# Strategic Research Topics

**A compendium to the 2022 *Annual Estimate of the Strategic Security Environment***

This list of strategic issues offers insight to the particularized matters impacting defense organizations. Input was provided by senior leaders across the highest echelons of Army and Department of Defense organizations. This list and the narrative found in SSI's annual estimate are intended to help focus the research community on topics important to the Army.

A menu of Joint Force research topics is maintained on the Joint Electronic Library Plus (JEL+). Students and researchers with a Common Access Card are highly encouraged to explore this list, accessible at **https://jdeis.js.mil/jdeis/index.jsp?pindex=324.**

***NOTE: This version is intended for public use and therefore omits specific restricted information. Email LTC Robert Greiner at robert.t.greiner2.mil@army.mil from an official government account to request the full version including controlled unclassified information (CUI).***

## INTEGRATED RESEARCH PROJECTS

(U) An Integrated Research Project (IRP) is an intensive, faculty-led, student-executed, research effort. It places faculty and students from across USAWC in a team setting that produces scholarship of value to the Army, Joint Force and/or Department of Defense (DoD). Students can directly influence Army policy, inform senior leader decision-making, and contribute scholarship of value to the national security community beyond the scale and impact typically possible with an SRR. Every IRP has at least one external sponsor that establishes the research requirement and/or has a vested interest in the topic. A sponsor is an external entity that agrees to assist USAWC research, sometimes with financial or materiel means but frequently through expert advice or feedback to the research effort. Students should sign up for an IRP only after meeting with IRP faculty leads and after considering the full menu of enrichment programs and other activities. Students may be required to travel to support research or deliver briefings to senior leaders. Each student will receive credit for the completion of the SRR. Students may also receive academic credits for individual course papers, elective courses, and/or public speaking requirements. See Appendix D of the AY23 Student Catalog for this and additional information.

☐ **1. <u>Developing, Employing, and Retaining a Highly Technical Force</u>**

**(U) This IRP focuses on methods to improve how we acquire, develop, employ, and retain highly technical Soldiers and Civilians in different career fields like cyber, military intelligence, signal, and those in assignments like the AI Task Force and DevOps Factory with Army Futures Command. The team will have access to existing data, create some new information, and utilize it to find recommendations for change - which will be included in papers and briefings to senior Army leadership.**

(U) See notes at head of section. The primary research focus for this IRP is Industrial / Enterprise Management, Leadership, and Innovation. The intended sponsors for research work are ARCYBER, the principal cyber advisor to SECARMY, and the Cyber Center of Excellence. Contact the faculty lead in CSL, COL Chad Bates, to express interest or solicit additional information.

☐ **2. <u>The Role of Strategic Landpower in Joint and Combined Operations</u>**

**(U) This IRP will provide a broadened appreciation of the U.S. Army capability gaps especially at the Service component level and potential solutions. Primary focus will be on the Theater Army's role in Multi-Domain Operations (MDO) against a near-peer competitor and gaps between authorities, roles, and resources that impact ability to successfully implement the National Defense Strategy. Will also address challenges for the Army's role in Homeland Defense and Homeland Security. Findings of this IRP to be briefed at the Strategic Landpower Symposium, Carlisle, PA on 9-11 May 2023.**

(U) See notes at head of section. The primary research focus for this IRP is Applied Strategic Art. The intended sponsors for research work are AUSA, HQDA G-3/5/7, Army Futures Command, and the Mission Command Center of Excellence. Contact the faculty leads in CSL, Dr. Greg Cantwell or MAJ Justin Magula, to express interest or solicit additional information.

☐ **3. <u>The Military and Society, An Annual Survey</u>**

**(U) This IRP will begin an annual survey of American society that oversamples on veterans and military families, with the aim of understanding the broad factors that influence Americans' "propensity to serve" and their willingness to advocate for military service. End product will be an inaugural report that aims to examine both immediate correlations between American public opinion and propensity to serve, and set the stage for a longitudinal analysis that examines the relationship between the military and society.**

(U) See notes at head of section. The primary research focus for this IRP is Industrial / Enterprise Management, Leadership, and Innovation. The intended sponsors for research work are SecArmy and the Vice Army Chief of Staff. Contact the faculty leads in DNSS, Dr. Carrie Lee or Dr. Marybeth Ulrich, to express interest or solicit additional information.

