

7. As we transition from combat to sustainment it is apropos to reassess our Risk Assessment Methodology. What aspects of Army logistics will exhibit increased risk as we transition to a more CONUS-based Army? Discuss possible mitigations to these risks. (POC: Dr. Chev Kellogg, 256-450-7510, *chever.h.kellogg.civ@mail.mil*)

8. AC/RC Mix Considerations: What are the potential benefits and risks to logistics and sustainment of applying more resources to the reserve component and reducing active component even further than currently planned and/or considered? What are the possible changes to the RC component that could mitigate readiness risk? Assuming the same training days in a year, what are the potential capability gains of increasing weekend and Annual Training MTOE proficiency requirements and assessment standards (e.g., regional reserve training centers focused on maintaining BN proficiency level in order to remain prepared for immediate NTC validation and inclusion into the ARFORGEN model? Is there is potential in nominating legislation for a RC Ready-Force that fills any residual gaps between the RC and AC components? (POC: Major Barry Level, 256-450-7212, *barrett.l.level.mil@mail.mil*)

9. HQ AMC G-3/4, Industrial Base Capabilities Directorate.
The Army force structure is downsizing to 490-440K and to possibly lower number (420-395K) during POM 16-20 due to DoD sequestration requirements. In addition, during the same period, the Army will be fielding new weapon systems, and would have weapon systems transitioning from production to sustainment. In order to have a supportable Army force structure, the Army must answer the following questions: 1) What Commercial Defense Industrial Base sectors are critical enough to warrant preferential investment or preservation, and which commercial industrial base sectors can diminish without affects to Army operation? 2) Within the critical sector, what industrial base capabilities are required to maintain new and legacy weapon systems to support the anticipated future force structure that includes Defense unique requirements and new technologies? 3) What capabilities can we divest which can be rapidly regenerated or procured? 4) What is the acceptable level of risk from divestiture of unnecessary weapon systems? (POC: Alan Lee, (256) 450-7111, *alan.r.lee3.civ@mail.mil*)

Army Materiel Systems Analysis Activity.
(POC: Susan C. Brundick, 410-278-0591, *susan.c.brundick.civ@mail.mil*)

10. During OIF and OEF, Soldier maintenance skills have eroded with an increasing reliance of contractors and plentiful OCO funding for spare parts. How can we best provide modernized and ready, tailored land force capabilities to meet combatant commander's requirements across the range of military operations? Questions which may be considered include:
      a.   Do we need to retrain our Soldiers in maintenance skills or continue emphasis on contractor field support?

b.   With the downsizing of the Army, should Ordnance Soldiers be re-trained for combat arms skills and be permanently replaced with contractors?

c. What are the lessons learned from the past 14 years of war with respect to acquisition and science and technology (S&T)?

d. Did we react fast enough with equipment and S&T to counter unique threats in Iraq and Afghanistan?

e. What logistics functions or innovations are most critical to the "pivot to the Pacific"?

f. What specific logistics and sustainment improvements are needed for this strategy?

g. How will increasing automation of logistics processes and functions on the battlefield and at the national level be affected by cyber operations? What communications infrastructure is key to ensuring the continuity of the global supply chain? Which of them require preferential investments for security? What backup capabilities are required / affordable to ensure redundancy?

h. What should be the Army's Science and Technology priorities given future threats and warfighting doctrine?

i. What logistics innovations are needed to sustain Force 2025?

11. The Army is transitioning from war to sustainment, undergoing significant restructuring, and facing severe fiscal restraints. Combat training and experience will continually and rapidly decline due to attrition. Individual and collective training time and resources will be further restricted. Effective field expedient solutions are not always captured in the TMs. How can we better sustain and train the logistics lessons learned in the new post-war Army?

12. Future of the Total Army construct. The contributions and achievements of the total force through over a decade of war are substantial. Subsequent restructuring due to fiscal and future mission requirements present many challenges to sustaining U.S. warfighting dominance. How should the total force be structured in order to retain, sustain, and transition those gains to the next generation force? What is the right mix of logistics functions between the Guard/Reserve and active forces, and what assets must we maintain to project support to our regionally aligned forces?

Army Sustainment Command.
(POC: Lieutenant   Colonel   Frank   V.   Gilbertson,   (309)   782-0149, *frank.v.gilbertson.mil@mail.mil*)

13. The Army Field Support Brigade (AFSB) provides forward deployed maintenance and support to the field. What events should trigger the deployment of an AFSB? Should an AFSB/AFSBn be deployed to the AFRICOM AOR?

14. Analyze Garrison Feeding and recommendations in the DA G4 White paper.

15. Analyze the viability of using the Logistics Readiness Center (LRC) as the Total Army Training Integration (TATI) training base for Compo2/3 units.

16. Does the current leased Non-Tactical Vehicle (NTV) policy meet the needs of the Army?

17. Does the current Army Prepositioned Stocks (APS) composition and strategy meet the changing needs of the nation?

18. What capabilities are required of the future Logistics Assistance Representative (LAR) program be for the Army and to what degree do we rely on CIV/MIL expertise? (e.g., telemaintenance capability, rely more on Warrant Officers to be our reach forward and conduct reach back to the national level/LCMC/depots).

19. How do we posture ourselves in support of Army/joint distribution management with a CONUS-based, expeditionary force.

20. What should the Joint LOGCAP framework and implementation concept/vision be for the future joint force?

U.S. ARMY TRAINING AND DOCTRINE COMMAND

Army Capabilities Integration Center
(POC: Lieutenant Colonel Charlie Hornick, 757-501-5502, *Charles.e.hornick.mil@mail.mil,*
and Major Mark Lavin, ATFC-EF, 757-501-5499, *mark.j.lavin.mil@mail.mil*)

1. National Security Policy Objectives and Risks: As the Army transitions from execution to preparation, for what national security objectives and risks must the Army prepare? What are the corresponding policy objectives? Given current fiscal constraints, national security policy, and enduring national interests, what are the ends, ways, and means of the associated strategy? As a national security "means," what is the role of the Army in that strategy given a multipolar world with rising regional states and empowered nonstate actors as described by the National Intelligence Council?

2. Strategic Landscape: Given national security documents, operational environment estimates, and international relations and military theory, what is the national security strategic landscape in 2030-40? What will challenge U.S. vital interests and describe the corresponding military problem? Define the Army force contribution to the Joint Force.

3. International Institutions: Are the institutions that dictate current "world order," or at least contain disorder, enduring? What threatens the legitimacy and utility of international institutions that have been established and supported by the United States and our allies? What constitutes existential threats to international institutions? How will these institutions, such as the North Atlantic Treaty Organization (NATO) and the United Nations (UN), evolve to account for rising state powers and what U.S. national interests may be threatened or challenged?

4. Information Age and Precision Revolution: The Industrial revolution greatly changed the characteristics of conflict. How has the U.S. military's leverage of the information age and revolution in precision delivery enabled offense dominant operations and overmatch in all domains? As we are challenged by rising state and nonstate actors, will the United States adjust its offensive approach? What conditions will require a change in posture and will national interests adjust to those realities?

5. Area Denial Threats and Army Solutions: How do sophisticated area denial weapons and technology change the characteristics of conflict? Is conflict transitioning to an era of defense dominated operations? What Army concepts are required to transition the Joint Force to regain tactical and operational offensive initiative under these conditions against a near-peer or regional hegemon?

6. Expansibility and Reversibility: ADP 1 describes the future force as one that must be expansible and reversible in the context of today's draw down. What can the Army rapidly expand in terms of capability, effects, and core competencies; and how does the

Army reverse the force sizing decisions of today in the face of a future adversary? How does the Army Operating Concept incorporate operational adaptability and describe the associated risks? Do these limit or increase political risk?

7. Tooth-to-Tail Ratio: As the Army draws down to a historically low end-strength, there has been a renewed focus on a achieving a 1-to-1 tooth-to-tail ratio. What constitutes these two variables, and what are the obstacles to balancing this correlation? Is this the best method to characterize Army forces, and, if not, what are the alternate methods of describing support to supported relationships?

8. Deterrence in the Multipolar World: The operational environment in 2030-40 is likely to include nonstate actors who have increased influence regionally and globally through access to technologies and capabilities that threaten U.S. and partner interests. The interests of these nonstate actors, and their make-up, are likely to be such that traditional concepts of deterrence are ineffective. Examine the utility and limitations of traditional deterrence (prevention through fear of punishment) as well as deterrence by denial (denying an adversary the prospect of achieving his objective). How does the Army contribute to unified action partner efforts to deter various non-state actors who may be aligned to region, near-peer hegemon?

