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2016-17 Key Strategic Issues List

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U.S. ARMY WAR COLLEGE

KEY STRATEGIC ISSUES LIST

ACADEMIC YEAR 2016-2017

U.S. Army War College Press

Part I: CHIEF OF STAFF OF THE ARMY SPECIAL INTEREST TOPICS

Part II: ARMY PRIORITIES FOR STRATEGIC ANALYSIS

Part III: ARMY WARFIGHTING CHALLENGES

July 31, 2016

Comments pertaining to this publication are invited and should be forwarded to: Director, Strategic Studies Institute and U.S. Army War College Press, U.S. Army War College, 47 Ashburn Drive, Carlisle, PA 17013-5010.

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For over a decade, the USAWC 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) 2016-2017 KSIL, referred to as the Chief of Staff of the Army Special Interest Topics, consists of critical topics demanding special attention. A subset of these topics will be addressed by the USAWC as Integrated Research Projects. Part II: Army Priorities for Strategic Analysis, has been developed by the U.S. Army War College in coordination with Headquarters Department of the Army (HQDA) and Major Commands throughout the Army. Part III: Army Warfighting Challenges, developed by ARCIC, represents those critical issues associated with the Army Operating Concept, "Win in a Complex World." The KSIL 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.

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FOREWORD

Russia, China, North Korea, Iran, and radical violent extremist organizations that currently challenge the U.S will likely continue to do so for some time. These security challenges exist within a wider global context of rapid technological change, significant demographic shifts, an uncertain economy, and geostrategic power dynamics of historic proportions. These conditions intensify the level of uncertainty and the pace of change, and raise the potential for significant interstate conflict to higher levels than at any time since the end of the Cold War.

Paired with the lessons of history, these contemporary security challenges require the U.S. Army to always be ready to deploy at any moment to fight and win. As a result, my #1 priority is readiness across the Total Force. There is no other #1. Readiness to fight and win in ground combat is—and will remain—an inviolate benchmark; no American Soldier must ever deploy to combat unready. The Army must also set the conditions to increase our effectiveness to meet the challenges of the future. Our transformation to the future force begins now. We will set the conditions to maintain overmatch against future adversaries while enhancing our ability to adapt to unforeseen challenges. All of this is achievable because of our most valuable asset—our people—the Soldiers, Families, and Civilians who dedicate their lives to the selfless service to their Nation. We will keep their faith.

We must continue to focus the efforts of the Army's educational institutions on addressing these seemingly insurmountable challenges. The Key Strategic Issues List (KSIL), developed by the U.S. Army War College, in coordination with Headquarters, Department of the Army and major commands throughout the Army, includes issues we must address to ensure the Army of 2025 and beyond will continue to meet the needs of the Nation. I strongly encourage those conducting research through our Senior Service Colleges and Fellows experiences, and other researchers, to consider the issues listed in the KSIL.

As we build a new future to deal with this growing complexity, the Army will require evolutionary change, and this change begins by changing mindsets. This necessary change must be based on rigorous research and the development of ideas that are invaluable to the Army and to the Nation. With your work and research, our Army will be better prepared for the future and the threats posed against our Nation's interests.

Mark A. Milley

General, United States Army Chief of Staff

Part I:

Chief of Staff of the Army Special Interest Topics

Integrated Research Projects

- 1. **Major War:** Examine the Army's preparation and capability to fight a great power war. While the Army's foremost mission is to develop, provide, and sustain the ground forces and capabilities to fight and win the nation's wars, it has not fought a peer or near-peer competitor since World War II. As a result, it may not be prepared, mentally or physically, for such a war. (POC: Dr. Antulio Echevarria, Strategic Studies Institute, antulio.j.echevarria.civ@mail.mil, 717-245-4058)
- a. To what extent has the Army or its forces lost proficiency in crafting strategy, exercising high-level command and control, projecting power, and regenerating forces necessary to fight a major war? How can the Army restore those proficiencies?
- b. How expansible is the Army at present in terms of personnel and equipment? What is the state of its readiness?
- c. How might US civil-military relations change in the face of a major war, and how should the Army react? Is a new Goldwater-Nichols act needed?
- 2. **Third Forces:** Examine the Army's ability to respond to "third forces" organizations that can influence the outcome of armed conflict but are not, strictly speaking, combatants. Examples of third forces include transnational criminal syndicates, Wikileaks, Anonymous, media organizations, multinational corporations, counter-recruiting activism, and non-governmental organizations. (POC: Dr. Steven Metz, Strategic Studies Institute, steven.k.metz.civ@mail.mil, 717 448-6116)
- a. To what extent do third forces influence the operational environment today as compared to previously?
- b. How should Army civil affairs and information operations evolve to deal with third forces?
 - c. In what other ways should the Army adapt to the influence of third forces?
- 3. **Sustainable Political Outcomes:** Examine the concept of achieving sustainable political outcomes, with a focus on the role of ground forces. (POC: COL Gregory Dewitt, PKSOI, <u>Gregory.p.dewitt.mil@mail.mil</u>, 717-245-3122)
- a. Assuming ground forces are a necessary but insufficient condition for achieving sustainable political outcomes, what is sufficient for achieving sustainable outcomes?

- b. How can Army leaders improve the formulation of military strategy to make ground forces an integral part of an interagency and international set of sufficient conditions?
- 4. **Operational Environment 2030-2050:** To maintain its competitive edge through 2050, the Army must envision the drivers and trends of the emerging 21st Century operating environment (~2030-2050), and anticipate their implications for the character of war and the future Army. (POC: Mr. Sam White, CSL, <u>samuel.r.white4.civ@mail.mil</u>, 717-245-3797)
- a. What are the most salient drivers and trends shaping the emerging $21^{\rm st}$ Century operational environment?
- b. What are the anticipated impacts of these drivers/trends on the character of war in the 21st Century (use one or more frameworks, such as principles of war, elements of law of armed conflict, etc.)
- c. Given these anticipated changes in the character of war, what critical attributes or competencies must the Army develop or reinforce to prosecute war successfully in the 21st Century?
- 5. **Global Response: Presence vs. Posture:** In an era of constrained resources, military leaders must consider the relative merits of physical presence of forces versus the capability (posture) of those forces. While both presence and posture are important, they may not be achievable to the degree desired; hence, adaptation, compromise, and risk assessment are necessary. (POC: Dr. John Deni, Strategic Studies Institute, john.r.deni.civ@mail.mil, 717-245-4183)
 - a. Should presence be prioritized over posture to meet global requirements?
- b. Are rotational combat units capable of providing the deterrent and/or war-fighting capabilities of permanently assigned combat units?
- c. Are pre-positioned stocks, operational projects, and activity sets adequate for future needs?
- 6. **Military Risk Framework:** Strategy is the alignment of ends, ways, and means informed by risk to attain goals. (Prof. Nate Freier, Strategic Studies Institute, nathan.p.freier.civ@mail.mil, 717-245-4127)
- a. How can military risk be expressed in a manner that is understandable to policymakers, practitioners, and the American public?
- b. What are the components of military risk? How do they relate to each other and how should they be evaluated?

- c. How may they be incorporated with risk mitigation components into a risk management framework to inform senior leader decisions?
- 7. **Security Force Assistance in Africa:** One of the biggest gaps in security force assistance is the absence of a deliberate and sustained program to develop institutional capability and capacity in African defense establishments. Examine this critical security force assistance requirement and propose Africa-appropriate solutions. (POC: COL Tom Sheperd, SSL, thomas.e.sheperd.mil@mail.mil, 717-245-3349)
- 8. **Strategic Deterrence in the 21**st **Century:** Deterrence today is in some ways more complex than during the Cold War. The global nature of contemporary conflicts demands an examination of risk of strategic attacks which can impact U.S. and global populations and interests in unprecedented ways. The Department of Defense faces the challenge of balancing assurance objectives, regional deterrence objectives, and strategic deterrence objectives. There is a compelling need to examine these concepts in a post-Cold War perspective. (POC: Dr. Chris Mason, Strategic Studies Institute, matthew.c.mason4.civ@mail.mil, 717-245-4073)
- 9. **Homeland Defense:** Recommend modifications to the Department of Defense's "Strategy for Homeland Defense and Defense Support of Civil Authorities" to establish a role for land forces and conduct a capability analysis. (POC: Prof. Bert Tussing, CSL, bert.b.tussing.civ@mail.mil, 717-245-4516)
- a. What are the potential threats to the homeland for which land forces would be needed?
- b. How should the Department of Defense in general, and U.S. Northern Command in particular, prepare to be the "lead federal agency" in the event of an internal military crisis?
- c. What "triggers" would signal the assumption of such a mission beyond the purview and capabilities of law enforcement?
- d. What "triggers" would signal the passing of principal authority from a defense mission to a law enforcement requirement?
 - e. Examine Army capabilities to operate in a post-nuclear environment.
- 10. **Strategic Direction:** Examine the translation of strategic direction into operational planning and execution. (POC: COL Gregory Dewitt, PKSOI, <u>Gregory.p.dewitt.mil@mail.mil</u>, 717-245-3122)
- a. How do we translate policy guidance into an effective whole-of-government operational plan, which coordinates and leverages all aspects of national power?

- b. How can the diplomacy, development, and defense (3D) construct and the Unity of Effort Framework (UEF) be used to identify potential implementation strategies?
- c. How can leaders influence the security environment, integrate the efforts of multiple partners, and retain the initiative in contested spaces.
- 11. **Anti-Access/Area Denial (A2/AD) in Europe:** Conduct an analysis of how the Army and its forces/capabilities can contribute to overcoming the A2AD challenge in northeastern Europe. (POC: Dr. John Deni, Strategic Studies Institute, john.r.deni.civ@mail.mil, 717-245-4183)
- 12. **Human Dimension:** Examine the Army human dimension strategy, focusing on its applicability to the 2030-2050 operating environment. (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mil, 717-245-3797)
- a. Identify necessary cognitive, physical, psychological and emotional traits necessary to realize the objective Future Force Soldier.
- b. what are the required mental, physical, psychological and social attributes necessary in recruiters?
- 14. **Rebalance 2.0:** Conduct a strategic assessment of the rebalance to the Asia-Pacific region. (POC: Dr. David Lai, Strategic Studies Institute, david/lai2.civ@mail.mil, 717-245-3914)
- 15. **Security Force Assistance:** With the exception of special operations forces, the Services do not include "security force assistance" and "building partner capacity" as core competencies. Providing the Joint Force with a framework for developing these competencies would result in more efficient use of resources and more effective partnering. (POC: Dr. John Deni, Strategic Studies Institute, <u>john.r.deni.civ@mail.mil</u>, 717-245-4183)
- a. How could security force assistance and building partner security capacity be used to support unified action?
- b. How could security force assistance principles be used to build partner capacity across a partnered nation's security force?
- c. What are the best measures of performance and measures of effectiveness for evaluating the US government's efforts in security force assistance and building partner capacity?