☐ **4. <u>Leadership and Combat Power in Large Scale Combat Operations</u>**

**(U) This IPR will examine the influence of leadership on combat effectiveness in the Russian and Ukrainian militaries during the current conflict there, with a particular emphasis on how losses of senior leaders affect combat performance. The conflict will be viewed through the six US Army War Fighting Functions (mission command, movement and maneuver, intelligence, fires, sustainment, and protection). The primary focus of the study will be on learning lessons to influence the Professional Military Education of Army leaders, particularly with reference to their agility and ability to replace senior commanders lost in combat.**

(U) See notes at head of section. The primary research focus for this IRP is Industrial / Enterprise Management, Leadership, and Innovation. The intended sponsors for research is the commanding general of Training and Doctrine Command. Contact the faculty leads in DMSPO, Dr. John Nagl or Prof. Al Lord, to express interest or solicit additional information.

## OFFICE OF THE SECRETARY OF DEFENSE

☐ **1. <u>Contingency Planning and Process</u>**

**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **2. <u>Contingency Plan Executability</u>**

**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

## ARMY HEADQUARTERS, G-3/5/7

(U) Students who select a research topic from this list will have access to regular engagements with the Army Initiatives Group (AIG) to receive research advice and assistance preparing for meetings with HQDA senior leaders. The G-357 will meet with individuals or research groups at key milestones to help scope and receive the finished product.

☐ **1. <u>Emerging Technologies</u>**

**(U) How do emerging technologies (AI, autonomous combat vehicles, long-range precision weapons) affect existing theories of warfare?**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for AIG points of contact and additional information on this research proposal.

☐ **2. <u>Leader Development for Future Warfare</u>**

**(U) How does the Army adapt leader development and PME to foster leaders capable of innovation as new and un-forecasted technologies emerge and change the character of warfare?**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for AIG points of contact and additional information on this research proposal.

☐ **3. <u>Ensuring Positional Advantage</u>**

**(U) How does the US Army ensure positional advantage with the threat of contested force projection and vulnerable forward basing.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for AIG points of contact and additional information on this research proposal.

☐ **4. <u>Leveraging Data</u>**

**(U) How does the Army need to change its warfighting concepts to take full advantage of a data centric army?**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for AIG points of contact and additional information on this research proposal.

☐ **5. <u>Maximizing Guard and Reserve Contributions to the Joint Force</u>**

**(U) How can we optimize the use of the reserve component (Compo 2 and 3) to best support the Joint Force for the 21st century?**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for AIG points of contact and additional information on this research proposal.

☐ **1. Improving Data Quality**

**(U) Research and examine "Improving Data Quality to Enable Equipment Readiness Decisions" to determine causal factors to inform requirements, including resources, and make a recommendation to DCS G-4 regarding changes to policies, programming, and/or budget to resolve data quality issues.**

(U) Research topic sponsor is HQDA G-46. We are limited in our ability to see, understand, and leverage data from our logistics enterprise systems to improve our operational decision-making and outcomes. The Army needs to improve the quality of its data in order to leverage it as a strategic asset in support of agile and resilient logistics.

☐ **2. Additive Manufacturing in Support of Multi-Domain Operations**

**(U) Research and examine "Cost-Effectiveness of Additive Manufacturing in Support of MDO" to determine causal factors to inform requirements, including resources, and make a recommendation to DCS G-4 regarding changes to policies, programming, and/or budget to resolve.**

(U) Research topic sponsor is HQDA G-44M. Assess the costs and benefits associated with leveraging additive manufacturing (AM) and complementary capabilities, at the strategic, operational, and tactical levels in support of Multi-domain Operations (MDO) in the Joint-Interagency, Intergovernmental and-Multi-national (JIIM) environment.

☐ **3. Measuring Deployment Readiness and Mobilization**

**(U) Research and examine "Evaluating Installation Deployment Readiness and Capacity" to determine causal factors to inform requirements, including resources, and make a recommendation to DCS G-4 regarding changes to policies, programming, and/or budget to resolve.**

(U) Research sponsor is HQDA G-43/5/7. Evaluate existing Army processes for measuring the deployment readiness and capacity of Power Projection Platforms (PPPs) and Mobilization Force Generation Installations (MFGI) and recommend an automated Common Operating Picture solution to generate monthly reports summarizing key metrics.

☐ **4. Handheld Terminal AIT Devices for Property Inventory**

**(U) Research and examine "Adoption of Army Handheld Terminal AIT Devices for Property Inventory Execution" to determine causal factors to inform requirements, including resources, and make a recommendation to DCS G-4 regarding changes to policies, programming, and/or budget to resolve.**

(U) Research sponsor is HQDA G-44S. Identify the impediments to soldiers and units adopting and using handheld terminal (HHT) automatic identification technology (AIT) devices. Identify changes in policies, training, hardware, and other areas to overcome these impediments.