9. Future Concepts.

a. Expeditionary Maneuver: What capabilities does an Army expeditionary maneuver concept require? The Army must project strategic Landpower in tailored and scaled force packages to conduct a variety of missions and respond to a wide range of threats, in alignment with joint concepts. Specifically address combat loading, communications en route to the objective, joint fires employment, and global force movement by sea and air to expedite reinforcement and sustainment of initial entry forces.

b. Army Operating Concept: Assess the validity of the 2010 *Army Operating Concept* (central idea, components of the solution, and supporting ideas). What requires revising the current Concept? What strategic choices does this concept present? What are we giving up to get what the concept offers? Does the 2010 *Army Operating Concept* align with joint concepts? Are there new concepts and capabilities required?

c. Science and Technology: What long-term investments are required today to ensure an Army able to meet all required missions in 2030-40?

10. Capability Solutions.

a. Human Dimension: Human capital is the Army's number one priority. What investments are necessary for the Army to be the experts in physical, cognitive, and leader development, and individual and team design?

b. Human Domain/Context: The Army must understand and be able to influence the context in which humans interact, particularly as the force gets smaller. What investments must the Army make in education and training to build Soldiers' socio-cultural intelligence quotient?

c. The Squad: What must the Army do to **improve the squad's ability** to achieve local overmatch in all warfighting functions? The Army delivers squads, whether one or 1,000. Building the future squad correctly will achieve tactical mobility for the Army. In particular, address what the Army must do to lighten the load on the squad and Soldiers through improved systems and discipline.

Army Warfighting Challenges

11. Develop Situational Understanding: How to develop and sustain a high degree of situational understanding while operating in complex environments against determined, adaptive enemy organizations. (POC: ICoE

12. Shape the Security Environment: How to shape and influence security environments, engage key actors, and consolidate gains to achieve sustainable security outcomes consistent with the mission in support of Geographic and Functional Combatant Commands and Joint requirements. (POC: MCCoE

13. Provide Security Force Assistance: How to provide security force assistance in order to support policy goals and increase local, regional, and host nation security force capability, capacity, and effectiveness. (POC: SOCoE, CAC, and USASAC

14. Adapt the Institutional Army: How to maintain an efficient Institutional Army that ensures combat effectiveness of the total force, supports other Services, fulfills DoD and other government agencies' requirements at home and abroad, ensures services and quality of life for Soldiers and families, and possesses the capability to surge (mobilize) or expand (strategic reserve) the active Army; in a period of austere resources and reduced end strength (capability and capacity). (POC: MCCoE

15. Counter Weapons of Mass Destruction (WMD): How to prevent, reduce, eliminate, and mitigate the use and effects of WMD and chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE) threats and hazards on friendly forces and civilian populations. (POC: MSCoE

16. Homeland Operations: How to conduct civil support and homeland defense operations to defend the Nation against emerging threats. (POC: MSCoE

17. Conduct Cyber Electromagnetic Operations and Maintain Communications: How to establish and maintain effective communications and defeat enemy attempts to interrupt critical satellite, terrestrial, and cyber capabilities. (POC: CyberCoE

18. Enhance Training: How to train Soldiers and leaders to ensure they are prepared to accomplish the mission across the range of military operations against complex state and non-state threats and to prevent unnecessary civilian casualties. (POC: CAC-T/MCCoE

19. Improve Soldier, Leader and Team Performance: How to develop resilient Soldiers, adaptive leaders, and cohesive teams committed to the Army professional ethic that are capable of accomplishing the mission in environments of uncertainty and persistent danger. (POC: MCCoE

20. Develop Leaders: How to develop innovative leaders capable of visualizing, describing, directing, and leading and assessing operations in complex environments and against adaptive enemies. (POC: MCCoE

21. Conduct Air-Ground Reconnaissance: How to conduct effective air-ground combined arms reconnaissance to rapidly develop the situation in close contact with the enemy and civilian populations. (POC: MCoE and AVCoE

22. Conduct Entry Operations: How to project forces, conduct forcible and early entry, and transition rapidly to offensive operations to ensure access and seize the initiative. (POC: MCCoE

23. Conduct Wide Area Security: How to conduct wide area security (WAS) in coordination with other military and civilian capabilities to protect forces, populations, infrastructure, and activities necessary to shape security environments, consolidate gains, and set conditions for achieving strategic and policy goals. (POC: MCCoE

24. Ensure Interoperability and Operate in **Joint, Interagency, Intergovernmental, and Multinational** (JIIM) Environment: How to integrate Joint, Interagency, Intergovernmental, and Multinational partner capabilities to ensure unity of effort and accomplish missions across the range of military operations. (POC: MCCoE

25. Conduct Combined Arms Maneuver: How to conduct combined arms air-ground maneuver to defeat hybrid enemies and accomplish missions and operational environments. (POC: MCoE and AVCoE

26. Set the Theater, Sustain Operations, and Maintain Freedom of Movement: How to set the theater, provide strategic agility to the joint force, and maintain freedom of movement and action during sustained and high tempo operations at the end of extended lines of communication in austere environments. (POC: SCoE

27. Deliver Offensive Fires**:** How to coordinate, integrate, and deliver Army and joint offensive fires in combined arms, air-ground operations to defeat the enemy and preserve freedom of action. (POC: FCoE

28. Deliver Defensive Fires: How to coordinate, integrate, and deliver defensive fires to protect forces and populations; defeat enemy rocket, artillery, mortar, ballistic missile, cruise missile, and UAS threats; and preserve freedom of action across the range of operations. (POC: FCoE

29. Exercise Mission Command: How to understand, visualize, describe, and direct operations consistent with the philosophy of mission command to seize the initiative over the enemy and accomplish the mission across the range of military operations. (POC: MCCoE

U.S. ARMY LOGISTICS UNIVERSITY

POC: Mr. John E. Hall, SES, President, Army Logistics University; (804) 765-8006; *john.e.hall58.civ@mail.mil*; and Mr. Jeff Curtis, SES, DLA; *jeffrey.curtis@dla.mil*

How can Combatant Commands better define logistics requirements in support of OPLANs, especially items with long production lead times?

U.S. ARMY FORCES COMMAND

Sustaining Army Force Generation (ARFORGEN).

1. The Army is grappling with how best to move from a wartime force to a strategically focused expeditionary force. As budgetary guidelines and resource constraints drive a massive internal reorganization, how does the Army best adapt force generation policies and processes to maintain warfighting capabilities in an emerging operational environment? Do current ARFORGEN policies and processes work, and how could they be refined to prevent an Army of "haves and have nots"? (POC: Susan Foster, G1/AG, 910-570-55185, *susan.m.foster2.civ@mail.mil*)

2. Based upon the 2006 decision by the CSA to adopt a progressive readiness model for ARFORGEN, does this model possess the agility and flexibility necessary to meet the projected force readiness requirements of the future? (POC: Michael Knippel, G3 AFOP-PS, 910-570-5522, *michael.j.knippel.civ@mail.mil*)

3. As the Army reduces its overall force structure, what portions of the current ARFORGEN process are most susceptible to weaken with reductions in the size of the Army? (POC: Robert Johnson, CIG, 910-570-5082, *robert.l.johnson563.civ@mail.mil*)

Future Operational Planning.

4. Based on lessons learned and open-source intelligence from OEF, OIF, OND, and other operations; has the Army sufficiently manned, trained, and equipped the future force to be able to operate effectively in an future environment?

5. Is the Army prepared to operate in an environment/theater where the use of a nuclear weapon has blanketed a significant portion of the area of operations with electromagnetic pulse (EMP) causing significant damage to Army mission command systems? (POC: Mr. Barry Lowe, G-3, 910-570-6334, *barrett.f.lowe.civ@mail.mil*)

Enhance the All-Volunteer Army.

6. The visibility of the military will draw down from the public eye as the Army draws down combat missions and force requirements. How does the military remain a viable option as a professional career option to the young people of our society? (POC: Colonel Tami Zalewski, Surgeon, 910-570-7264, *tami.zalewski.mil@mail.mil*).

7. How does the Army select for those accessions that can withstand the challenges of military life while balancing high standards with the costs of nonavailables in an all-

volunteer Army? (POC: Colonel Tami Zalewski, Surgeon, 910-570-7264, *tami.zalewski.mil@mail.mil*).