- d. Is there a role for the U.S. Army in building partner capacity in the homeland?
- e. How can the acquired expertise of retired senior Army professionals be utilized to provide strategic advice and assistance in defense reform, security force assistance and building partner capacity? (POC: Mr. Chuck Grenchus, Center for the Army Profession and Ethic (CAPE), Charles.grenchus@usma.edu, DSN 688-0826)
- 16. **Third Offset Strategy:** The Department of Defense has undertaken a "third offset strategy" an innovation initiative for maintaining a qualitative edge over competitors. (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mil, 717-245-3797)
 - a. How can the Army influence the third offset strategy?
 - b. How might the third offset strategy influence the Army?
- 17. **Institutional Army for the 21**st **Century:** The STEADFAST reforms of the 1970s were the last major reorganization of the institutional Army. Given the changes of the past four decades (Goldwater Nichols, end of the Cold War, wars in Iraq/Afghanistan, etc.) and the expected challenges of the future security environment (return of peer/near-peer threats, persistent instability and disorder, continued pressure on Army resources and manpower, etc.), is the institutional Army sufficiently structured, organized, resourced, and empowered to produce and support a 21st century force? Where are the gaps, seams, shortfalls, redundancies, and opportunities? How and why should we address them? What should the institutional Army look like, and how should it function? (POC: LTC Joshua Bradley, Strategic Plans, Concepts and Doctrine Division Army G-35/SSP, Joshua j. bradley.mil@mail.mil, 703-692-8769)
- 18. **Science and Technology:** The pace of scientific and technological (S&T) innovation over the past 100 years has been astounding. Rapid advances in medical, biological, computing, cognition, physics, chemistry, materiel science, aerospace, energy, and many other fields have benefited the world—and also benefited the Joint Force and U.S. Army. As our Army seeks to preserve or extend its dominance into the 21st Century, how should we think about the role of science and technology? Will the rate of S&T innovation continue to accelerate into the future and provide us opportunities to exploit—or is the rate of S&T innovation slowing down? Are new or different S&T fields more promising than others from a military standpoint? (POC: LTC Joshua Bradley, Strategic Plans, Concepts and Doctrine Division Army G-35/SSP, Joshua.j.bradley.mil@mail.mil, 703-692-8769)

Part II:

Army Priorities for Strategic Analysis

Strategic Leadership

- 1. Few graduates of Army Professional Military Education (PME) courses will actually serve as General/Flag Officer or SES-level strategic leaders; however, most will serve as advisors to strategic leaders. What knowledge, skills, and abilities (KSA) are most evident in successful advisors to strategic-level leaders in the Army, the Department of Defense, and the U.S. Government? Do our existing PME courses and assignment opportunities facilitate or impede the development of these KSA? Are these KSA, education and experience factors different from those required by successful strategic-level advisors in other Services, Federal agencies, organizations or business? If there are significant differences, what can the Army learn from these differences to further improve its development of successful strategic-level advisors? (POC: Prof. Jim Shufelt, CSL, james.w.shufelt3.civ@mail.mil, 717-245-3366)
- 2. Beyond Army Professional Military Education (PME) and Civilian Education System (CES), how does the Army increase the cognitive performance of strategic leaders of character, competence, and commitment? What are the strategic leader attributes and competencies that will be required in the future, and how is the Army addressing these requirements through research, capability development and assessment? (POC: COL Matt Shatzkin, Ph.D., CSL, matthew.p.shatzkin@mail.mil, 717-245-4052)
- 3. Examine how the Army can better prepare senior army leaders to effectively contribute to national strategy (NSS, NDS, NMS) development. How can we adjust officer development to prepare leaders to apply the new Army Operating Concept, specifically to "win in a complex world"? Does "winning" require strategic competencies in both leading within the complexities of a JIIM environment and understanding the context of global challenges, such as regional, cultural, economic and linguistic expertise? (POC: Prof. Trey Braun, Strategic Studies Institute, william.g.braun2.civ@mail.mil, 717-961-6718)
- 4. Army Leadership vs. Army Management. As a profession, the Army must provide expert, qualified practitioners—but it also must manage the resources and processes of the institution itself. The Army is well-led, but is it well-managed? How can the Army improve its development of good leaders and good managers? (POC: LTC Joshua Bradley, Strategic Plans, Concepts and Doctrine Division Army G-35/SSP, Joshua.j.bradley.mil@mail.mil, 703-692-8769)

Strategic Mission Command

5. How should theater armies respond and provide mission command to small-scale contingencies? What capabilities do they need for steady state activities and rapid response requirements? (POC: Dr John A. Bonin, CSL, john.a.bonin.civ@mail.mil, 717-245-3457)

Military Profession

- 6. "The Army Profession and Civil-Military Relations." Based on Army Profession Doctrine (ADRP-1, para 5-6; para 6-8), at the strategic level, examine the civil-military relations issues currently challenging the Army Profession. (POC: Dr. Marybeth Ulrich, DNSS, USAWC, marybeth.p.ulrich.civ@mail.mil, 717-245-3514) Potential topics include:
 - a. Leveraging military and civilian expertise in policy making
- b. Military- Congressional Relations through the lens of acquisition reform, or Goldwater-Nichols reform, etc.
 - c. The Civil-Military Gap: Is this factor contributing to America's long wars?
- d. Is the media's coverage (or lack of coverage) contributing to America's long wars?
 - e. Is the American military institution losing prestige?
- f. Are civil-military relations principles being effectively applied in strategies to shape post-conflict governments?
- g. Are legacy Service Members becoming increasingly prevalent? Anecdotally, it appears that second- and third- generation Service Members are occurring more frequently. If this phenomenon is becoming more prevalent, does this have implications relevant to the civil-military gap? Are we becoming socially or culturally insular? (POC: MAJ Centrell Jones, USAREC, centrell.a.jones.mil@mail.mil, 502-626-4012)
- 7. How should military senior leaders reconcile the civil-military tensions created by their multi-role identities (executive branch agent, congressional advisor, and military commander/leader)? (POC: Prof. Trey Braun, Strategic Studies Institute, william.g.braun2.civ@mail.mil, 717-961-6718)
- 8. Within professional development through education, training, and experience, how can the Army ensure that ethical reasoning is developed along with critical and creative thinking and incorporated within decision making in mission command, performance of duty, and all aspects of life? (POC: MAJ Shawn Dalton, Opns Div Ch, CAPE, shawn.d.dalton.mil@mail.mil, 845-938-1057)

- 9. How can the Army best implement and promulgate the Army Ethic (Ref: ADRP 1) throughout the Total Army? (POC: MAJ Shawn Dalton, Opns Div Ch, CAPE, shawn.d.dalton.mil@mail.mil, 845-938-1057)
- 10. How can the Army Profession best implement character development into education, training, and experience? (POC: MAJ Shawn Dalton, Opns Div Ch, CAPE, shawn.d.dalton.mil@mail.mil, 845-938-1057)
- 11. How can the Army strengthen mutual trust between its components (Regular Army, Army National Guard, and Army Reserve)? (POC: MAJ Shawn Dalton, Opns Div Ch, CAPE, shawn.d.dalton.mil@mail.mil, 845-938-1057)
- 12. Do periods of post-war defense reductions cause bureaucratization of the US Army, moving it away from its desired institutional character of profession? Are there currently systemic indicators of loss of professional status either within the US Army or among those the Army supports? (POC: Dr. Don Snider, Strategic Studies Institute, don.m.snider.civ@mail.mil, 717-245-3142)
- 13. Examine the "state of ethical leadership" provided by junior officers of the millennial generation. Conduct a study focused on former Battalion Commanders within the AWC student body of all services. (POC: Dr. Don Snider, Strategic Studies Institute, don.m.snider.civ@mail.mil, 717-245-3142)

The Human Dimension

- 14. How well does the Army Human Dimension strategy address the requirements of strategic leaders to become "adaptive and agile"? Should the supporting objectives or key tasks be adjusted when addressing strategic leaders? (POC: COL Matt Shatzkin, Ph.D., CSL, <a href="mailto:mailto
- 15. What are the best practices associated with working with a partner military in a culture different than the American one? How can the Army use this information to be more effective at building partner militaries? (POC: Dr. Steven Metz, Strategic Studies Institute, steven.k.metz.civ@mail.mil, 717 448-6116)
- 16. How can the Army strengthen mutual trust between its communities of practice (Profession of Arms and Army Civilian Corps)? (POC: MAJ Shawn Dalton, Opns Div Ch, CAPE, shawn.d.dalton.mil@mail.mil, 845-938-1057)
- 17. How can the Army best utilize the acquired talents and expertise of its distinguished retired Army professionals? (POC: MAJ Shawn Dalton, Opns Div Ch, CAPE, shawn.d.dalton.mil@mail.mil, 845-938-1057)
- 18. Will the Human Dimension substantially improve the generating and operating forces' ability to achieve overmatch against our enemies and adversaries? (POC: COL Brian Cook, G3, USAWC, brian.c.cook4.mil@mail.mil, 717-245-4584)

- 19. Women in Combat: Provide an external assessment of the Army's plan and associated costs and risks to integrate women into combat positions. A recent policy change in December 2015 by the Department of Defense (DoD) allows women into all combat positions. In April 2013 the Army submitted a plan to DoD on how it planned to integrate women into combat positions. (POC: COL Cheryl Phillips, SSL, Cheryl.d.phillips3.mil@mail.mil, 717-245-3181)
- 20. What are the physical requirements for strategic leaders? How well does the Army Human Dimension strategy of Holistic Health and Fitness address these requirements? (POC: COL Matt Shatzkin, Ph.D., CSL, matthew.p.shatzkin.mil@mail.mil, 717-245-4052)
- 21. What policies and systems need adjustment to help improve the flow of Soldiers among the various components? How can the Army leverage the Continuum of Service to retain experienced talent in the Reserve Components as the Regular Army draws down? (POC: COL Toney Filostrat, OCAR, Director of Strategy and Integration, toney.e.filostrat.mil@mail.mil, 703-806-7787)
- 22. What can the Army do through its Army ROTC programs to address diversity of the force issues: (POC: Dr. Bert Huggins, Research and Diversity, RMID, USACC, bert.huggins.civ@mail.mil, 502-624-4354)
 - a. Enhance the quality and quantity of minority commissions
 - b. Enhance the quality and quantity of geographic representation
- c. Enhance the quality and quantity of academic representation in regards to STEM majors
- 23. Examine the nature, condition, and future of the All-Volunteer Force (AVF) and supporting systems. (POC: Dr. Lenny Wong, Strategic Studies Institute, leonard.wong.civ@mail.mil, 717-245-3010)
- a. To what extent are the reasons for creating the AVF in the early 1970s still relevant today?
- b. To what extent does the AVF undermine the sense of public responsibility and shared sacrifice necessary for a democracy to survive?
 - c. What are the long-term economic consequences of maintaining the AVF?
- d. Given the AVF's cost and inherent limitations, would the United States be capable of mass mobilization in the event of a national emergency?