☐ **5. Strategic Readiness Assessments**

**(U) Research and examine "Improving Army Strategic Readiness Assessment (ASRA) Sustaining Tenet Metrics" to determine causal factors to inform requirements, including resources, and make a recommendation to DCS G-4 regarding changes to policies, programming, and/or budget to resolve.**

(U) Research sponsor is HQDA G-43/5/7. Provide new ASRA metrics so that Army Senior Leaders have meaningful measures and indicator assessments that portray a holistic view of current and projected sustaining tenets of readiness to enable the Army to successfully execute operation plan (OPLAN) requirements. Inform updates to Department of the Army Pamphlet 525–30 (DA Pam 525-30).

☐ **6. Accounting for Government Furnished Property**

**(U) Research and examine "Accounting for Government Furnished Property within the Army" to determine causal factors to inform requirements, including resources, and make a recommendation to DCS G-4 regarding changes to policies, programming, and/or budget to resolve.**

(U) Research sponsor is HQDA G-44S. Analyze the existing federal and Department of Army policies, manning, training, and the automated systems involved in the accounting of government furnished property (GFP) in order to determine the root causes for the Army not properly identifying GFP within contracts and the inability to account for it in automated systems.

☐ **7. Assessment of the Army's Railway Fleet Investment Strategy**

**(U) Research and conduct an "Army Rail Assessment" to determine causal factors to inform requirements, including resources, and make a recommendation to DCS G-4 regarding changes to policies, programming, and/or budget to resolve.**

(U) Research sponsor is HQDA G-43/5/7. Analyze the Army's railway fleet investment strategy and identify courses of action that will allow the Army to consider options, including owning and maintaining rail infrastructure, relying on contracting support, or a mixed strategy to meet each installation's Power Projection Platform (PPP) and Mobilization Force Generation Installations (MFGI) specific needs at reduced risk.

## U.S. SPACE COMMAND

(U) Students who select a research topic from this list will receive informal, open-source access, coaching, and, depending on the topic, unclassified material from one or more USSPACECOM subject matter experts (SMEs). Ultimately, the student and the PME program will determine the form, function, and purpose of all space-related research. Students interested in space-related research need to identify the topic to their faculty advisor or project advisor as their topic of focus. After faculty approval, USSPACECOM will coordinate an online introduction between the student, advising PME faculty/academic lead, and the USSPACECOM SME that requested the research topic. Together, the student and USSPACECOM SME will coordinate until academic completion. The top research papers received will be assessed for potential inclusion in an all-space special issue edited by USSPACECOM's SIG.

☐ **1. Emergent Space Conflict Theory and Policy**

**(U) How should USSPACECOM prepare to fight a future space war? What changes are needed in existing Department of Defense policy, strategy, doctrine, theories, and organizational form/function?**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **2. <u>The Trinity of Multi-Domain Conflict</u>**

**(U) Explore the idea that future conflict may center on space, cyberspace, and special operations forces. How would this function? What changes are needed for U.S. and allied security organizations to shift to this context?**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **3. <u>Space in the Age of Digital Superiority</u>**

**(U) USSCYBERCOM was the first Combatant Command that is entirely digital. Is USSP ACECOM the first geographic-oriented Combatant Command that also must fight exclusively in a digital context? If so, are there unique considerations and functions for USSPACECOM that USSCYBERCOM does not require?**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **4. <u>Command and Control (C2)</u>**

**(U) Historically, the AF Air Operations Center has been the primary program of record for AF C2 systems development and fielding. Working with JADOC, JTT, and other joint C2 software, these software packages have responded to the traditional requirements process. The Joint Force has pursued the same requirements to fielding approach and results have not resulted in improved multi-domain C2.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **5. <u>Strategic Design of USSPACECOM</u>**

**(U) While well on its way to being stood up, the fluidity of organizational design of USSPACECOM offers a once-in-a-century opportunity. This study would examine if the U.S. is making the most of this unique era and would propose organizational changes both subtle and radical to improve effectiveness of space warfighting.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **6. <u>Adapting to Advanced Missile Warning Threats</u>**