8. Lessons Learned from Army 2001-14. How does the Army build a learning methodology to capture and institutionalize lessons from the Army of 2001-14 in a manner that enables the Army of the future to provide new solutions to unfamiliar problems informed by lessons from the Army of 1980-2001? (POC: Robert Johnson, CIG, 910-570-5082, *robert.l.johnson563.civ@mail.mil*)

Intelligence Related.

9. The re-structuring of U.S. Forces to a CONUS-based expeditionary force requires constant access to the Intelligence Community and Theater Intelligence resources to support the planning, preparation, and deployment of forces to support a Regional Commander's mission requirements. What are the fundamental home station training capabilities and IT architecture that must be available for the Mission Commander to train maintain and utilize their tactical intelligence capability? (POC: Mr. Ben Clapsaddle, G2, 910-570-5257, *ben.c.clapsaddle.civ@mail.mil*)

10. Does the structure of the Corp and Division G2's have the ability to integrate and synchronize the intelligence products and information gathered by Joint Improvised Explosive Device Defeat Organization (JIEDDO)-like organizations into the Mission Commanders overarching plans and strategies? Utilizing DOTML-PF, What capabilities and resources could be added to the G2 in order for the Corp and Division G2's to have all intelligence in his area of operation and interest be focused on the Commander's critical information requirements? (POC: Mr. Ben Clapsaddle, G2, 910-570-5257, *ben.c.clapsaddle.civ@mail.mil*)

11. With the development of Intelligence Readiness and Operational Capability (IROC) becoming standard at each Corp and Divisional installation and providing the Mission Commanders critical intelligence and information in support of their Regionally Aligned Forces (RAF) missions, should each IROC be expanded to include the commanders primary planners? Should the IROC become an Operations & Intelligence Center (O&I) that can be expanded quickly to meet the commander's requirements? (POC: Mr. Ben Clapsaddle, G2, 910-570-5257, *ben.c.clappsaddle.civ@mail.mil*)

12. Financial Management. Financial Management Support to FORSCOM Headquarters and MTOE Units Analyze and assess the current financial management structure (both military and civilian) within FORSCOM to facilitate Army Financial Management Optimization. Determine if it the current financial management structure meets Commander's requirements and where manpower efficiencies (if any) can be achieved by leveraging automated systems, reducing workload or standardizing

processes and schedules. (POC: Mr. Murray Pittman, G8, Budget Division, 910-570-5897, *thurman.m.pittman4.civ@mail.mil*)

13. Distance Education. Is there a difference in the education provide to Reserve Component distance education versus resident education? If so, are there mitigation measures that can realistically close the gap between the two methods of education? (POC: Robert Johnson, CIG, 910-570-5082, *robert.l.johnson563.civ@mail.mil*)

Regional Alignment of Forces.

14. Is the Regional Alignment of Forces concept enabling the Combatant Commanders to truly maneuver strategically?

15. Is the mission command architecture associated with the Regional Alignment of Forces effective in enabling the Army Service Combatant Commanders to provide feedback to Combatant Commanders?

16. At what point does Regional Alignment of Forces enabled engagement degrade a division's combat effectiveness? (POC: Robert Johnson, CIG, 910-570-5082, *robert.l.johnson563.civ@mail.mil*)

Soldier Performance.

17. As the Army identifies ways to enhance the performance of individual Soldiers, how will the Army best operationalize this across the force to ensure the collective training approach achieves sufficient results to sustain individual enhancement?

18. As our Army investigates ways to enhance Soldier performance, how does the Army develop the human brain to best learn, adapt, and anticipate critical decisions? Is it feasible to expect that the Army might develop a method for training the mind that gives Soldiers a decisive advantage over any opposition? (POC: Robert Johnson, CIG, 910-570-5082, *robert.l.johnson563.civ@mail.mil*)

Army Cyber.

19. Who should be in charge of cyber infrastructure and operations in the Army? How do you best structure Army cyber for success?

20. Should the Signal Center of Excellence and portions of the Military Intelligence Center of Excellence be combined into a Cyber Center of Excellence?

21. What is the future vision of Signal/Cyber Corps when considering diminishing resources?

22. What strategy should be implemented to improve effectiveness of Army cyber by divesting excess resources, harvesting and reshaping those resources, and applying the resources where they can have the highest return on investment within the cyber domain; especially considering diminishing resources? What better business process improvements (i.e., Lean Six Sigma) could be applied to Army cyber?

23. What roles and functions should FORSCOM perform as the service force provider for conventional forces with respect to cyberspace operations? (How can FORSCOM best facilitate the manning, training, and equipping of conventional forces to be able to operate effectively in the cyber domain?) (POC: William (Bronco) Lane, G-6, 910-570-5643, *william.e.lane3.civ@mail.mil*)

Theater Tactical Signal Brigade (TTSB), Expeditionary Signal Battalion (ESB), and Expeditionary Signal Company (ESC) Reorganization/Reutilization. The Army tactical network technological advancements moved signal into the digital (Cyber) age. The Army Signal structure however has remained static and top heavy thus slow to respond to Warfighter requirements (ex. support to disadvantaged units without organic signal company).

24. Are there enough Theater Tactical Signal Brigades (TTSB), Expeditionary Signal Battalions (ESB), and Expeditionary Signal Companies (ESC) to meet operating forces requirements?

25. How do you best structure TTSBs and ESCs that is intuitive and revolutionary for future success in warfighter operations?

26. Would flattening signal structure by converting the active TTSBs into three Expeditionary Cyber (ECR) Regiments,), aligning one regiment under each Corps for Training and readiness, reorganizing and reutilizing two ESB HHC authorizations to create an additional ECC improve response to Operational requirements?

27. Will this strategy improve the effectiveness of reorganized elements and significantly enhance the effectiveness and efficiency in the use of Army resources to support Army's Mission Command? (POC: William (Bronco) Lane, G-6, 910-570-5643, *william.e.lane3.civ@mail.mil*)

Army Records Management. The Clinger-Cohen Act established the Chief Information Officer (CIO) to manage both Information Technology and Records Management. Currently the Administrative Assistant to the Secretary of the Army is in charge of Records Management. This separation of responsibilities is frustrating for soldiers, civilians, and contributes to important functions not being done to standard or within the law. Some Records Management publications are under the Proponency of the

Administrative Assistant to the Secretary of the Army (i.e., Army Regulation [AR] 25-30, AR 340-21, AR 25-51) and others under the Proponency of the Army CIO (i.e., AR 25-1, AR 25-55).

28. What is the most effective and efficient way to consolidate the Army Records Management Program under the CIO-G6?

29. How does the Army ensure resources are properly programmed and executed through their respective MDEP and PEG Managers to link dedicated resources to the records management program?

30. Who should take on the execution of records management functions and responsibilities on U.S. Army Garrisons to support all installation tenants; IMCOM or NETCOM? (POC: William (Bronco) Lane, G-6, 910-570-5643, *william.e.lane3.civ@mail.mil*)

Joint and Service Training.

31. Does our current Army and joint training framework provide a ready JTF-HQ capability for the Combatant Commanders to receive and organize in time of crisis? If the current framework does not, What DOTLMPF impediments exist to building a JTF-HQ capability within the Army training programs?

32. Specifically for Joint Task Force-Headquarters (JTF-HQ) capable formations, how much of their training under their Service must be aimed at JTF-HQ readiness, and how is this joint business to be conducted from a resourcing and standards perspective?

33. What is the gap between where Service METL ends and Joint METL begins? Does our current joint training framework provide a ready joint force for the Combatant Commanders to receive and organize in time of crisis? If the current framework does not, what are ways to improve the framework? (POC: John Shroyer, G-3, 910-570-6378, *john.r.shroyer.civ@mail.mil*)

Future 2020-40.

34. Future Training Support Systems (TSS)/Combat Training Center (CTC) integration; how does FORSCOM best leverage current and anticipated TSS capabilities to better merge Live/Virtual/Constructive/Gaming to conduct Corps/Division-level mission command training concurrent with a CTC rotation, home-station training, etc? What will a CTC rotation in 2030/2040 look like?

35. What are the fundamental skills our Army must focus on to ensure readiness in 2020/2025/2030? Is the Army doing the right things?

36. What talent management "Best Practices" require implementation or further expansion to ensure proper leader development for the Army of 2030? (POC: Robert Johnson, CIG, 910-570-5082, *robert.l.johnson563.civ@mail.mil*)

Homeland Security.

37. What emerging capabilities can enhance mission effectiveness of Army units committed for Defense Support to Civil Authority (DSCA) missions, particularly in terms of communication and relief supply distribution?