Strategy Education

- 24. How can the Army balance the developmental processes of skill-building, conceptual understanding, feedback, and personal growth to develop strategic thinking competencies for Army leaders? How can the Army better encourage strategic thinking self-development (e.g., reading broadly, exploring a wide range of sources, reflecting on action)? (POC: Prof. Steve Kidder, CSL, Stephen.d.kidder.civ@mail.mil, 717-245-4349)
- 25. The Army Operating Concept emphasizes the recognition of human, cultural, and political continuities of armed conflict. It calls for forces possessing cross-cultural capabilities that permit them to operate effectively among populations. Inherent in this vision is a mastery of language, cultural awareness, and an in-depth knowledge of peoples, political systems, religion, demographics, infrastructure, and a host of other factors that can vary significantly by country and region. How can the Army best acquire, maintain, and make that knowledge accessible to support regionally aligned forces? (POC: Mr. Kevin McLean, Futures Branch Chief, DCS G2, kevin.m.mclean3.civ@mail.mil, 703 695-2195)
- 26. How can the Army's educational and concept development systems encourage and reward creativity? Are there best practices and techniques which can be drawn from other types of organizations which emphasize creative thinking? Could the Army make creativity more career enhancing? (POC: Dr. Steven Metz, Strategic Studies Institute, steven.k.metz.civ@mail.mil, 717 448-6116)
- 27. What is the appropriate level of exposure to molecular biology, genetic engineering, and bioinformatics in intermediate level and graduate military education curricula to enable future Army leaders to realistically anticipate, think strategically about and counter the use of biological weapons? (POC: COL Paul B. Keiser, WRAIR, paul.b.keiser.mil@mail.mil, 301-319-3347)
- 28. What is the optimal mix of faculty in the Army's professional military educational system? What skills or attributes are in short supply? How can the Army attain more of them? (POC: Dr. Steven Metz, Strategic Studies Institute, steven.k.metz.civ@mail.mil, 717 448-6116)
- 29. The "reinvigoration of wargaming" in the Department of Defense has become a focus in the wargaming community since Undersecretary of Defense Robert Work released his 9 February, 2015 Memo on "Wargaming and Innovation." The systematic use of wargames (i.e. board games and simulations) in PME could be a significant line of effort in the reinvigoration of wargaming and strategy education, not just high profile wargaming events. How can the Army best implement programs using wargames in PME from Cadet to Colonel that facilitate strategy education? (POC: Mr. Dana Hare, CSL, dana.c.hare.civ@mail.mil, 717-245-4592)

War and Strategy

- 30. In his November 2014 memo, former Secretary of Defense Chuck Hagel stated: "A reinvigorated wargaming effort will develop and test alternative ways of achieving our strategic objectives and help us think more clearly about the future security environment." How can DoD leverage wargaming to increase innovation in national and theater strategy? (POC: COL Jack Pritchard, CSL, jack.k.pritchard.mil@mail.mil, 717-245-3186)
- 31. Compare and contrast Russian military operations in Georgia (2008) and in the Donbass region of Ukraine (2014). What do these military operations reveal about the character and nature of warfare? What lessons should the United States Army learn from Russia's conduct of entry operations, conduct of combined arms maneuver, integration of fires, and delivery of fires? (POC: COL Doug Winton, DMSPO, douglas.w.winton.mil@mail.mil, 717-245-4311)
- 32. The United States Joint Force has failed to bring its counterinsurgency operations in Iraq and Afghanistan to a satisfying end. Our current attitudes of counterinsurgency operations are analogous to those of the 1970's when the U.S. Army deliberately reoriented its doctrine, training, and modernization efforts to defeat the Soviets in Central Europe leaving it unprepared for counterinsurgency in 2003. Compare and contrast Sri Lankan counterinsurgency operations against the Liberation Tigers of Tamil Eelam (LTTE) with the Colombian counterinsurgency operations against the Revolutionary Armed Forces of Colombia (FARC). What lessons can be learned that should influence U.S. counterinsurgency doctrine? (POC: COL Doug Winton, DMSPO, douglas.w.winton.mil@mail.mil, 717-245-4311)
- 33. Analyze any 20th century campaign that was at least 30 days in length and included a ground force of division strength or higher to draw lessons that address one or more of the following Army Warfighting functions: conduct Air-Ground Reconnaissance; conduct entry operations; conduct Wide Area Security; ensure Interoperability in a JIIM environment; conduct Combined Arms Maneuver; Integrate Fires; Deliver Fires; or Exercise Mission Command. (POC: COL Doug Winton, DMSPO, douglas.w.winton.mil@mail.mil, 717-245-4311)
- 34. Compare and contrast the conduct of the XVIII ABC and VII Corps in Operation Desert Storm. Assess their conduct of combined arms maneuver, integration and delivery of fires, and exercise of mission command. (POC: COL Doug Winton, DMSPO, douglas.w.winton.mil@mail.mil, 717-245-4311)

Strategic Landpower

- 35. How does strategic landpower support U.S. National Security Strategy? Given current constraints, in what roles and functions should the Nation take risks in land forces? (POC: Dr John A. Bonin, CSL, john.A.Bonin.civ@mail.mil, 717-245-3457)
- 36. Shape and set theaters. How much can the Army outsource to contractors in a deployed environment before we risk operational effectiveness? What are the pitfalls for moving entire functions traditionally performed by soldiers to performance contractors? (POC: COL Stephanie Howard, CSL, stephanie.q.howard.mil@mail.mil, 717-245-4560; BG George Schwartz, DCG, USAWC, george.schwartz@us.army.mil, 610-906-6721; and Mr. Robert Phillips, G-3/4 AMC, Robert.j.phillips.civ@mail.mil, 256-450-6919)
- a. What are the advantages of utilizing contractors versus maintaining specific capabilities in the reserve components that can be mobilized when needed? Do the advantages outweigh the disadvantages (e.g., SOFA, UCMJ)? What metrics should be used to make these assessments? Are there DoD employees capable of performing functions required of contractors?
- b. Which core capabilities are "inherently governmental" and which skill sets and facilities must the Army maintain to support the force? What key capabilities are necessary for expeditionary operations? (POC: Mr. Robert Phillips, G-3/4 AMC, robert.j.phillips.civ@mail.mil, 256-450-6919)
- c. How does the use of contractors affect the public's opinion regarding a conflict?
- d. How should the Army institutionalize the use of Operational Contract Support? (POC: Mr. Randal Lewis, ODCS, G-4, <u>Randal.e.lewis.civ@mail.mil</u>, 703-692-9019)
- 37. Given constrained funding and the current defense strategy, what is the right force mix and missions for active and reserve component capabilities? Considering short-term national military objectives and longer term operations, can the Army maintain the right mix of forces using multi-component and/or cadre units to reduce active component end strength? How can Army reserve components be reorganized to increase their value to Army responsibilities? (POC: Prof John A. Bonin, CSL, john.A.Bonin.civ@mail.mil, 717-245-3457; BG George Schwartz, DCG, USAWC, george.schwartz@us.army.mil, 610-906-6721; COL Toney Filostrat, OCAR, Director of Strategy and Integration, toney.e.filostrat.mil@mail.mil, 703-806-7787; Mr. Robert Phillips, G-3/4 AMC, Robert.j.phillips.civ@mail.mil, 256-450-6919; and Tim Muchmore, HQDA DCS G-8, timothy.s.muchmore.civ@mail.mil, 703-614-5591)
- a. How should the recommendations of the National Commission on the Future of the Army (NCFA) affect Army decisions on active and reserve forces?

- 38. To provide Regular Army combat brigades time to convert to the new modular design, in 2004-05, Army National Guard non-modular combat brigades provided the majority of combat brigades operating in Iraq. Through modular redesigns, the Regular Army created additional brigade-level maneuver forces, now referred to as brigade combat teams (BCTs). With the end of combat operations in Iraq and Afghanistan, the Army is reducing end-strength from all three components, deactivating units, and involuntarily separating experienced leaders. (POC: BG George Schwartz, DCG, USAWC, george.schwartz@us.army.mil, 610-906-6721, and Tim Muchmore, HQDA DCS G-8, timothy.s.muchmore.civ@mail.mil, 703-614-5591)
- a. What are the options and the associated costs, timelines, political implications and risks for rapidly expanding the capacity of Army capabilities/forces?
- b. How could the Army have derived better value from its mix of Regular, Guard and Reserve forces? Would it have been feasible for the ARNG to provide more BCTs without "breaking"?
- 39. How can the Army Service Component Commands (ASCC) leverage the Total Force Partnership Program (TFPP), the Army Reserve Private-Public Partnership program, and the National Guard State Partnership Program (SPP) to enhance regional alignment and as a security cooperation force multiplier? (POC: BG George Schwartz, DCG, USAWC, george.schwartz@us.army.mil, 610-906-6721; and COL Toney Filostrat, OCAR, Director of Strategy and Integration, toney.e.filostrat.mil@mail.mil, 703-806-7787)
- 40. Conduct a comparative analyses of the roles of ASCCs across multiple geographic combatant commands. Identify similarities, differences, best practices, opportunities, and challenges. Include a comparison of ASCC policies, plans, and doctrines for command and control of component forces; and a comparison of ASCC security cooperation strategies, policies, and plans. (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 41. There has been little analysis on Reserve Component roles since the 1993 "Offsite Agreement" that led to the ARNG specializing in combat arms and enablers at Division level and below, and the Army Reserve specializing in providing enabler capabilities at the echelons above Division. Given the changes in the strategic environment, to include extensive modernization, and the Army's transition to Brigade-based "Modularity" since 1993, is the Off-Site agreement still valid? Should the Army consider placing combat arms in the Army Reserve? Discuss the advantages, disadvantages, and risk of placing combat arms capabilities in the Army Reserve. (POC: COL Toney Filostrat, OCAR, Director of Strategy and Integration, toney.e.filostrat.mil@mail.mil, 703-806-7787)
- 42. How can Army future force (2025+) capabilities and forces be best aligned with the Army's three components to implement the defense strategy at least risk and provide the best value to the Nation? (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mil,