**(U) Because the changes and adaptability of new adversary threats, our detection, tracking and display systems/capabilities (satellites, radars, and common operating picture [COP]) must be able to address our adversaries' abilities.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **7. <u>First Strike Instability in Space and Escalation Control.</u>**

**(U) Because of First Strike instability, there is a pressure to escalate to kinetic activity in the space domain during the competition-conflict transition. Current escalation frameworks do not account for the space domain instability in the broader geopolitical context.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **8. <u>The Role of Novel Orbits in Generation-after-Next Generation Warfighting</u>**

**(U) U.S. military systems have been largely confined to operating in Low Earth and Geosynchronous Orbits. This study would examine how a range of alternative orbits (including Cislunar and heliocentric) might influence the provision of space services and space control both positively and negatively.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **9. <u>Hostile Intent and Hostile Act</u>**

**(U) How lessons from other domains can inform determining hostile intent and hostile act for space engagements. Examine how hostile intent is determined for other domains and what systems and processes might be changed to improve the accuracy and timeliness of determining hostile intent for space operations.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **10. <u>Mega-Constellations</u>**

**(U) The use of mega-constellations comprised of small satellites is on the rise, both commercially and internationally. These constellations impact the space area of operations and challenge our ability to maintain space domain awareness.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **11. <u>Proliferation of Commercial, Civil, and Military Space Systems</u>**

**(U) Understand what it would mean to have 10,000, 100,000, or 1,000,000 satellites in orbit from a military perspective. Address considerations, including fog of war (e.g., how does Space Domain Awareness change), C2, autonomy, and impact to terrestrial services.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **12. <u>Responsive Space Architectural Changes to Improve Cost-Benefit</u>**

**(U) Examine how responsive space elements of an architecture might favorably compare with other resiliency options, particularly for augmentation and reconstitution. This study would compare responsive augmentation and reconstitution options to the baseline and more traditional alternatives.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **13. <u>The Road to Norms of Behavior for Space</u>**

**(U) How is space the same/different and can we get to stability faster than other domains? Examine how norms of behavior developed in other domains and how this information might aid in developing norms for space.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **14. Alternative Futures for the Extraterrestrial Battlespace**

**(U) Examine the future of space warfare through a lens of technology, policy, and evolving space applications. Alternative futures (e.g., mining the asteroids/moon, a competitor passes us, avenues of technological surprise, etc.) would be examined to see where the U.S. would find the most military advantages and disadvantages.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **15. The Role of Space in Strategic Deterrence**

**(U) The role of space in deterrence is emerging as a critical topic in the future development of a deterrence strategy for the United States. Examine the past, present, and future role of space in strategic deterrence and whether space can play a greater or unique role in strategic deterrence, increasing stability and security for the U.S. and the world.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **16. Terrestrial Response Options for Space Aggressions**

**(U) Determine how to deter space aggressions using terrestrial actions. It is typically difficult to apply Diplomatic, Information, Military, and Economic (DIME) deterrence actions to transgressions in the space domain.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **17. Space Deterrence Theory**

**(U) Examine the similarities and differences for how aggression is deterred in other domains as compared with space. Key differences might be that there is rarely a direct loss of life and greater difficulty collecting international interest in deterring space aggression.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **18. The Global Proliferation of Position, Navigation, and Timing (PNT)**

**(U) Alternatives to GPS are proliferating, offering the U.S. and its adversaries new opportunities and challenges in the PNT battlespace of the future. This study would plumb the depths of how this proliferation of PNT affects the future of warfare.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **19. Replacing GPS for U.S. PNT Requirements**

**(U) Study alternatives to replacing GPS both technologically, sociologically, commercially, and militarily. Even if technology does not exist, extrapolate how "if' statements might impact dimensions of the PNT user community, particularly the military community.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **20. Informational Silos from Classified Programs**

**(U) The rate of technological convergence and information availability has transformed the commercial industry. U.S. reliance on classification to provide strategic advantage has always been seen as a strength, but with rate of change increasing, it is possible that the silo-ing of information may prove a strategic disadvantage. This study will seek to expose disadvantages to slowing information flow caused by classification or other barriers.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **21. Information Opportunities and Vulnerabilities for the Space Enterprise**

**(U) How the U.S. Space Enterprise (terrestrial and in-space) is vulnerable to open source, crowd-sourced, and easily observable information.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **22. Critical Asset Analysis Tool**