38. In what new ways can Title 10 forces (Active Army and U.S. Army Reserve) provide enhanced capabilities to NORTHCOM during DSCA?

39. Can traditional campaign planning and theater design improve planning for DSCA? (POC: Robert Johnson, CIG, 910-570-5082, *robert.l.johnson563.civ@mail.mil*)

Single Reserve Component.

40. What are the implications of reorganizing all Reserve Component into a single component?

41. What are the legal requirements and resource implications impacted by a reorganization of the Reserve Component into a single component?

42. How could the Reserve Component be reshaped to yield the biggest return on investment? (POC: William (Bronco) Lane, G-6, 910-570-5643, *william.e.lane3.civ@mail.mil*)

CHIEF, U.S. ARMY RESERVE COMMAND

(POC: Major Chris Botterbusch, 703-806-7786, *christopher.f.botterbusch.mil@mail.mil*)

The Army Reserve's efforts to incorporate themes from *Force 2025 and Beyond* in the implementation of Army Total Force Policy (ATFP) formed the Army Reserve's 2015 submission. The main question for strategic analysis and research is: How can the Army Reserve (AR) best adopt the strategic themes of *Force 2025 and Beyond* while implementing the ATFP?

1. Force Structure: How will the "fundamental change" inherent in *Force 2025 and Beyond* impact the ATPF's annual requirement to analyze force structure options that specifically consider the mix of operating and generating force capabilities between the Active Component (AC) and AR? How will the change impact the AR?

2. Readiness Policy/ Procedures: ATFP directs available mission and surge forces deploy as integrated expeditionary forces to the maximum extent possible. How does this affect AR Soldiers and their families?

3. Educate and Train: How will the Army incorporate the ATFP into institutional education/training while also addressing the developments of *Force 2025 and Beyond*? How could the Army benefit from, and implement, multicomponent faculty and students for all schools to include pre-command courses? How could the Army benefit from, and implement, a multicomponent approach to Total Army Training for conventional forces?

4. Equipping: The Army's equipping strategy must ensure that procurement and equipping processes enable the AR to perform its missions. How should the AR prioritize science and technology candidates within Force 2025, and how does the ATFP change determination of equipment status?

5. Personnel Management: ATFP aims to recognize the importance and effectiveness of the all-volunteer force by enabling Soldiers to move between the AC, AR, and the Army National Guard (ARNG) during their careers through the "Soldier for Life" concept. How does this impact the AR? Additionally, how does the AR "Continuum of Service" initiative, which enables AR Soldiers to move between TPU, AGR, and IRR categories within the AR, fit in to the "Soldier for Life" concept?

6. Common Standards: ATFP directs standardized AC and RC qualification and professional development. How does this impact the AR?

7. Doctrine Development: The ATFP requires adaptation of current AC and RC training and doctrine publications. How will doctrine synchronize variations in science

and technology between components as rapid acquisitions close gaps in competitive advantage to preserve overmatch? How can the AR best influence publication development/revision to ensure commonality while retaining its uniqueness?

U.S. ARMY ENGINEER CENTER AND SCHOOL

(POC: Colonel Jason Smallfield, Director of Training and Leader Development, 573-563-4093, *Jason.l.smallfield.mil@mail.mil*)

1. Develop Engineer doctrine, organization, training, materials, leadership, personnel, and facilities (DOTMLPF) for initial-entry operations/initial-entry engineering.

2. Future of the improvised explosive device (IED) in warfare and applicable counter-IED (CIED) methods across warfighting functions (WFF) and DOTMLPF.

3. Role of lethal countermobility and our ability to "shape the terrain" in warfare—our potential opponents and our own uses.

4. Development of combat outposts and T/O bases (ISBs, FOBs, APODs, SPODs) using existing materials reducing sustainment demand and costs in transport.

5. What standing authorities and/or standing contracts do Army engineers need in a regionally aligned force to deliver construction effects in theater rapidly?

6. Role of Engineer regionally aligned forces (RAF) in Theater Engagement Plans/Actions.

7. Mechanisms needed in authorization, resources, staffs, and procedure to operationalize Army regionally aligned forces (RAF).

8. Role of Engineers in Cyber Operations.

9. Role of Engineers in Space Operations.

10. Development of NetZero Combat Outposts and Forward Operating Bases (ISB, FOB, APOD, SPODs).

11. Role of Engineers in RAFs focused on a particular region: AFRICOM, CENTCOM, PACOM, EUCOM, SOUTHCOM, NORTHCOM.

12. How to develop, enhance, and sustain technical engineering excellence in civilian, enlisted, noncommissioned officer, warrant officer, and officer cadres in the regiment.

13. Role of one of the following Military Engineer organizations: Chinese Military Engineers (RLA), Russian Military Engineers, Iranian Conventional and IRGC Engineers, North Korean Military Engineers, Pakistani Military Engineers, or Indian Military Engineers in PRC strategy, operations, tactics, in warfighting and their global engagement with potential partner states and with potential adversaries.

14. Role and missions of engineers in advise/assist as well as foreign capacity building operations and DOTMLPF requirements as a result.

15. U.S. code legal authorities for delivering architect, engineer, and construction across all phases for exercise and combat operations on humanitarian assistance/disaster recovery and what new authorities are needed, if any.

U.S. ARMY RESEARCH DEVELOPMENT AND ENGINEERING COMMAND

U.S. Army Aviation and Missile Research Development and Engineering Center.
(POC: Chris Lofts, 256 876-5904, *christopher.s.lofts.civ@mail.mil*)

1. Explore the implementation of Better Buying Power Initiative (Acquisition and Contracting related to S&T). A "Paradigm Shift" must occur in buying weapon systems, e.g., Modular Missile Technology. How can we implement Open Architecture application, specifically to Tactical Missiles and maintain Data Rights, and Government Purpose Rights. A Business Case Analysis should be performed on how to implement in contract vehicles as the impact to Missile Primes and subcontractors is considered. (Will this limit the industrial base or increase the industrial base?)

U.S. Army Armament Research, Development and Engineering Center.

2. The Army invests approximately $1 billion a year in science and technology development through the Army Research, Development, and Engineering Centers (DECs). This funding often develops new technologies that can address warfighter needs yet the technologies fail to transition to Acquisition Programs of Record (PORs). There are many reasons why these technologies do not transition, but chief among them appears to be the lack of a clear path to the industrial contractors who compete for the PM PORs. Given this large resource investment, how can the Army best integrate and synchronize the technologies the DECs develop with industry so that the investments in these technologies are not lost. What changes to policy, roles, and missions should the Army consider so that industry can work with the government to take these technologies into the acquisition phase of the development life cycle? (POC: Mr. Joseph Pelino, Director of Technology, 973-724-3457, *joseph.pelino.civ@mail.mil*)

3 The continuing investment in and development of higher density more portable power sources has led to the realization of many technologies that were previously unattainable on mobile platforms or portable by individual Soldiers. Examine the impact of these technologies and their implications to both the technological and ultimately operational employment in the Army. This will include the exploration of 1) technologies such as directed energy weapons, robotics, and the reduction of current systems reliance on low-density power supplies, 2) potential changes to force structure or concepts of normal operations and TTPs, and 3) the potential benefits in the logistical chain from these technologies. How will the Army employ these technologies and maximize the advantages from it in the future force to give the Army "The Power to Win"? (POC: Mr. Joseph Pelino, Director of Technology, 973-724-3457, *joseph.pelino.civ@mail.mil*)

4. Computers have become commonplace in our Army today, but those used for decisionmaking have become adept at providing a vast amount of information, which

has led to "data overload" from our Soldiers. With new data mining algorithms and user-friendly interfaces, the employment and utility of these systems is becoming more accepted and employed by all levels of the force structure. It has allowed for the incorporation and analysis of data from a multitude of sensors with varying types of information to present a cohesive real-time picture of places and situations that allow for the individual Soldiers to be physically removed from the areas that are or will become identified as mission critical. With the most current data-to-decision technologies, how will this best be integrated and employed going forward? How will this artificial intelligence enhance the way that our Soldiers execute their mission? How will the Army best employ this data dominance to show what was "Made in the USAI"? (POC: Mr. Joseph Pelino, Director of Technology, 973-724-3457, *joseph.pelino.civ@mail.mil*)