- 717-245-3797; BG George Schwartz, DCG, USAWC, <u>george.schwartz@us.army.mil</u>, 610-906-6721; and Tim Muchmore, HQDA DCS G-8, <u>timothy.s.muchmore.civ@mail.mil</u>, 703-614-5591)
- 43. Is the current (2015) construct of RC training, readiness and access appropriate to meet the Army's requirements in 2025+? How should the 39-day peacetime training model for Reserve and Guard forces be updated and/or expanded to increase the availability, readiness, and utility of Reserve and Guard forces? What are the opportunities for the Army to better support the peacetime training and development of Reserve and Guard forces to optimize their proficiency and readiness with limited days of training? What are the implications for Reserve Component recruitment and retention if training days are increased? Are we expecting too much from today's Reserve and Guard forces, given the increased complexity and lethality of military operations? (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mil, 717-245-3797; BG George Schwartz, DCG, USAWC, george.schwartz@us.army.mil, 610-906-6721; and Tim Muchmore, HQDA DCS G-8, timothy.s.muchmore.civ@mail.mil, 703-614-5591)
- 44. Regional dimension of the megacity issue. Existing thinking treats "megacity" as a unitary phenomenon, however, there are important differences across regions. What capabilities are needed for all megacities and which ones are specific to a region, a country, or even one particular megacity? Develop a regional strategic framework for why and how the Army might become involved. (POC: Dr. Steven Metz, Strategic Studies Institute, steven.k.metz.civ@mail.mil, 717-245-3822)
- 45. Unified land operations within complex urban terrain is fast becoming a reality Army formations must contend with. Army doctrine fails to adequately grasp the complexity of large cities, megacities are not currently a unit of analysis within the Department of Defense intelligence community, and megacities and dense urban terrain are not featured in the defense planning scenarios which shape force composition or employment. How should the Army prepare itself for the eventuality of warfare in complex urban terrain? (POC: COL Patrick Mahaney, SSG, patrick.j.mahaney3.mil@mail.mil, 703-545-0516; and Dr. Steve Metz, Strategic Studies Institute, steven.k.metz.civ@mail.mil, 717-245-3822)
- 46. Examine the requirements for the Army to maintain and, as needed, regenerate stability operations proficiency and capacity. Make recommendations for force structure in an era of maintaining limited capacity, identify which elements to keep an expandable nucleus, and develop blueprints for required capabilities and time/resources required to regenerate capacity from scratch. (POC: COL Gregory Dewitt, PKSOI, Gregory.p.dewitt.mil@mail.mil, 717-245-3122)
- 47. Cross Domain Fires. Adversaries are employing integrated systems, across domains, to defeat and disrupt U.S. and friendly air, land, cyberspace, maritime, and space capabilities. The Army is currently challenged to effectively mass Army and Joint, Interorganizational, and Multinational (JIM) fires across all domains (to include land,

maritime, air, cyber, and space). Without the ability to consistently and effectively mass fires through all domains), future Army forces will find it difficult to seize and maintain the initiative or sustain overmatch against future peer opponents. (POC: COL Edward (Dusty) O'Neill edward.joneill12.mil@mail.mil, 580-442-6230)

- a. How does the US Army coordinate and integrate Army and JIM fires capabilities, at strategic, operational and tactical levels, through all five domains, to provide scalable lethal and non-lethal effects to combatant commanders?
- b. How do Fires forces coordinate and integrate advanced technologies such as directed energy, robotics, MUM UAS delivery platforms, hyper-sonic projectiles, and electro-magnetic launch to reduce sustainment, increase firepower, and deliver lethal and non-lethal effects with greater range and precision?
- c. How can the US Army integrate fires with maritime operations similarly to the way it integrates fires with Air operations? (i.e. a US Army Battlefield Coordination Detachment (BCD) integrates with the Air component, what Army capability could do that with the maritime component?)
- d. What are the components of a Cross-Domain Fires cell at the BCT level (i.e. current concept of an Air-Ground Integration Cell or AGIC consists of Fire Support, Aviation, and Air Defense); how do CEMA operations and Space-based targeting integrate with the AGIC?
- e. Should there be a requirement for the Army to establish an operational Cross Domain Fires Headquarters similar to AAMDCs/AOCs for each CCDR?
- f. How can the US Army deny access with tiered capabilities at every echelon, specifically synchronizing air defense and spectrum management at the tactical level, without inhibiting the full complement of friendly capabilities in support of a ground scheme of maneuver?
- 48. Expeditionary Army Capabilities. Evaluate the Army's expeditionary capability to deploy to and conclude assigned missions as quickly as possible. Identify tradeoffs among operational capabilities to ensure the nation has a truly expeditionary force with campaign capacity for both rapid decisive and stabilization operations. (POC: Dr. John A. Bonin, CSL, john.A.Bonin.civ@mail.mil, 717-245-3457)
- 49. How can the Army and the rest of DOD (in coordination 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, PKO, Training, and Capacity Building)? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)

50. What maneuver support capability is required at echelons above brigade to support operations in 2030 and beyond? (POC: Mr. Vern Lowrey, Deputy Director, Maneuver Support Center of Excellence (MSCoE), vernon.l.lowrey.civ@mail.mil, 573-563-8193)

National Security Policy and Strategy

- 51. What kind of actions should the United States take to achieve a balance between acceptance of a larger global role for a constructive China while drawing lines against coercion in China's neighborhood? (POC: Prof. John Troxell, Strategic Studies Institute, john.f.troxell.civ@mail.mil, 717-245-3231)
- 52. U.S. Grand Strategy: Should the United States continue to include, as a key element of U.S. grand strategy, a goal of preventing the emergence of a regional hegemon in one part of Eurasia or another? If not, what grand strategy should the United States pursue? What value do alliances hold for the United States in the 21st century? (POC: Prof. John Troxell, Strategic Studies Institute, john.f.troxell.civ@mail.mil, 717-245-3231)
- 53. Members of Congress have asserted unambiguously Congress's role in defining the national security strategy through its authorization and appropriations of policies and funding for the military. Analyze the Goldwater-Nichols related reforms passed by Congress and assess whether they enhance DOD's ability to lead. Additionally, identify what additional reforms should be considered to increase effectiveness. (POC: LTC Wilbur W. Hsu, Office of the Chief, Legislative Liaison, wilbur.w.hsu.mil@mail.mil, 703-697-6574)
- 54. Does the 2015 National Security Strategy accurately identify and properly emphasize key features and trends in the international security environment? Has there been a fundamental shift in the international security environment from the familiar post-Cold War era to a new and different strategic situation? (POC: Prof. John Troxell, Strategic Studies Institute, john.f.troxell.civ@mail.mil, 717-245-3231)
- 55. The Defense and State Departments have different geographic boundaries; how can the interagency leverage these different geographic AORs to overcome seam issues in each department? [Use the PACOM-CENTCOM seam as an example.] (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 56. Full mobilization for a Major War includes harnessing the private sector to meet the military's needs. In the modern globalized economy, how would the private sector and military work together to secure supplies of raw materials, secure supply lines for subcontractors, and secure supply lines from point of manufacture to point of utilization? How would the governance structure work for such a massive civ-mil collaboration? (POC: Aaron Hull, FORSCOM Strategy Team, aaron.j.hull2.civ@mail.mil, 910-570-5579)

Defense and Military Strategies

- 57. How can the Army strengthen interoperability to include digital exchange of information with its most capable, and most likely future coalition partners? How can the U.S. Army retain and improve on its ability to operate with multinational forces at all levels? (POC: Dr. John Deni, Strategic Studies Institute, john.deni@us.army.mil, 717-245-4183; and Dr. John A. Bonin, CSL, john.A.Bonin.civ@mail.mil, 717-245-3457)
- 58. Considering short-term national military objectives and longer term operations; can the Army maintain the right mix of forces using Advise and Assist Brigades with senior grade personnel only to reduce Regular Army end strength? Could these also serve as cadre units for Regular Army expansion? (POC: Dr. John A. Bonin, CSL, john.A.Bonin.civ@mail.mil, 717-245-3457)
- 59. Examine the appropriateness of redefining the six phases of the "Continuum of Military Operations." (POC: COL Matt Lissner, Strategic Studies Institute, j.m.lissner.mil@mail.mil , 717-245-3984)
- a. Should Phase Zero be further subdivided to determine levels of adversarial activities and direct shaping activities to prevent exaggerated escalation into post Phase Zero (i.e. jumping from PH 0 directly into PH 2 or 3)?
- b. Should Land Forces be organized, trained, and equipped to fight particular Phases vice having the entire force prepared to fight any and all Phases?
- 60. How should the Army provide trained and ready JTF-HQ capabilities for Combatant Commanders? What DOTLMPF impediments currently exist to building a JTF-capable HQs within the Army that are customized for hybrid, cyber and gray-area conflicts? (POC: Dr. John A. Bonin, CSL, john.A.Bonin.civ@mail.mil, 717-245-3457)
- 61. Given current reductions, how does the Army maintain its posture as the backbone of the Joint Force, providing fundamental capabilities to each Combatant Commander such as command and control, logistics, intelligence and communications support to set the theater? How does the Army leverage the other services capabilities and external agencies (such as DLA)? (POC: Dr. John A. Bonin, CSL, john.a.bonin.civ@mail.mil, 717-245-3457)
- 62. Is the current force mix among the Army components appropriate for the Army's Support to other Services (ASOS) requirements? Are there ways to leverage the Reserve Components to help preserve combat strength in the Active Component? What are the strategic risks of doing so? Given that a significant portion of the ASOS capabilities lies in the Reserve Components, how does the readiness of those capabilities impact the joint force? From a readiness standpoint, which ASOS capabilities are better suited for the Reserve Components and which to the Regular Army, and also between compo 2 and 3? How can the Army effectively ensure appropriate equipment modernization and Total Force interoperability to meet ASOS requirements? (POC: COL Toney Filostrat, OCAR, Director of Strategy and Integration, toney.e.filostrat.mil@mail.mil, 703-806-7787)

- 63. Consolidation of a GCC and its service components. Is there a relevant historical example in the US experience? What are the costs and benefits? What are the redundancies and what potential exists to free up personnel to cover shortages? What are the PACOM and component capability and capacity gaps (personnel) during steady state and crisis? PACOM could fund a research trip, to include observation during a major exercise. (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337) ///PACOM J37assistance offered///
- 64. How will the Capstone Concept for Joint Operations (Globally Integrated Operations) and the new Army Operating Concept (AOC) of Integrated Distributed Operations change the way the Army Reserve supports the Total Force? (POC: COL Toney Filostrat, OCAR, Director of Strategy and Integration, toney.e.filostrat.mil@mail.mil, 703-806-7787)
- 65. Given current headquarters reductions, to what degree and how should the Army recreate the capability to conduct large scale land operations [multi-corps]? (POC: Dr. John A. Bonin, CSL, john.A.Bonin.civ@mail.mil, 717-245-3457)
- 66. What is the right Command and Control construct to integrate joint capabilities that support rapid decision-making by national command authorities to counter Transregional, Multi-domain, Multi-functional (TMM) threats and conflicts and how do U.S. Army Theater Armies best support this from the operational level? (POC: CPT Garrett Dodgen, US Army South G3 COIC Operations Officer, garrett.k.dodgen.mil@mail.mil, 210-295-6906)
- 67. According to the National Commission on the Future of the Army report, the Army needs reserve component forces to continue to serve as an operational reserve. What level of unit readiness and operational experience obtained through 10+ years of war should be maintained, and what are the alternative approaches, costs, benefits, and risks for doing so? (POC: BG George Schwartz, DCG, USAWC, george.schwartz@us.army.mil, 610-906-6721; and Mr. Tim Muchmore, HQDA DCS G-8, timothy.s.muchmore.civ@mail.mil, 703-614-5591)
- a. Is tiered readiness viable, or does it just create "have's" and "have not's" across the force?
- b. Within the "sustained readiness" model, what is the best ratio or training/readiness years to available year: 5:1? 6:1?
- c. How should the Army rewrite the *social compact* with families and employers to accommodate for frequent operational employment of Army forces from all components? How long should an RC unit expect to be in a Title X status?
- d. During the Korean conflict, ARNG forces were mobilized and sent to USAREUR to replace Regular Army units sent to Korea. What are the current implications of rotating mobilized Guard or reserve forces to serve as forward deployed deterrent forces?