**(U) Build a module for the USSPACECOM Critical Infrastructure Decision Support System (UCIDS) for unclassified and classified information using standard Microsoft Office Programs to enable USSPACECOM personnel to load, view, edit, print reports, etc. to manage all USSPACECOM critical assets. Tool needs to be able to identify/show shortfalls and deficiencies for Critical Mission Assets.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **23. Chess in Space**

**(U) Application and Evolution of Military Strategies to the Space and Joint Fight: Develop an appendix to the "Art of War" for space. Student may consider earlier published military research on 'Chess versus Go: American and Chinese Defense Philosophical Differences' and other metaphoric, game theory, cultural, and institutional differences as well.**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **24. Operationalizing Space Deterrence**

**(U) What is an effective strategy for deterrence? How should the U.S. enable integrated deterrence in the space domain? How should space deterrence properly nest within national objectives, policy, and deterrence as a whole? What considerations are senior leaders not considering that would complement current trajectories?**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **25. Enabling Commercial Integration**

**(U) How should the DoD adapt its business model to the rapid life cycle of innovation and emerging technology? Balancing capability, time, and control, how can the DoD mitigate bureaucratic impediments that delay modernization plans? How is space different from the terrestrial domains regarding commercial integration? How does the DoD go beyond material solutions in partnerships with the private sector to effectively leverage and strengthen the National Security Innovation Base?**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **26. Civil Enterprise Assumption of Space Situational Awareness**

**(U) The transition for Space Situational Awareness to be monitored by civil entities is taking too long. What impact does that have on DoD members in cost and manpower? What are the major hurdles institutionally, organizationally, legally, and internationally? What are the consequences if this takes too long for USSPACECOM, the DoD, and other stakeholders? How might this problem be resolved or a faster solution implemented outside of existing or traditional approaches?**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

☐ **27. The Future of Space Medicine in the DoD**

**(U) With the stand-up of USSF and with USSPACECOM as the DoD Manager for Human Space Flight Support, the future of Space Medicine will significantly impact the DoD. How might the DoD further establish medical education and training to ensure medical professionals are prepared to support these missions? If the future includes DoD astronauts, should training and medical review be the responsibility of NASA or the DoD?**

(U) See notes at head of section. Students may contact the Strategic Studies Institute for USSPACECOM points of contact and additional information on this research proposal.

## JOINT TASK FORCE SPACE DEFENSE (JTF-SD)

(U) Additional research topics are available for those individuals with access to the Joint Worldwide Intelligence Communication System (JWICS). Contact SSI for more information.

☐ **1. Space Superiority Assessment Methodology**

**(U) How does the United States know when it has gained (and are maintaining) space superiority?**

(U) See notes at head of section. JTF-SD is specifically interested in the development of a space superiority assessment methodology. There may be opportunities throughout this research effort to leverage subject matter experts from within JTF-SD and the National Space Defense Center. Contact SSI for more information.

## U.S. ARMY CENTRAL

☐ **1. Multilateral Nuclear Deterrence**

**(U) How does multilateral nuclear deterrence work? All theoretical work so far has been bilateral.**

☐ **2. Nuclear Proliferation in the Middle East**

**(U) Our plans to address Iranian nuclear capability have not met with success. If Iran goes nuclear, who follows? What does a counter proliferation campaign in the Middle East look like? If that fails, what does the ensuing arms race look like?**

☐ **3. <u>Enabling Foreign Security Forces through Security Force Assistance</u>**

**(U) What force allocation and basing posture will meet our requirements in the Middle East while fitting under budget and manpower caps?**

☐ **4. <u>Force Posture</u>**

**(U) What force allocation and basing posture will meet our requirements in the Middle East while fitting under budget and manpower caps?**

☐ **5. <u>Re-Imagining the U.S. Presence in Kuwait</u>**

**(U) What are the costs and benefits of reorganizing Kuwait similarly to Korea?**

(U) Consider one year unaccompanied and two accompanied tours, applicability of KATUSAs or "REFORKUW" concepts, and the use of assigned forces - probably including DIV HQ, ABCT, IBCT, CAB, SPT BDE, PAT BN.

☐ **6. <u>Over-the-Horizon Mission in Afghanistan</u>**

**(U) What should an over the horizon counterterrorism campaign in Afghanistan look like?**

☐ **7. <u>Competition in the Middle East</u>**

**(U) What does a campaign of competition in the Middle East look like?**

(U) Specifically consider the Central and South Asian (CASA) region.