5. Unmanned vehicles have proliferated greatly over the past 20 years, and the U.S. military has had success employing unmanned vehicles for explosive ordnance disposal missions, surveillance missions, situational awareness missions, and even in target engagement missions. With the availability of these technologies, the ability to provide some level of autonomy, and the ability to engage targets with these systems, how will the Army best employ these technologies and systems to augment or reshape concepts of operations and the structure of the future force? How will these systems, who will be able to not only collect but analyze data for decisionmaking, be employed to defeat our adversaries and allow for some separation of our Soldiers from harm's way? (POC: Mr. Joseph Pelino, Director of Technology, 973-724-3457, *joseph.pelino.civ@mail.mil*)

6. Examine the implications to logistics, sustainability, and the tooth-to-tail ratio provided by advanced additive manufacturing technologies giving the Army the capability of "Anything, Anywhere, Anytime." Background: additive manufacturing (or 3-D printing) systems are beginning to be deployed in theater to decrease logistics requirements and allow for more soldier innovation. As these capabilities advance to multiple plastic, metallic, and biological materials, the range of applications increases to include any/all repair parts, body parts/organs for the wounded, and even food. Nanotechnology advancements are looking to make the Star Trek replicator a reality, capable of producing new/modified weapons and ammunition on demand for very specific target requirements. (POC: Mr. Joseph Pelino, Director of Technology, 973-724-3457, *joseph.pelino.civ@mail.mil*)

7. Explore how evolving cyber warfare capabilities could be used to affect an enemy's national will to fight, from the tactical to the strategic level of the battlefield. Background: Cyber warfare attacks to date (e.g. viruses, worms, trojan horses, etc.) have been primarily released onto networks and through data storage media to attack random systems and produce varying effects. The Stuxnet worm has demonstrated increasing sophistication to target very specific systems and produce very specific physical damage. It targeted Microsoft Windows machines and networks, repeatedly

replicating itself. Then it sought out Siemens Step7 software, which is used to program industrial control systems that operate equipment, such as centrifuges. Next, it compromised the programmable logic controllers, allowing the worm's authors to spy on the industrial systems and then cause the fast-spinning centrifuges to tear themselves apart. (POC: Mr. Joseph Pelino, Director of Technology, 973-724-3457, *joseph.pelino.civ@mail.mil*)

8. Considering the soldier tasks of shoot, move and communicate, explore the battlefield effects of a bioengineered direct brain-machine interface. Background: Advances in sensors, nanotechnology, and understanding how the human brain functions are leading toward human electronic enhancements. One possibility that arises is the direct control of machines by thoughts. Toys are currently on the market that allow you to "levitate" balls, control a computer cursor, and fly small helicopters by using headsets that read your brain waves. As these sensors become more sensitive and accurate, or sensors are implanted directly into the brain, the machine responses become much more accurate and occur almost immediately. This capability can then be extended to weapons, fire control systems, vehicles and radios. (POC: Mr. Joseph Pelino, Director of Technology, 973-724-3457, *joseph.pelino.civ@mail.mil*)

9. Examine the benefit of a military draft to curtail political aspirations while ensuring national will for wartime. Background: The all-volunteer force, while it has led to a much more tactically proficient military, is a major contributing factor to U.S. strategic losses of wars. The all-volunteer force has led to a stable and professional military. It has been able to improve training and create a military composed almost entirely of career, professional soldiers. However, this has also led to a growing civilian-military divide. The impacts of this divide are not just social in nature. The all-volunteer force has allowed politicians to separate the conduct of war from the impacts on the population as a whole. There is little to no political pressure against engaging in warfare because, from the electorate's point of view, there is no direct impact. However, once the military is sent to and engaged in conflict, they can quickly dominate due to their tactical prowess, but there is no strategic, national will to fight. Wars are simply costly affairs with economic impacts. We do not lose wars in the strategic realm because we lost the national will to fight—we never had it in the first place. But the all-volunteer force eliminates the check on the politicians that would prevent starting engagements without this national will. The end result is a highly capable military that continues to win battles and lose wars because of political limitations. (POC: Mr. Joseph Pelino, Director of Technology, 973-724-3457, *joseph.pelino.civ@mail.mil*)

U.S. Army Research Laboratory.
(POC: Mike Karen ARL Program and Budget Office, Program Plans and Integration Team Leader, 301-394-4285, *Michael.l.karen.civ@mail.mil*)

10. Given the increasing use and availability of intelligent systems (i.e., robotics and autonomous systems) to U.S. Army warfighters, what are the official Department of the Army policies and guidelines for both the role and the use of intelligent systems in current and future Army warfare and operational scenarios, and what may be some strategic implications stemming from these policies and guidelines?

11. Given the increasing emphasis on intelligent systems, we feel that this topic is an important and appropriate one for inclusion in the U.S. Army War College curriculum. Please let me know if you need additional information.

U.S. Army Communications-Electronics Research, Development, and Engineering Center.
(POC: Mr. John Delcolliano, Chief, PNT Branch, CERDEC, CP&I, *john.j.delcolliano.civ@mail.mil*)

12. Assured Positioning, Navigation, and Timing.
Introduction: Recent events have brought attention to positioning, navigation, and timing (PNT) for the U.S. military. As more and more military systems rely on global positioning systems (GPS) for accurate position, navigation, and timing data, concerns over the impacts on operations due to GPS denial are growing. In particular, commanders are concerned over the vulnerabilities of our GPS based PNT capabilities. In response to these concerns, CERDEC is pursuing technologies to shore up military vulnerabilities to GPS and help ensure that PNT solutions will be available when and where they are needed. To further protect our Armed Forces, CERDEC is also investigating alternative solutions to GPS in an attempt to provide a continuous PNT service throughout operations even in the complete absence of GPS.
Details: Examine the strategic implications of forces operating in a GPS denied environments.
Background: PNT assurance objectives include protecting GPS signals, making them less vulnerable to attack as well as ensuring uninterrupted navigation and timing solutions to users in the advent of complete GPS denial. PNT assurance is a primary focus of the Army. Efforts intended to improve the robustness of GPS solutions include GPS anti-jam antennas (antenna technologies resistant to jamming attacks), multi-GNSS receivers (receivers capable of using GPS and other multi-GNSS solutions similar to GPS), and pseudolite systems (GPS-like signals transmitted locally from terrestrial airborne, ground, or stationary units). The objective of these efforts is intended to allow users to continue relying on GPS regardless of the hostile environment in which they are operating. In addition to strengthening GPS signal availability, CERDEC is pursuing technologies to provide PNT information in the absence of GPS. Some of these efforts include investigating alternate sensors such as inertial sensors, RF ranging devices, RF time transfer, chip scale atomic clocks, vision based navigation aids, zero velocity updates, network assisted navigation and collaborative navigation solutions, etc. These efforts will allow Army forces to seamlessly continue operations in the absence of GPS.

Further, if these sensors can achieve performance accuracies similar to that of GPS, these technologies will reduce our reliance upon GPS and therefore reduce our vulnerabilities to EA. PNT ground platforms include mounted soldiers and systems, dismounted soldiers and systems, as well as unmanned ground vehicles, and timing solutions for a variety of Army systems including tactical networks which can span many more assets than just mounted and dismounted platforms.

U.S. Army Edgewood Chemical Biological Center.

13. What is the role of additive manufacturing in the future Army? Additive manufacturing or 3D printing is a process where solid objects are made via a layer-by-layer assembly from digital models. Additive manufacturing tools are currently used by SOF engineering laboratories, Army science and technology (S&T) laboratories, and Industry to support the Soldier. Recent commercial 3D printers have advanced such that the 3D printers can now be found in personal homes much like the first desktop computers slowly found a place in almost every home in the United States. Additive manufacturing tools and 3D printers provide the ability to print items on demand rather than having to order a part and wait for its arrival. Printing parts on demand is reducing the logistics tail and burden for many commercial industries now and creating new industries. Industry is embracing additive manufacturing and ultimately this will impact the products the Army purchases. Will this shift in industry require the Army to change procurement strategies and acquisition plans? Will 3D printing be used in a forward operating base for replacement parts or to produce items needed for new requirements? What should be the U.S. Army S&T investment and strategy with respect to additive manufacturing? Should we expect to face an adversary that is using additive manufacturing to enhance their capabilities in combat? (POC: Dr. Augustus W. Fountain III, ECBC, 410-436-0683, *augustus.w.fountain.civ@mail.mil*)

14. The Third Review Conference of the States Parties of the Chemical Weapons Convention met in April 2013 without being able to adopt language addressing the use of "incapacitants." The use of a fentanyl cocktail by Russian special forces in October 2002 to end a hostage crisis in the Dubrovka Theater by Chechen extremists brought their use into the international spotlight. Despite the deaths of 125 hostages, there was no public outcry on the use of a knock-down agent to resolve the crisis, and in December 2011, the European Court of Human Rights found the Russian government not guilty regarding the use of the fentanyl cocktail; citing that the intended use of the incapacitant was for law enforcement purposes. This ambiguity in the CWC is bearing witness to a surge of research and development into fentanyls and other pharmaceuticals by CWC signatory countries. While these chemicals are deemed incapacitants, under certain concentrations and conditions, they can be lethal, as evidenced by the deaths at the Russian opera house. The dual use of these and other pharmaceuticals makes monitoring proliferation activities difficult. With this trend, there is reason for concern that the United States and its allies could experience these

chemicals in future combat actions. (POC: Dr. Augustus W. Fountain III, ECBC, 410-436-0683, *augustus.w.fountain.civ@mail.mil*)

U.S. Army Tank Automotive Research, Development, and Engineering Center.