- e. As the Army draws down, to what extent and how should it prepare to rapidly increase capacity and capabilities in the event of a major conflict?
- 68. The Planning, Programming, Budgeting, and Execution (PPBE) system was devised in the 1960s as the resource management system for DoD. Despite significant changes in the strategic environment and national government processes, the PPBE system has remained structurally intact since then. The system is a bottom up, Service centric, calendar driven, budget request system. Does the PPBE system adequately support the increasingly joint operations and force development systems? Given evolving threats such as cyber-attacks and non-state actors, should the PPBE system be updated to better address ill-defined and rapidly evolving threats? In the ever-more-constrained defense budget environment, should PPBE be updated to enable more holistic program assessments and trade-off analysis? How does the requirement for auditability impact the PPBE system? What are the best practices in the strategic leadership and resource management domains that can inform these changes? (POC: Prof Fred Gellert, USAWC DCLM, Frederick.j.gellert.civ@mail.mil, 717-245-4785)
- 69. How can landpower contribute to the attainment of desired psychological effects in diverse cultures? What are the best practices and how should military planning integrate them? (POC: Dr. Steven Metz, Strategic Studies Institute, steven.k.metz.civ@mail.mil, 717 448-6116)
- 70. What role does the U.S. Army have in building resilience within allied and partner countries? (POC: Dr. John Deni, Strategic Studies Institute, <u>john.r.deni.civ@mail.mil</u>, 717-245-4183)
- 71. How can the Army best balance the benefits and shortcomings of overseas permanent and rotational presence? (POC: Dr. John Deni, Strategic Studies Institute, john.r.deni.civ@mail.mil, 717-245-4183)
- 72. In the global economy, industry and manufacturing have become increasingly international. More and more, Army has come to rely on companies with off-shore ties to provide critical warfighting materiel, yet connections with adversarial regimes may not always be apparent. How can DoD/Army maintain assurance that its supply chain will continue uninterrupted during conflict without direct or indirect interference from a foreign government? How can DoD/Army ensure a stable and secure manufacturing base that reliably provides components and systems to specification with confidence that products have not been tampered with or altered to provide an adversary some sort of military advantage? How can Army guarantee security of classified programs and technical data when partnering with international firms to develop a new combat system? (POC: Kevin McLean, HQDA G-2, kevin.m.mclean3.civ@mail,mil, 703-695-2195)
- 73. Assess the Sustainable Readiness Model's (SRM) ability to provide trained and ready forces for Combatant Commanders with enough flexibility to react to emerging worldwide crises. (POC: COL Brian Cook, G3, USAWC, brian.c.cook4.mil@mail.mil, 717-245-4584)

- 74. How should the Army define its warfighting functions to best enable intellectual organization and thought of Army operations as envisioned in the Army Operating Concept (AOC)? (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mi, 717-245-3797)
- 75. How have the emergent joint concepts and doctrine of "CBRN Response," "International CBRN Response," and, "DOD-Led CBRN Response" impacted strategic deterrence, vice the former concepts/doctrine of "Consequence Management," "Foreign Consequence Management," and, "DOD-Led Consequence Management?" Does this shift, initiated in response to the Department of Defense Strategy for Countering WMD, change the way in which ground forces approach mitigation of WMD effects in support of strategic deterrence? Can ground forces' mitigation of WMD effects deter non-state actors? (POC: LTC Joshua Bradley, Strategic Plans, Concepts and Doctrine Division Army G-35/SSP, Joshua j.bradley.mil@mail.mil, 703-692-8769)
- 76. How must the generating force transform to support Army operations as envisioned in the Army Operating Concept (AOC)? (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mi, 717-245-3797)
- 77. How must the Army personnel management/development system and processes transform to support Army operations as envisioned in the Army Operating Concept (AOC)? (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mi, 717-245-3797)
- 78. Since establishment of the Defense Health Program (DHP) in 1992 have the conditions within the Department of Defense (DOD) evolved to such a degree as to warrant a change in the structure of DHP to improve readiness within the Military Health System? (POC: LTC E. Lee Bryan, Chief, OTSG/MEDCOM CIG, edward.l.bryan3.mil@mail.mil, 703-693-5840)
- 79. Develop a readiness model for Army Medicine that accounts for both individual and organizational equities. (POC: LTC E. Lee Bryan, Chief, OTSG/MEDCOM CIG, edward.l.bryan3.mil@mail.mil, 703-693-5840)
- 80. Examine Globally Integrated Health Services as outlined in the Joint Concept for Health Services (JCSH) from an Army perspective. What are the strengths, weaknesses, opportunities and threats and implications for Army Medicine? (POC: LTC E. Lee Bryan, Chief, OTSG/MEDCOM CIG, edward.l.bryan3.mil@mail.mil, 703-693-5840)

Cyber

81. The application of International Law in Cyberspace is unclear, and presents many potential legal challenges for commanders as they apply Cyber to their operational requirements. What are the issues in current International Law and what are the challenges in applying the moral principles of the Army Ethic as the United States

- operates in the cyber domain? (POC: Mr. Ben Leitzel, CSL, benjamin.c.leitzel.civ@mail.mil, 717-245-4120; and LTC Blake Stone, OTJAG International and Operational Law Division, blake.e.stone2.mil@mail.mil, 703-695-1756)
- 82. United Nations and NATO Charters discuss the concept of "use of force" for purposes of national defense and response to hostilities. Should there be internationally agreed upon definitions and guidelines for establishing the use of force in cyberspace? If so, at what level? (POC: Mr. Ben Leitzel, CSL, benjamin.c.leitzel.civ@mail.mil, 717-245-4120)
- 83. The cyber domain is a recent construct and military operations in and through cyberspace are rapidly evolving. In recent history, two other domains (air and space) saw rapid decades-long evolution, including military operations in and through those domains. What do our experiences in the air domain and later in the space domain suggest for the trajectory of military operations in cyber space? (POC: LTC Jonathan A. Campbell, ARCYBER Operations, jonathan.a.campbell2.mil@mail.mil, 703-706-2376)
- 84. What theories and doctrine from the land, sea, air, and space domains can be applied to aid in development of theories and doctrine of cyberspace? (POC: Mr. Ben Leitzel, CSL, benjamin.c.leitzel.civ@mail.mil, 717-245-4120)
- 85. What Phase 0 and pre-conflict authorities do USCYBERCOM and operational-level commanders require to enable full spectrum cyberspace operations during conflict? (POC: Mr. Ben Leitzel, CSL, benjamin.c.leitzel.civ@mail.mil, 717-245-4120)
- 86. When USCYBERCOM becomes a combatant command, what are the advantages, disadvantages, and risks? (POC: Mr. Ben Leitzel, CSL, <u>benjamin.c.leitzel.civ@mail.mil</u>, 717-245-4120)
- 87. The military Services are organizing their cyberspace forces to support both joint and Service requirements. Each service has established Service Cyberspace Component Commands to support joint missions. The Army, Navy, and Air Force also utilize service retained organizations (Second Army, Tenth Fleet, 24th Air Force). What are the strategic advantages and disadvantages of the way each service has organized its cyberspace forces, and what advantages could the Army achieve by changing the way it has organized its own? (POC: LTC Christopher Cline, ARCYBER G5, christopher.l.cline.mil@mail.mil, 703-706-2539)
- 88. As Department of Defense Information Networks (DODIN) operations evolve, the lines of responsibility among the CIO/G-6, other Army staff elements, and the Army's cyber component (U.S. Army Cyber Command) often blur in practical application. What are the best roles and responsibilities at Department of the Army Headquarters and operational commands to ensure that the Army operates effectively in cyberspace? (POC: Barry Bazemore, Army CIO/G-6, bazemore.civ@mail.mil, 571-256-8998)
- 89. The DoD Cyber Strategy states that one of the missions for the Department of Defense Cyberspace capability is the military protection of the 16 sectors of Critical

Infrastructure against cyber-attacks of significant consequence. How would DoD participate in the defense of critical Infrastructure? (POC: Mr. Ben Leitzel, CSL, benjamin.c.leitzel.civ@mail.mil, 717-245-4120)

- 90. The Army has chosen to put the areas of Cyberspace, Electromagnetic Warfare and Spectrum Operations together in the development of the "CEMA" (Cyber Electromagnetic Activities) concept. Can this concept work in conducting Joint operations? How does the CEMA concept complement Space operations? Should Space Operations become a part of CEMA or stay separate? (POC: Mr. Ben Leitzel, CSL, benjamin.c.leitzel.civ@mail.mil, 717-245-4120; and Mark Ayers, SMDC G35, mark.h.ayers.civ@mail.mil, 719-554-8891)
- 91. In April 2015, Secretary of Defense Carter announced the publication of the DoD Cyber Strategy. Evaluate the DoD Cyber Strategy in the context of securing U.S. interests. (POC: Mr. Ben Leitzel, CSL, benjamin.c.leitzel.civ@mail.mil, 717-245-4120)
- 92. 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)? How can we best secure our lines of communication and the global supply chain from cyber-attack? What communications infrastructure is key to ensuring continuity of operations and which require preferential investments for security? (POC: Dr. Jeff Groh, SSL, jeffrey.l.groh.civ@mail.mil, 717-245-3587)
- 93. What characterizes strategic deterrence in cyberspace? Is deterrence a precursor to defense? Is it part 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? (POC: Dr. Jeff Groh, SSL, jeffrey.l.groh.civ@mail.mil, 717-245-3587)
- 94. With many defensive cyberspace operations predicated on knowing the pathogen (e.g. a virus) and offensive cyberspace operations often based on previously unknown vulnerabilities (e.g. zero-day defects), defensive measures inherently lag offensive ones. How can we influence the arms race between offensive capabilities against our vulnerabilities and defensive capabilities to protect our superiority? (POC: LTC Jonathan A. Campbell, ARCYBER Operations, jonathan.a.campbell2.mil@mail.mil, 703-706-2376) Are current cyber policies, related Army and DoD directives and instructions, and Army and Joint military doctrine sufficient to underpin defensive and offensive effects operations to achieve desired strategic outcomes? (POC: Dr. Jeff Groh, SSL, jeffrey.l.groh.civ@mail.mil, 717-245-3587)
- 95. How might the DoD, Joint Force, and specifically the Army recruit, train, and retain a ready cyber workforce? To what degree can the Army rely on the civilian-developed cyber skills of Guard and reserve personnel and forces? Discuss ways in which the military can effectively capitalize on education and professional cyber skill sets obtained in the civilian workforce for its military members. (POC: Dr. Jeff Groh, SSL,

<u>jeffrey.l.groh.civ@mail.mil</u>, 717-245-3587; and LTC Jennifer Roberts, ARCYBER G1, Jennifer.a.roberts1.mil@mail.mil, 301-833-2012)

- 96. Cyber Support to Corps and Below (CSCB) are actions in and through cyberspace supporting Corps and below commanders leading to the accomplishment of military objectives. CSCB operations directly support unified land operations and establishes the foundation to push cyberspace expertise and capabilities to the tactical level. What strategy should the Army employ to organize for and conduct Cyber Support to Corps and Below? (POC: LTC Ronald Wilkes, HQDA ODCI (G-39), ronald.d.wilkes.mil@mail.mil, 703-695-1467)
- 97. While cyberspace has been identified as a global warfighting domain akin to the land, air, sea, and space domains, Army doctrine is still emerging to account for this new addition. How can the Army reframe its doctrine to reflect the cyberspace domain, and how can Army doctrine reflect its intended dominance in the land domain while operating in and through the cyberspace domain? (POC: LTC Matt Zais, ARCYBER & 2A SIG, mail.mil, 703-706-2547)
- 98. Industry partners are leading innovation, and are years ahead of Army and DoD technology innovation. How does Army identify, adapt, train and conduct innovation to solve complex strategic, operational, and tactical level problems effecting operation in the cyberspace domain? (POC: LTC Christopher Cline, ARCYBER & 2A G5, christopher.l.cline.mil@mail.mil, 703-706-2539)
- 99. How and to what degree can or should the Army rely on Guard and/or Reserve forces to play a major role in cyberspace operations? How should Guard and Reserve personnel and forces prepare for their assigned role in cyberspace? Identify and assess the options for the mix and the roles of cyber units in all Army components. (POC: Mr. Ben Leitzel, CSL, benjamin.c.leitzel.civ@mail.mil, 717-245-4120; and BG George Schwartz, DCG, USAWC, george.schwartz@us.army.mil, 610-906-6721)
- a. How should the Army recruit cyber talent? Do reserve component units provide the best opportunities for cyber warriors, by allowing them to practice their skills in civilian roles?
- b. What should be the mix of military and civilian personnel in Army cyber forces? What should be the operational chain of command? What would be the best ways to recruit cyber expertise? Leverage the ability to serve in a "hometown" unit? By managing the military careers of cyber professionals like lawyers and doctors?

Futures

- 100. Where does strategic investment of limited R&D resources make the greatest impact on the Army future force (2025+)? What metrics of value should be used to assess impact in an Army future force of 2025+? (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mil, 717-245-3797)
- 101. The Army Operating Concept (AOC) discusses the need for the Army future force (2025+) to prevent enemy overmatch in capabilities or tactics. Given the probability of lingering fiscal pressure, in which area(s) <u>MUST</u> the Army invest fully to maintain overmatch and which areas can the Army accept prudent and mitigated risk? (POC: Mr. Sam White, CSL, <u>samuel.r.white4.civ@mail.mil</u>, 717-245-3797)
- 102. How does the Army identify, assess and mitigate the cumulative risk which will be induced into Army systems and organizations by the technological vulnerabilities of the Army future force (2025+)? (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mil, 717-245-3797)
- 103. What future critical Army capabilities and functions are reliant on near-unconstrained access to technology? What Army future force (2025+) missions are at risk if the Army does not have either cyberspace supremacy or cyberspace superiority? What Army capabilities and functions must be backed-up with alternate processes to allow Army future force (2025+) operations in a technology restricted environment? (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mil, 717-245-3797)
- 104. The Army Operating Concept (AOC) depicts the Army future force (2025+) as operating in an environment that is unknown, unknowable and constantly changing anticipative, innovative and enabled by technology. What specific skill sets are required of Soldiers who will be accessed into the Army 10+ years from now; how can the Army assist in developing a sufficient recruiting pool of qualified young people with these skills and attributes? (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mil, 717-245-3797)
- 105. In order to fully enable Army future force (2025+) operations with international partners as envisioned in the Army Operating Concept (AOC), which Standardization Agreement (STANAG) –type arrangements must be in place? (POC: Mr. Sam White, CSL, samuel.r.white4.civ@mail.mil, 717-245-3797)
- 106. Biological Weapons: Examine the ways in which military forces can prevent, anticipate, detect and respond to an attack using biological weapons. The threat of a military or terrorist attack using biological weapon s has significantly increased and evolved in recent years with the proliferation of (1) computer algorithms to predict genetic modifications in microorganisms that confer drug or vaccine resistance without

diminishing transmissibility; (2) laboratory techniques using commercially available kits for genetically modifying microorganisms simply and cheaply; (3) unmanned aerial vehicles including microdrones capable of disseminating aerosolized agents indoors or out on a large or small scale without detection or attribution. (POC: COL Paul B. Keiser, WRAIR, paul.b.keiser.mil@mail.mil, 301-319-3347)

- a. What scenarios are likely for the development and use of biological weapons against US interests using current and emerging technologies?
- b. What should be the role of the Department of Defense in general and the Army in particular, versus public health and civil authorities, in responding to these scenarios?
- c. What should be the role of the Department of Defense in general and the Army in particular, versus the biotech industry and academia, in anticipating these scenarios and developing material and non-material solutions to prevent, anticipate, detect, and respond to these threats?

Homeland Defense/Security

- 107. How should the Army align forces from each of its components to perform Homeland Response Force missions most effectively and efficiently, consistent with Federal statute? (POC: Prof John A. Bonin, CSL, john.A.Bonin.civ@mail.mil, 717-245-3457; and COL Toney Filostrat, OCAR, Director of Strategy and Integration, toney.e.filostrat.mil@mail.mil, 703-806-7787; and BG George Schwartz, DCG, USAWC, george.schwartz@us.army.mil, 610-906-6721; and Mr. Tim Muchmore, HQDA DCS G-8, timothy.s.muchmore.civ@mail.mil, 703-614-5591)
- 108. Strategic Mobility in Domestic Response: What are the Army's requirements to rapidly deploy adequate sizes and types of forces to meet DSCA requirements in the event of catastrophic incidents, and how should Army forces be aligned to best fulfill operational demands and minimize the potential for being "late to need?" (POC: Prof. Bert Tussing, CSL, bert.b.tussing.civ@mail.mil, 717-245-4516)
- 109. Formalizing Inter-Agency Coordination. As in the foreign environment, many domestic security requirements facing the United States argue for a coordinated, whole-of-government approach: interagency (within the Federal government); and interorganizational (with State, Local, Tribal, and the private sector). However, formal venues for inter-agency coordination and unified effort are lacking. Can formal interagency coordination and unified effort be instituted in response to threats to our security, first in terms of law enforcement and then (potentially) in terms of defense? What might this look like? Is it time for Congress to mandate this type of unified effort, for both domestic and international security operations, in the form of a "Goldwater-Nichols for the Inter-Agency?" (POC: Prof. Bert Tussing, CSL,

bert.b.tussing.civ@mail.mil, 717-245-4516)

- 110. Border defense strategies: A great deal of critical thinking and strategic planning with respect to border security has taken place in the Department of Homeland Security, exemplified in the recent release of the *Southern Border and Approaches Campaign Plan*. What interagency extensions need to take place surrounding that plan, particularly as associated with the Department of Defense? Are there "triggers" that would signal a threat evolving from a public safety problem to one that is a national security threat? Should there be? What would be our response to those triggers? (POC: Prof. Bert Tussing, CSL, bert.b.tussing.civ@mail.mil, 717-245-4516)
- 111. Reassessing the Dual Status Commander Concept for a Greater Threat. The Dual Status Commander concept has been congressionally-mandated as the "usual and customary" command and control arrangement during the simultaneous employment of National Guard and Regular forces in disaster response scenarios. In spite of successes revealed in operations in response to Super Storm Sandy, shortcomings were realized in the command and control of Title 10 and National Guard forces. If the disaster had been larger, it is not difficult to understand how those shortcomings could have been more pronounced. As the scope of a disaster transcends multiple state boundaries, as we advance from a disastrous to a catastrophic incident, what is the command and control construct best suited to provide the most effective and efficient response in terms of saving lives, mitigating greater property damage and preventing further human suffering? (POC: Prof. Bert Tussing, CSL, bert.b.tussing.civ@mail.mil, 717-245-4516)
- 112. Incorporating the Service Reserves into Major Disaster and Catastrophic Incident Response. With the National Defense Authorization Act of 2012, the legislative obstacle has been removed from utilizing Service Reserve (i.e. federal) forces in response to natural disasters. What steps are required to effectively integrate those forces into a rapid, proximate force for response to disaster and catastrophe? What education and organizational efforts are required to ensure our state Governors understand the full capabilities immediately available to them in domestic crises, and have the processes in place to facilitate rapid access to federal forces? (POC: Prof. Bert Tussing, CSL, bert.b.tussing.civ@mail.mil, 717-245-4516)
- 113. How can the Army can strengthen interoperability with domestic interorganizational partners and the domestic private sector? (POC: Mark Moncure, TRADOC, mark.d.moncure.civ@mail.mil 757-501-5486)

Regional Studies

114. How should the Army provide Security Force Assistance to support Combatant Commanders' Theater Security Cooperation Programs? Should these capabilities be regionally aligned or assigned? (POC: Dr. John A. Bonin, CSL, john.A.Bonin.civ@mail.mil, 717-245-3457)