15. What are the strategic implications due to the ubiquitous, affordable, and persistent nature of enemy unmanned aerial vehicle (UAV) platforms to the use of conventional ground combat forces? What is the ideal mix of remote (networked) and long range (conventional) sensing for friendly forces given the growing UAV threat? Will there be a mobile ground-based UAV/counter-UAV fight to ensure friendly sensory overmatch? How could mobile cyber, electronic warfare, and directed energy weapons be best employed to mitigate the effects of the enemy UAV threat? (POC: Daniel Newport, 586-214-3478, *daniel.w.newport.civ@mail.mil*)

16. What are the strategic, ethical, and legal implications of the integration of biometric databases and sensor technologies within ground vehicles to assist in the identification and attrition of enemy forces or individuals? (POC: Daniel Newport, 586-214-3478, *daniel.w.newport.civ@mail.mil*)

17. What are the strategic implications regarding the use of future ground combat vehicles in the highly vertical fighting landscape of the "megacity"? Will combat vehicles with enhanced vertical and omnidirectional sensory, targeting, and lethality capabilities be an asset in these possible future "megacity" scenarios? (POC: Daniel Newport, 586-214-3478, *daniel.w.newport.civ@mail.mil*)

18. If ultra-low latency future warfare occurs beyond the speed of human decisionmaking, at what point in the decisional continuum will or should human intervention be required? Will the optimal amount and level at which autonomous decisionmaking vs. human intervention be fixed or variable based on exigent circumstances? (POC: Daniel Newport, 586-214-3478, *daniel.w.newport.civ@mail.mil*)

19. What are the strategic implications of future unprecedented, intimately comingled and highly interdependent mechanical and electronic ground vehicular subsystems due to the effects of cyber and electronic warfare? Could the complexity of these subsystems become unmanageable (or nearly so) due to a robust, near-peer cyber and electronic warfare threat or nonstate actor? (POC: Daniel Newport, 586-214-3478, *daniel.w.newport.civ@mail.mil*)

20. What are the strategic implications associated with the possible future use of robotic vehicles and autonomous systems in ground warfare? Will it lead to more costly and protracted warfare? Will it result in less decisive victories and more ambiguous outcomes? Does this make the process of winning hearts and minds during peacekeeping and stability operations more difficult due to the reduced presence of

Soldiers interacting with the local population? (POC: Daniel Newport, 586-214-3478, *daniel.w.newport.civ@mail.mil*)

21. What are the strategic implications to the employment of ground combat forces and the ground combat vehicle force structure if air superiority/supremacy is not achieved or maintained? Would an "aegis on-the-move" capability for ground vehicles help to ensure combat effectiveness even under these adverse conditions? (POC: Daniel Newport, 586-214-3478, *daniel.w.newport.civ@mail.mil*)

22. What are the strategic implications regarding the use of ground combat forces and the ground combat vehicle force structure if information superiority/supremacy is not achieved or maintained? Could inherent vehicular intelligence mitigate the effects of periodic loss of satellite and other communications connectivity? (POC: Daniel Newport, 586-214-3478, *daniel.w.newport.civ@mail.mil*)

23. Since 2001, much has been revealed about 1) how the United States engages an enemy, 2) how forces operate on the ground, 3) logistical, transportation, and basing requirements, and 4) critical dependencies to continue the fight. Furthermore, we have been fighting a significantly overmatched enemy who has been able to identify and exploit critical weaknesses. How might a peer military use these revelations to significantly complicate U.S. ground military operations (and broader U.S. military campaigns) in future wars and how should U.S. Forces counter this? (POC: Daniel Newport, 586-214-3478, *daniel.w.newport.civ@mail.mil*)

24. What are the strategic implications of possible future autonomous logistics transport and resupply operations? Will these technologies result in increased Soldier survivability at the expense of increased attrition of resupply convoys? If so, will this approach be sustainable? Will autonomous resupply operations result in more fuel or less fuel being consumed overall relative to fully manned resupply operations? (POC: Daniel Newport, 586-214-3478, *daniel.w.newport.civ@mail.mil*)

U.S. ARMY MEDICAL DEPARTMENT/THE SURGEON GENERAL

1. Ready and Deployable Medical Force—Global Health. Given the current and anticipated operational environment, it is imperative that Army medicine focus efforts to sustain and build capabilities that support the Army's efforts to shape the strategic environment. Additionally, Joint and Army strategic planning guidance documents clearly identify building partnership capacity (BPC) as a means to train foreign forces to support regional coalitions. Among Combatant Commanders, there is increasing emphasis on theater security cooperation (TSC) and BPC. (POC: Kristina McElroy, DoD VSA, 703-681-0497, *kristina.m.mcelroy2.civ@mail.mil*)

Strategic Issues:
   a. How can the Army Medical Department (AMEDD) remain relevant and contribute to TCS with global health engagements? Design a strategic approach to global health engagements that engages Combatant Commanders to think of AMEDD as a tool to shape the operational environment.

   b. Evaluate measures to integrate military (hard power) and nonmilitary (hard and soft power) tools to achieve strategic objectives and avoid or resolve potential conflict. (How to revamp the MEDCAP-like missions to be more productive and less disruptive to local assets, nongovernment organizations, and other interagency assets in the current environment.)

   c. How can the AMEDD develop metrics and a net assessment to determine that global health shaping and engagement actions work? Have sister services developed effective metrics? Develop recommendations to measure and assess these actions and prioritize where the AMEDD needs to focus its efforts.

2. As Army Medicine transforms itself to meet emerging strategic planning guidance and responds to current fiscal realities, the central focus is readiness—both readiness and health of the force AND maintaining a ready and deployable medical force. (POC: Major Matt Tarjick, OTSG Strategy Management, 703-681-3752, *matthew.p.tarjick.mil@mail.mil*)

Strategic Issues:
   a. Drawing from 13 years of lessons learned, define what readiness means to MEDCOM. In doing so, explain the specific capabilities and services within the direct care system that The Surgeon General (TSG) must maintain to ensure future readiness. Explain the rationale for excluding specific capabilities or services that are not required for preserving readiness.

   b. Consider the importance of preserving the health benefit (soft power) to maintain an "all-volunteer" force; what are recommendations beyond those currently

proposed that preserves as much of the health benefit without further taxing the entire AD/Retiree population (e.g., no show penalty, pharmacy reform).

c. How agile is the current institutional Army in terms of our ability to react to changing or surge requirements? Are there alternative models for maintaining surge medical capabilities in an MTF and in contingency operations (e.g., contractors in CSHs, eliminating the professional filler system (PROFIS) in favor of permanently assigned health teams—dieticians, BH, PT, etc.)?

d. Evaluate the effectiveness of the current Army Reserve U.S. Army Hospital (USAH) organizational structure to meet the PROFIS backfill requirements of the U.S. Army Medical Command. How has assigning active component PROFIS to deploying units using the PROFIS Deployment System (PDS) instead of habitual geographic supported/supporting relationships changed the way the Army Reserve provides PROFIS backfill? What is the most effective way to organize Army Reserve PROFIS backfill personnel into unit structure to best support the PDS requirements?

3. The Army Medical Department's System for Health (SFH) is a partnership among Soldiers, Families, Leaders, Health Teams, and Communities to promote **Readiness, Resilience, and Responsibility.** It incorporates components of Army Medicine's health programs, including Soldier Centered Medical Home, Patient Centered Medical Home, and Warrior Transition Units. (POC: Colonel Deydre Teyhen, OTSG Director, System for Health, 703-681-9078, *deydre.s.teyhen.mil@mail.mil*)

Strategic Issues:
a. Due to a financially constrained environment, how can the AMEDD forge ahead with the change from a health care system to a SFH? Are we taking the correct initiatives now that will increase the benefits in the future to maintain, improve, and restore health? If so, how will we sustain this effort as budgets are reduced? If not, what do we need to change?

b. What are the opportunities for synergy between the Comprehensive Soldier and Family Fitness (CSF2) and Behavioral Health (BH) campaigns to more effectively address resilience, risk reduction, and health in the Lifespace?

c. Key to improving individual health within the "Lifespace" is each individual's personal behavior to positively impact his/her own health. Central to this goal are improved individual activity, better nutrition, proper and adequate sleep, smoking cessation, etc. Discuss evidence based methods (e.g. personal enticement) of changing behaviors that may be leveraged to facilitate Army medicine's paradigm shift to creating a SFH.

d. How do we integrate annual SRP requirements and the annual PHA requirements to help promote health and readiness while minimizing lost duty time to Soldiers to complete requirements and duplication of workload among healthcare providers? How do we demonstrate the return on investment and value-add of these annual requirements to strategic leaders and Soldiers?

e. Compare the impact of previous wars with the last 12 years of war on our Forces and their Families, and how our Warriors are reintegrated into society (i.e., the challenges they face, the impact of how society views our Soldiers, their recovery and successful reintegration into society). Are there enduring effects within the Army and the DoD as a result of the experience? Provide data analysis of the impact on the disability evaluation system processes. Because there has been lot of interest and exchange with our European allies in our behavioral health efforts, as well as our Warrior in Transition concept, research may also delve into how different nations handle these issues through the lens of performance triad.

4. On October 1, 2013, the Defense Health Agency (DHA) was established by the Secretary of Defense. The DHA is responsible for driving greater integration of clinical and business processes across the Military Health System (MHS), implementing shared services with common measurement of outcomes, enabling rapid adoption of proven practices, helping reduce unwanted variation, and improving the coordination of care across time and treatment venues. Currently, the DHA is responsible for all or parts of the 10 shared services (Facility Planning, Medical Logistics, Health Information Technology, TRICARE Health Plan, Pharmacy, Budget and Resource Management, Contracting/Procurement, Public Health, Medical Education and Training, and Research and Development). (POC: Colonel Steven Owens, OTSG Reserve Affairs, 703-681-1062, *steven.j.owens.mil@mail.mil*)

Strategic Issues:
a. Formulate a proposed transition from multiple service-specific medical systems to a single unified, nonservice specific military medical system under the DHA. Explain the integration of current service-specific equities into a single organization.

b. Analyze and then describe what the AMEDD's core mission's and strategic vision for the future should be as the MHS transitions the DHA to FOC. How should Army medicine differentiate itself from its sister services and the DHA? What key capabilities should Army Medicine retain for the foreseeable future?

c. Analyze the pros and cons of merging all service specific surgeon generals (SGs) into a Joint Surgeon General at the DHA, and provide a position defending your alternative solution or to remain with the status quo of three separate SGs. Describe

potential command structure changes, impacts to MTF support, and impacts to TO&E structure.

5. Big data analytics is clearly a game changer, enabling organizations to gain insights from new sources of data that have not been mined in the past. It is a technology-enabled strategy for gaining **predictive** insights into customers, partners, and the business with potential to support significant changes in health and healthcare. (POC: Lieutenant Colonel Ian Lee, OTSG DSC, 703-681-0629, *ian.e.lee.mil@mail.mil*)

Strategic Issues:
a. How can Army medicine capitalize on and harvest "Big Data" to transform healthcare delivery? How should we leverage this capability?

b. Can Big Data analytics be leveraged to re-structure the DoD Electronic Health Record (EHR) to support and enhance moving from healthcare to Health? How can we explore and document its impact, and use the resulting analysis to transform our healthcare delivery processes?

c. What are the information barriers to a true patient-centered health and healthcare system experience? How do we use this opportunity to better integrate the beneficiary/patient into the delivery of healthcare and the behaviors of improved health?

d. How can the same modality be used to align medical readiness reporting across all services?

e. Assess the effectiveness of the metrics the Army uses to manage nondeployable Soldiers. How can these be improved?

6. The Army Medical Department must develop trained, ready, and agile leaders through a total force approach that includes a sustainable force mix of Active and Reserve Medical component capabilities tailored to meet the challenges of the 21st Century. (POC: Ms. Kristina McElroy, DoD VSA, 703-681-0497, *kristina.m.mcelroy2.civ@mail.mil*)

Strategic Issues:
a. Evaluate current and previous efforts of AMEDD Reserve Professional Military Education (PME). Does the current system adequately train and develop willing leaders when only Officer Basic is required for all AMEDD Reserve branches other than MSC?

b. Assess where positive and negative outcomes have occurred. Drawing on such findings, recommend a potential model or framework through which the AMEDD can improve support to develop leaders to meet the challenges of the 21st century.

7. Defense Support of Civil Authorities (DSCA) operations require a trained and deployable medical force to meet a broad range of humanitarian and disaster response requirements. Develop recommendations to measure and assess these actions and prioritize where the AMEDD needs to focus its efforts (POC: Ms. Kristina McElroy, DoD VSA, 703-681-0497, *kristina.m.mcelroy2.civ@mail.mil*)

Strategic Issues:
a. Can the AMEDD integrate its significant resident humanitarian and disaster response capability into emerging Defense Support of Civil Authorities (DSCA) doctrine? If so, outline the process to do so.

b. Can Active and Reserve AMEDD forces train for CONUS global health engagements? Discuss health concerns, pandemic disease preparation, and other disaster relief and humanitarian assistance issues that impact Army medicine. Is a CONUS DSCA response different from an OCONUS humanitarian response? What are the requirements for the AMEDD to train for CONUS DSCA operations, especially in an all-hazards response environment?

c. Are current Combined Arms Training Strategies (CATS) tasks adequate for AMEDD support to DSCA operations? How is operational interoperability affected? What are the costs and requirements to initiate such a program?

8. Over the 235-year history of Army medicine, the roles and responsibilities of civilians have continued to evolve. Our civil service civilians provide continuity, stability, and leadership. How have civil service positions evolved across Army medicine to include more leadership responsibilities? Could more strategic leadership positions for civilians enhance Army medicine without harming officer and NCO career progression and development? (POC: Nancy Quick, MEDCOM Civilian Corps Proponent Officer, 210-221-6674, *nancy.f.quick.civ@mail.mil*)

Strategic Issues:
a. With reductions in AMEDD budgets that will result in a smaller civilian workforce, what can the MEDCOM do to best reshape that workforce? How can the AMEDD achieve better hiring outcomes? How does the AMEDD best motivate, develop, and retain the clinical skill sets and other needed talent to continue to complete their missions now and in the future?

b. How effective are the Army leader development programs in preparing our civilians for leadership roles and positions? Determine the return on value (ROV) from

various leadership development programs such as the DA Civilian Education System and other programs of enhancement. What additional integration can be achieved between the military and civilian leader training events? Evaluate the impact of formal leader development programs (LDPs), such as the U.S. Army Corps of Engineers LDP. Address must-do vs. nice-to-do HQDA mandated mandatory training on ROV.

9. On March 23, 2010, President Barack Obama signed comprehensive health reform, the Patient Protection and Affordable Care Act, into law. Analyze the effects of the ACA on Defense Health.

Strategic Issues:

a. Does the expansion of public programs, such as treatment of Medicaid or CHIP affect Defense Health? What are the impacts on the ability of Army medicine to recapture care? Will the ACA cause a competition for personnel to provide services? (POC: Lieutenant Colonel Todd Ryktarsyk, OTSG-CIG, 703-681-0950, *todd.a.ryktarsyk.mil@mail.mil*)

b. Analyze the impact of the DoD offering continuous TRICARE coverage to all RC Soldiers to maintain readiness. Analysis must take into account variables in the Affordable Care Act across States, projected barriers to overcome and mechanism to do so, intended historical cost, projected percentage of utilization vs. private insurance, projected cost to the government at full execution, recommended cost sharing, if any, variability in costs to RC vs. AC, etc. (POC: Colonel Steven Owens, OTSG Reserve Affairs, 703-681-1062, *steven.j.owens.mil@mail.mil*)

U.S. ARMY RECRUITING COMMAND

With demographic trends demonstrating an ever-decreasing pool of talent to recruit and access, combined with industry's increasing willingness to compete for that talent (e.g., companies offering free college to employees), how can the Army best compete for and acquire the talent the Army requires between now and 2025? (POC: Mr. Rick Ayer, USAREC CIG, (502) 626-5050, *rick.e.ayer.civ@mail.mil*)

Additionally, USAREC would like to sign on as endorsers/proponents to eight questions from Part I: 14, 16, 31, 68, 70, 71, 74, and 75. (POC: Rick Ayer, USAREC CIG, (502) 626-5050, *rick.e.ayer.civ@mail.mil*)

U.S. ARMY COMBINED ARMS CENTER,
CENTER FOR ARMY LESSONS LEARNED

Operation ENDURING FREEDOM and Operation IRAQI FREEDOM Lessons Learned Project.