- 115. What Army HQs element is responsible for regional engagement? How does the mission of theater-JFLCC enhance regional engagement by the Army? Are these HQs staffed and organized to execute mission command for regional engagement? (POC: Dr. John A. Bonin, CSL, john.A.Bonin.civ@mail.mil, 717-245-3457).
- 116. Regionally Aligned Forces (RAF). A considerable amount of research and writing has already been done on RAF, however the concept requires further evaluation. Specifically, future research should focus on measuring the impact of RAF as a method for conducting Theater Security Cooperation. (POC: COL Chris Bado, DMSPO, christopher.m.bado.mil@mail.mil, 717-245-3561)
- a. Is the RAF concept effective in developing regional expertise in participating units, or is turnover in these forces so great that it negates the development of any institutional regional expertise?
- b. Is the RAF concept sustainable over time or are global force management requirements too disruptive to enable sustained regional alignment for particular units?
- c. Is RAF more or less effective than simply assigning Army forces to combatant commands and using them out of area, so to speak, only when global force management dictates?
- d. Examine the implications regarding RAF for Reserve and National Guard formations.
- 117. How can the Army best leverage the National Guard's State Partnership Program (SPP) and how can the Army integrate SPP activities and investments to achieve combatant commander and ASCC objectives? To what degree should Army forces from all components be regionally aligned and why? How can SPP be leveraged to contribute to the Security Cooperation Overseas Unit Training (SCOUT) program? How do the Army, combatant commands, and/or OSD measure the value of the continuing relationships established between a state and partner country senior leaders on interoperability? (POC: BG George Schwartz, DCG, USAWC, george.schwartz@us.army.mil , 610-906-6721)

Russia and Europe:

- 118. What are the most effective means by which the U.S. Army can deter Russian aggression and/or adventurism? What asymmetric means can the U.S. Army employ to counter Russian military strengths and advantages? (POC: Dr. John Deni, Strategic Studies Institute, john.r.deni.civ@mail.mil, 717-245-4183)
- 119. What role will the U.S. Army and/or Army forces play in the event of instability across Eastern Europe brought about by the collapse of the Lukashenko regime in

- Belarus? (POC: Dr. John Deni, Strategic Studies Institute, john.r.deni.civ@mail.mil, 717-245-4183)
- 120. How can the Army best contribute to building readiness within and among European allies? (POC: Dr. John Deni, Strategic Studies Institute, john.r.deni.civ@mail.mil, 717-245-4183)
- 121. If permanent forward presence of Army forces in Europe were increased, what should be stationed there and where should it be stationed? (POC: Dr. John Deni, Strategic Studies Institute, john.r.deni.civ@mail.mil, 717-245-4183)

Pacific:

- 122. What is the formal US alliance strategy in the Pacific (Japan/Korea/Philippines/Thailand/Australia)? How might the U.S. re-engineer strategy to further advance its interests? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337) ///PACOM J37assistance offered///
- 123. Given the vast expanse of the Indo-Asia-Pacific region; its various political, economic and military frictions points; and reduced U.S. military budgets, how should U.S. Army Pacific engage Australia, Korea, Japan, the Philippines and India to undertake multilateral actions that promote a more stable region? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 124. How should the Army respond and provide mission command in contingencies involving treaty partners (i.e. South Korea, Japan, Thailand, Philippines, and Australia)? What capabilities are needed for steady state activities and for rapid response requirements? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337) ///PACOM J37assistance offered///
- 125. What are the most important contributions U.S. Army Pacific can make towards advancing security objectives in the Oceania region? What is the best strategy to achieve shared security goals? How should USARPAC team with others (Australia, New Zealand, France, etc) to implement a regional strategy? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 126. What land power capabilities resident in the physical and information domains are most useful to a whole-of-government effort to promote stability, access, and inter-state confidence in East and South East Asia over the coming decade? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 127. How can DoD better leverage International Military Education and Training (IMET) to support U.S. Army activities in the Pacific? To what extent does foreign student participation in PME instill an adherence to Internationally-recognized Laws of

Armed Conflict/protection of Human Rights? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)

- 128. What levers are available to the U.S. to further its interests in the Indo-Asia-Pacific region? How can the U.S. use these levers and elements of national power to prevent a dramatic change in the status quo that has benefitted the U.S. since the end of World War II? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 129. Assess what opportunities exist, or can be developed, to increase security cooperation with Pacific allies and partners in the space domain in support of shared security interests? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 130. Conduct a comparative analysis of current and optional mission command relationships of forces OPCON to USARPAC and ADCON to FORSCOM with respect to achieving CSA priorities and the needs of the GCC? Based on this analysis, develop the best mission command nodes and relationships for the Army in support of PACOM (be as flexible as desired, but base recommendations on current forces and current treaty requirements and partnership agreements). (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 131. MDA (maritime domain awareness), MARSEC (maritime security), and MSI (maritime security initiative)(J45, J56). What is the nature of the maritime security problem that PACOM and the US fundamentally care about? What works in improving maritime domain awareness and control in a developing nation? Are their positive and negative case studies we can use to refine our strategy for partner development in the Pacific? How should PACOM go about shaping the utilization of the Maritime Security Initiate to maximize its potential? What can we realistically hope to gain from improved MARSEC capabilities in Southeast Asia? This really needs to focus on 1-3 countries rather than a broad overview; priorities include the Philippines, Indonesia, Malaysia, Brunei, Vietnam, and Singapore. (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337) ///PACOM J37assistance offered///
- 132. Conduct an assessment of current Army forces provided to PACOM and those required by set the theater (Phase 0) operations and GCC OPLANs/CONPLANs. Are there capabilities or force designs that could reduce those requirements? Could a reasonable change in military strategy toward any of the threats in the Pacific reduce the requirements of Army forces? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)

China:

133. China has added "public diplomacy" in its foreign policy approach. How will this initiative impact U.S. engagement activities in Asia? How will it influence other

- elements of national power? (POC: LTC Donald Travis, PhD., CSL, donald.s.travis.mil@mail.mil, 717-245-4527)
- 134. Develop a range of U.S. policy options if China and Taiwan unify; or, alternatively, if Taiwan declares independence. Develop measures of merit and make policy recommendations in both cases. (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 135. What countries or allies and partners are best postured to contribute to deterrence of Chinese aggression or to mitigate escalation if aggression occurs and how can we strengthen their posture? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 136. What are the existing and emerging opportunities for US Military operations, activities and actions that will create multiple, complex, and compelling dilemmas for the Peoples Republic of China from the PRC perspective that contribute to achieving U.S interests in the Pacific Region and beyond? Provide assessments and recommendations on policies, capabilities, posture, and forces required to create such dilemmas. (Note: it is important to assess activities that would compel interest, concern, and provide stimulus for change based on what motivates the PRC/PLA and not from a U.S. perspective or value system). (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 137. What opportunities exist for policy initiatives or changes that would provide opportunities to apply pressure/stimulus to the PRC that nest with and support current and acceptable military operations, actions and activities in the Pacific Region toward gaining at best PRC cooperation in attaining regional security (security contributor) and at worst provide compel the PRC to reconsider/revise actions that are detrimental to regional security and U.S. national interests? These can be policy changes to either antagonize/pressure (i.e. officially no longer refer to the contested ocean area as the "South China Sea" or proactively declare the airspace over the contested area as an "international free fly zone" before the PRC declares an ADIZ to policies that relax restrictions and constraints on opportunities to engage and partner). (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 138. How can U.S. Army Pacific best support the Department of State, DoD, the Joint Staff, and USPACOM engagement strategies with China? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 139. What are the underlying causes or conditions that would lead to an armed conflict between the United States and the Peoples Republic of China? How might those conditions be identified and addressed? (POC: LTC Donald Travis, PhD., CSL, donald.s.travis.mil@mail.mil, 717-245-4527)
- 140. What Does China Want? Examine China's Strategic Objectives in the 21st Century. (POC: Dr. Chris Mason, Strategic Studies Institute, matthew.c.mason4.civ@mail.mil, 717-245-4073)

- 141. What new opportunities does the recent ruling by the Court of Arbitration regarding the dispute between the PRC and the Philippines provide that can be leveraged through changes in policy or activity to increase cooperation among Pacific Regional Partners? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 142. In light of China's recent increased emphasis on politics in contrast to economy, what other implications can be derived from its One Belt, One Road economic strategy? (POC: Mark Moncure, TRADOC, mark.d.moncure.civ@mail.mil 757-501-5486)
- 143. How can the Army develop a comprehensive military partnership with People's Liberation Army (PLA) and incentivize greater participation in USARPAC activities and exercises that are within NDAA guidance? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)

ASEAN:

- 144. How will the political, economic and social challenges associated with the succession of the Crown Prince complicate or hinder military-to-military relations with Thailand, a treaty ally? What role can/should the U.S. military play in support of development of a new constitution and a return to democracy? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 145. How can the U.S. leverage all instruments of national power with Burma, Vietnam, the Philippines, Indonesia and other SEA nations to help advance it's interests vis-à-vis China? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 146. How can the U.S. work with ASEAN and its related institutions to encourage China to become a multilateral partner in the region that accepts the precepts of international law; and what role can the U.S. military play with respect to ASEAN? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)

NEA:

- 147. How should U.S. Army Pacific support the Japan Ground Self Defense Force transformation efforts in light of recent changes in the interpretation of Japan's security law; and how can USARPAC assist in allaying the concerns of other Pacific nations regarding Japanese militarism. (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337)
- 148. If the DPRK implodes and becomes an ungoverned space, what are the most plausible scenarios in consideration of U.S., Russian, and Chinese interests? What are the most appropriate courses of action for U.S. policy and strategy in the context of each scenario? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337

149. Tri-lateral military cooperation between the RoK, Japan, and the US (PACOM and OSD). What are the real impediments (versus what people say prevents cooperation) and what can we learn from examples where they have been overcome? How can we generate more tri-lateral military cooperation exercises while also increasing their scale from the tactical to operational and strategic engagement? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337) ///PACOM J37assistance offered///

India:

- 150. Examine the U.S. India Strategic Defense Relationship. (POC: Dr. Chris Mason, Strategic Studies Institute, matthew.c.mason4.civ@mail.mil, 717-245-4073)
- 151. To what extent does India represent a counter-balance in the Indo-Asia Pacific to help ensure China remains a status quo power; and how can the US reinforce that counter-balance generally, and from a military standpoint? (POC: Mr. Rod Laszlo, USARPAC G5, rodney.f.laszlo.civ@mail.mil, 808-438-6337) PACOM priority. ///PACOM J37assistance offered///

Latin America:

- 152. What actions and capabilities must the United States and its partners work to develop in Latin America over the next 30 years to prepare for contingency operations that might include cooperation or confrontation with the Peoples Republic of China? What inroads have China, Russia, and Iran made into Central America, South America, and the Caribbean and what can the U.S. Army do to counter these or how can it maximize its support to the JIIM Communities of Interest and Lead Federal Agencies? (POC: LTC Donald Travis, PhD., CSL, donald.s.travis.mil@mail.mil, 717-245-4527)
- 153. The America's: (POC: Dr. Evan Ellis, Strategic Studies Institute, Robert.e.ellis78.civ@mail.mil , 717-245-4085)
- a. How can land power contribute to the struggle against organized crime and terrorism, and to establish/maintain good governance in Latin America and the Caribbean? What are the lessons that U.S. ground forces can learn from the struggle against criminal cartels in Mexico?
- b. What is the most effective way for U.S. ground forces to engage with/support Central American militaries engaged in law enforcement missions in the region, such as counternarcotics, anti-gang activities, and internal security against criminal elements?
- c. How can land power (including security partnerships, PME, and training) help the U.S. maintain its role as partner of choice in Latin America and hedge against the strategic risks from the advances of extra-hemispheric actors such as China and Russia in the region?