Strategic Issues. (POCs: Mr. Michael Hartmayer, CALL, 913-684-5978, *michael.s.hartmayer.civ@mail.mil*; and Mr. Neil Buthorne, CALL, 913-684-5988, *neil.r.buthorne.civ@mail.mil*)

1. How does the Army train and maintain standing C/JFLCC-capable deployable headquarters that are structured to avoid the generation of ad hoc HQs?

2. How do Army forces increase the ability to recognize, acknowledge, and accurately define the operational environment in order to employ the right forces effectively with the right capabilities, missions, and goals?

3. How will the Army retain the ability to rapidly expand as a scalable all volunteer force without mobilization?

4. What increased capacity do some theaters (ASCCs) require to execute small scale contingency missions due to short response requirements and lack of enablers?

5. What are the civil-military cooperation requirements, particularly between Army and USG agencies, as a strategic imperative for successful operations?

6. How can the Army bridge the requirements between maintaining an effective expeditionary force and sustained operations over years? How does the Army institutionally and operationally prepare itself for the potential of sustained operations?

7. What is the Army's (joint force) force structure requirements to execute stability operations, given its history of creating vast requirements/programs/formations (PRTs, MiTTs, BTTs, PTTs, etc.) aimed at building HN capacity?

8. How can the Army improve the planning and execution of transitions between Phases, and the resulting evolution of responsibilities among USG agencies, unified action partners, including host nations?

9. How can the Army best continue to hone its strategic communications ability overall, and reward the exercise of courageous communication with all audiences?

10. How can Army forces best provide the shaping function (security Cooperation/SFA) for GCCs and HQDA?

Operational Issues: (POC: Mr. Scott Farquhar, CALL, 913-684-5151, *scott.c.farquhar.civ@mail.mil*)

11. How can division and corps level staffs integrate coalition partners into pre-deployment mission and staff training quickly and effectively?

12. How can the U.S. Army retain and improve the ability to operate with coalition forces at all levels?

13. How can the Army improve Regionally Aligned Force (RAF) employment, in terms of policy and doctrine, and how should those improvements be addressed?

14. What must the U.S. Army do to codify information sharing compatibility in a coalition environment?

15. How does the U.S. Army retain and improve the ability of SoF/CF to operate in an integrated and synchronized fashion at all levels?

16. How can the Army increase the awareness of roles, responsibilities, and capabilities of Operational Contract Support (OCS) and efficient planning, management, and integration across the Army?

17. How can the Army improve its ability to leverage the large number and variety of enablers for improved situational awareness?

U.S. ARMY PEACEKEEPING AND STABILITY OPERATIONS INSTITUTE

1. Incorporating a Holistic Paradigm for Military Operations to Support U.S. government (USG) Success:

Over the past decade and half of war, the United States has been heavily involved in stability operations in Iraq and Afghanistan, where ongoing violent conflict and a non/semi-permissive security environment has significantly constrained and restricted the ability of USG and multinational governmental and non-governmental organizations to support and build partner capacity in key areas such as governance, civil security, and economics. However, as we emerge from these protracted conflicts, much of the discussion among senior leaders is that land forces, and other joint force partners, must be prepared to assume and accomplish these critical non-security related tasks until either the operational environment permits and civilian capacity can be sufficiently expanded to accomplish these tasks. As military leaders continue to focus on how we must insist on and more effectively "hand-off" these non-security efforts to civilian lead agencies, even though our recent, as well as our historical experiences have shown that the only element of the USG capable of operating effectively in areas of violent conflict is indeed the U.S. military. Research in this area would address one or all of three major questions:

    a. Why do military concepts and senior leaders continue to emphasize "handing off" vice being prepared to assume and accomplish stability efforts beyond "security" in unstable and violent environments?

    b. How should joint and Army concepts and doctrine for operations, intelligence and design/planning change to accept these realities (i.e. that we must be prepared to both defeat and stabilize/control in conflict environments) in order to incorporate the essential nature and contributions to USG success of military efforts beyond "establishing security"?

    c. How the core military contribution of "establish security" to enable a "safe and secure environment for USG efforts in areas impacted by violent conflict (be it pre-, during, or post-conflict), must incorporate a holistic approach beyond gaining local, physical control over areas controlled by the enemy/adversary, by incorporating efforts to change and improve other stability areas as part of our overall operational approach?

(POC: Dr. Jim Embry, Professor, Stability Operations, 717-245-3524, james.h.embrey.civ@mail.mil)

2. Create a "criminal justice model" for rule of law that encompasses police, detention, and law and works with current doctrine to ensure a holistic approach vice a disconnected/stovepipe approach. (POC: Ms. Karen Finkenbinder, Rule of Law, Justice, and Reconciliation Advisor, 717-245-3659, karen.j.finkenbinder.civ@mail.mil)

3. Megacities as a component of the future strategic environment: For Rule of Law purposes, consider how the joint force interacts with security/police forces in the cities. Current doctrine ignores community security actors. (POC: Ms. Karen Finkenbinder, Rule of Law, Justice, and Reconciliation Advisor, 717-245-3659, karen.j.finkenbinder.civ@mail.mil)

4. How do we integrate civilian Rule of Law mechanisms/advisors into the Military Planning Process to prevent transition and instead allow for "rebalancing?" (POC: Ms. Karen Finkenbinder, Rule of Law, Justice, and Reconciliation Advisor, 717-245-3659, karen.j.finkenbinder.civ@mail.mil)

5. What conflict transformation actors are available to allow for seamless rebalancing from military to police in post conflict? (POC: Ms. Karen Finkenbinder, Rule of Law, Justice, and Reconciliation Advisor, 717-245-3659, karen.j.finkenbinder.civ@mail.mil)

6. Create a model that depicts the complex nature of conflict transformation over the linear phased model. (POC: Ms. Karen Finkenbinder, Rule of Law, Justice, and Reconciliation Advisor, 717-245-3659, karen.j.finkenbinder.civ@mail.mil)

7. Create a case study that looks at transitioning from military security to civilian security – not the usual suspects (Kosovo, Ireland, etc.) and compare it to recent practices in Iraq or Afghanistan. (POC: Ms. Karen Finkenbinder, Rule of Law, Justice, and Reconciliation Advisor, 717-245-3659, karen.j.finkenbinder.civ@mail.mil)

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PART III:
JOINT SUPPLEMENT

Updated October 31, 2014

CONTENTS

JOINT SUPPLEMENT

1. U.S. Air Force

Air Force and Air War College: Service Oriented Topic List. The list is managed by the Air University Research Information Management System (AURIMS). Topics have been submitted by the following: CSAF-SECAF, Air War College, Air University, HQAF Staff, and several other U.S. Air Force commands. Research topics in this AURIMS list vary from the tactical to the strategic level. Army War College students wishing to use one of these topics for their SRP should first coordinate w/the USAF Senior Service Representative (SSR) and their SRP advisor to ensure there is sufficient strategic relevance for their chosen topic.

For additional information, contact:
Colonel Lynn Scheel
Air Force Senior Service Representative, U.S. Army War College
Office: 717-245-4863
lynn.i.scheel.mil@mail.mil

2. U.S. Navy

The United States Naval War College, Joint Military Operations (JMO) Department: JMO Research Paper Topics, January 15, 2013. Various commands, organizations, and agencies have provided issues of contemporary concern.

For additional information, contact:
Captain Mark Light
Navy Senior Service Representative, U.S. Army War College
Office: 717-245-3238
Mark.f.light.mil@mail.mil

3. U.S. Marine Corps

Marine Corps University Research Topic Nominations. Topics have been submitted for Annual Year 2014-15 and are organized by major combat functions: Command & Control, Maneuver, Fires, Intel, Logistics, Force Protection, and Cyber; and several other categories to include Training, International, and Reserve issues.

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