- d. What are the probable scenarios for the evolution of the security situation in Venezuela, and how can the US best work with its partners in the hemisphere to help prepare for them?
- e. How can the Army best contribute to building readiness within and among South and Central American partner nations?
- f. How can the U.S. Army most effectively support efforts to prevent, contain, or defeat violent extremist movements in Latin America?
- g. How can the U.S. Army best support the continued professionalism of Latin American armies and the development of Latin American military capabilities?
- h. How can the U.S. Army best support U.S. lead federal agencies (federal law enforcement agencies and DoS) and also partner nation lead agencies (law enforcement organizations) within the limitations of interagency communities and authorities to combat this threat?

Africa:

- 154. How can the U.S. Army most effectively support efforts to prevent, contain, or defeat violent extremist movements in Africa? (POC: Dr. Steve Metz, SSI, steven.k.metz.civ@mail.mil, 717-245-3822)
- 155. Assessing and Responding to Regional Security Requirements in Africa: Determine options for landpower as part of a joint and combined strategy for responding to regional security requirements in Africa. (POC: COL Gregory Dewitt, PKSOI, Gregory.p.dewitt.mil@mail.mil, 717-245-3122)
- a. How can the Army support an Assessment Working group that would bring together IA analysts to focus on a pre-crisis country/issue and develop a shared understanding of the operating environment and identify drivers of conflict?
- b. What landpower capabilities are most useful to a whole-of-government effort to promote stability in Africa over the coming decade? Army roles include SOF activities, partnership capacity building, OHDACA/HAP, HADR (including apparently infectious disease control, post Ebola), logistics support for regional peacekeeping, and advise-and-assist missions.
- c. What are the obstacles to greater US Army involvement in the region? These range from the political (including US interagency, chief-of-mission, lines of effort concerns, and ownership vs partnership issues), non-governmental (concerns about the militarization of US policy toward Africa), African perceptions (all of the above, plus human rights concerns, negative connotations toward militaries due to coups d'etat, and cranky governments), geographic access issues (many dangerous areas are landlocked and lack infrastructure, making it difficult to set the theater), governance issues like corruption, AFRICOM's challenges getting assigned forces, etc.

- d. How can the Army best synchronize security cooperation activities and build partner capacity to enable African Partners to provide security and stability?
- e. How can the Army best posture itself in Africa to promote U.S. national security goals, to include supporting/leveraging UN/AU operations in Africa?

156. How can the U.S. Army best support the continued professionalism of African armies and the development of African military capabilities? (POC: Dr. Steve Metz, SSI, steven.k.metz.civ@mail.mil, 717-245-3822)

Middle East:

157. Study the possibility of escalating war in the Middle East. (POC: Dr. Larry Goodson, SSL, larry.p.goodson.civ@mail.mil, 717-245-3261)

- a. What role should U.S. landpower play in U.S. strategy toward the Middle East?
- b. If the Syrian Civil War sparks a Great Middle Eastern War, what will be the consequences for the region, United States, and world?
- c. What are the implications for the Army if the U.S. position in the Middle East evolves to a "low profile" situation, which may include operating without partnerships with Iraq and KSA, and possibly without Bahrain facilities?
- 158. Is existing U.S. strategy toward the Islamic State of Iraq and the Levant (ISIL) likely to achieve U.S. policy aims? What improvements to U.S. strategy (both Operation Inherent Resolve and the non-military components of that strategy) might be needed? (POC: Prof Larry Goodson, DNSS, larry.p.goodson.civ@mail.mil, 717-245-3261)
- 159. What options should the U.S. military provide to policy makers concerning the problem of mass migration from Syria to Europe? What critical U.S. military capabilities are necessary to achieve national interests during a refugee crisis? How could the U.S. military best support strategic efforts concerning security, medical, transportation, engineer, and logistical requirements associated with mass migration events? How could the U.S. military be used to help prevent criminals / terrorists from using mass migration to infiltrate the US and other partner nations? (POC: COL Toney Filostrat, OCAR, Director of Strategy and Integration, toney.e.filostrat.mil@mail.mil, 703-806-7787)
- 160. If the Framework for a Joint Comprehensive Plan of Action on Iran's Nuclear Program should fail, what strategy should the United States employ to achieve its policy objective of preventing Iran from obtaining a nuclear weapon? How can landpower contribute to enhanced deterrence and what posture would best communicate 'will and capability' to support national policy objectives? (POC: Dr. Larry Goodson, DNSS, larry.p.goodson.civ@mail.mil, 717-245-3261)

- 161. Notwithstanding Operation Resolute Support, Western countries seem set to diminish their involvement in Afghanistan over the next several years. If so, and a regional "Great Game" in and around Afghanistan develops, what response would best secure American interests? (POC: Dr. Larry Goodson, DNSS, larry.p.goodson.civ@mail.mil, 717-245-3261)
- 162. In the event that significant U.S./NATO forces remain in Afghanistan, what is their enduring mission and what would "winning" look like in the next five years? (POC: Ernest Irick, USARCENT, ernest.lirick.civ@mail.mil, 803-885-8549)
- 163. What activities should the U.S. Army be engaged in to support U.S. national objectives in Egypt? (POC: Ernest Irick, USARCENT, ernest.l.irick.civ@mail.mil, 803-885-8549)

Part III:

Army Warfighting Challenges

This document supersedes all previous versions – dated 16 Mar 2016

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



<u>Develop Situational Understanding</u> – Lead: ICoE, Primary Support: MCoE/SOCoE How to develop and sustain a high degree of situational understanding while operating in complex

environments against determined, adaptive enemy organizations.



Shape the Security Environment – Lead: MCCoE, Primary Support: SOCoE 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.



<u>Provide Security Force Assistance</u> – Lead: SOCoE, Primary Support: CAC How to provide security force assistance to support policy goals and increase local, regional, and host nation security force capability, capacity, and effectiveness.

CHANGE



Adapt the Institutional Army and Innovate – Lead: MCCoE, Primary Support: AMCARCIC

How does the Army as an institution adapt and innovate to ensure the combat effectiveness of the total force, support to other Services, the ability to fulfill DoD and other agencies requirements, quality of life for Soldiers and families, and possess the capability to surge (mobilize) or expand (strategic reserve) the active Army.



Counter Weapons of Mass Destruction - Lead: MSCoE

How to prevent, reduce, eliminate, and mitigate the use and effects of weapons of mass destruction (WMD) and chemical, biological, radiological, nuclear, and high yield explosives (CBRNE) threats and hazards on friendly forces and civilian populations.



Conduct Homeland Operations - Lead: MSCoE

How to conduct homeland operations to defend the Nation against emerging threats.



Conduct Space and Cyber Electromagnetic Operations and Maintain Communications
Lead: CyberCoE, Primary Support: SMDC

How to assure uninterrupted access to critical communications and information links (satellite communications [SATCOM], positioning, navigation, and timing [PNT], and intelligence, surveillance, and reconnaissance [ISR]) across a multi-domain architecture when operating in a contested, congested, and competitive operating environment.



Enhance Realistic Training – Lead: MCCoE, Primary Support: CAC-T 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.



Improve Soldier, Leader, and Team Performance – Lead: MCCoE

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.



Develop Agile and Adaptive Leaders – Lead: MCCoE

How to develop agile, adaptive, and innovative leaders who thrive in conditions of uncertainty and chaos and are capable of visualizing, describing, directing, and leading and assessing operations in complex environments and against adaptive enemies.



Conduct Air-Ground Reconnaissance and Security Operations - Lead: MCoE, Primary Support: AVCoE

How to conduct effective air-ground combined arms reconnaissance and security operations to develop the situation rapidly in close contact with the enemy and civilian populations. CHANGE



Conduct Joint Expeditionary Maneuver and Entry Operations - Lead: MCoE

How to project forces, conduct forcible and early entry, and transition rapidly to offensive operations to ensure access and seize the initiative.



Conduct Wide Area Security - Lead: MCoE, Primary Support: AVCoE

How to establish and maintain security across wide areas (wide area security) to protect forces, populations, infrastructure, and activities necessary to shape security environments, consolidate gains, and set conditions for achieving policy goals.

Ensure Interoperability and Operate in a Joint, Interorganizational, and Multinational Environment - Lead: MCCoE, Primary Support: SOCoE

How to integrate joint, interorganizational, and multinational partner capabilities and campaigns to ensure unity of effort and accomplish missions across the range of military operations.



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



Set the Theater, Sustain Operations, and Maintain Freedom of Movement -

Lead: SCoE, Primary Support: AMC

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.



Integrate Fires - Lead: FCoE, Primary Support: SMDC

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.



Deliver Fires - Lead: FCoE, Primary Support: SMDC

How to deliver fires to defeat the enemy and preserve freedom of action across the range of military operations.



Exercise Mission Command - Lead: MCCoE

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.



Develop Capable Formations – Lead: ARCIC CDD

How to design Army formations capable of rapidly deploying and conducting operations for ample duration and in sufficient scale to accomplish the mission.

AVCoE = Aviation Center of Excellence FCoE = Fires Center of Excellence ICoE = Intelligence Center of Excellence MCoE = Maneuver Center of Excellence MCCoE = Mission Command Center of Excellence MSCoE = Maneuver Support Center of Excellence Command

CCoE = Cyber Center of Excellence

CAC-T = CAC-TrainingCDD = Capabilities Developments Directorate SMDC = US Army Space and Missile Defense SCoE = Sustainment Center of Excellence

SOCoE = Special Operations Center of Excellence

ARCIC = Army Capabilities Integration Center

CAC = US Army Combined Arms Center

AMC = US Army Materiel Command

Army Warfighting Challenges Online:

- Contribute at milBook Collaboration Site: https://www.milsuite.mil/book/groups/army-warfighting-challenge-awfc-group
- Public site (not requiring a CAC or password): http://www.arcic.army.mil/Initiatives/army-warfighting-challenges.aspx
- milWiki NIPRNet: https://www.milsuite.mil/wiki/AWFC
- SIPRNet collaboration site: https://intellipedia.intelink.sgov.gov/wiki/Army_Warfighting_Challenges