☐ **8. <u>Employment of a MDTF</u>**

**(U) Can and should a Multi-Domain Task Force be employed in competition and conflict to keep key strategic choke points open in the CENTCOM AOR?**

(U) Specifically consider key terrain such as the Strait of Hormuz, Suez Canal, and bab al Mendeb. What should the composition, disposition, and strength of this task force be?

☐ **9. <u>Iran</u>**

**(U) What is the desired and achievable political end state in Iran? What military end state supports this?**

☐ **10. <u>Impact of the Grand Ethiopian Renaissance Dam</u>**

**(U) What will the impact of the Grand Ethiopian Renaissance Dam be on Egyptian agriculture? How does this impact Egyptian and U.S. security interests?**

☐ **11. <u>Ukraine-Russia Conflict and Global Food Insecurity</u>**

**(U) Which countries in the CENTCOM AOR are most likely to experience food insecurity and famine as a result of the cutoff of Ukrainian and Russian wheat and fertilizer? What HA/DR missions are likely to ensue?**

☐ **12. Army PCS Practices**

**(U) Household goods shipment doesn't seem likely to improve anytime soon. Should the army imitate the State Department by maintaining furnished quarters and overseas vehicle fleets while Soldiers only ship what is now categorized as unaccompanied baggage?**

(U) Specifically include a cost-benefit analysis.

## U.S. ARMY EUROPE AND AFRICA

☐ **1. U.S. Posture in Europe**

**(U) Propose and assess enduring posture options for Europe based on recent information available from the war in Ukraine balanced against deep historical analysis.**

(U) The war in Ukraine and movement of Russian forces into Belarus on an apparently permanent basis challenge many of the assumptions on which current Army force posture in Europe has been based.

☐ **2. Ukraine: Lessons Learned for Front Line States**

**(U) Analyze lessons from the war in Ukraine to inform planning to defeat future Russian aggression.**

(U) Specifically consider within your research the use of urban defense, dispersed strike groups equipped with advanced capabilities, and information operations.

☐ **3. Ukraine: Lessons We should Learn and Not Learn**

**(U) Assess Russian operations in Ukraine and identify takeaways to inform future Army planning and posture as well as things that should not be taken as lessons.**

(U) Ukraine is largest use of force in Europe since World War 2 and offers significant insight into Russian capability. Russia ran into difficulties and initially operated in a manner different than their doctrine would suggest, and then transitioned to deliberate combined arms maneuver. How do we ensure that Army draws the right lessons from this conflict?

## U.S. ARMY NORTH

☐ **1. Interagency Communication and Coordination in Homeland Defense**

**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **2. The Space Layer in Homeland Defense**

**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **3. Interagency and Multinational Communication and Common Operating Picture**

**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **4. Artificial Intelligence**

**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **5. <u>Evolving Threats to the Homeland</u>**

**(U) New technologies are being developed and employed across multiple domains. Hypersonic missiles, drone warfare, cyberspace attacks, space warfare, GPS jamming, localized EMP devices, and similar technological advances are projected to play a part in future conflicts. Based on the anticipated impact of emerging technologies on the American public, Critical Infrastructure / Key Resources, and the Joint Force's ability to project force from the Homeland to other theaters, which of these new technologies should most concern NORTHCOM when planning for Homeland Defense?**

(U) Desired objectives: 1) List emerging technologies that present the greatest threat to defending the Homeland. 2) Prioritize this list based on anticipated impact these technologies will have on the homeland. 3) Recommend defensive OAIs that will enable the joint force to best mitigate the impact of attacks using highest-priority emerging technologies.

☐ **6. <u>National Response Framework</u>**

**(U) The National Response Framework (NRF) was formed in response to Hurricane Katrina. Is this the right model for the next large crisis? Does it adequately account for Homeland Defense? If not, does the NRF require a re-look, and what would that look like?**

(U) Desired Objectives: 1) Summarize the NRF and the context in which it was developed. 2) Evaluate utility of current NRF in responding to likely national crises the nation will face in the future, to include hurricanes, earthquakes, pandemic influenza, large fires, and civil disturbances. 3) Recommend changes to the NRF to account for deficiencies in current framework.

☐ **7. <u>North American Defense</u>**

**(U) Hazards and Threats faced by the USA, Canada, and Mexico, will likely not be contained within the borders of just one nation. Emerging threats of pandemic influenza, cyber attacks against critical infrastructure, space-based and/or EMP attacks, and others will likely have spill-over impacts. Aligning the Joint Force to think about homeland defense as a continental concern instead of a national concern already exists with NORAD partnership, the USA-Canada combined defense plan, and other measures. Adopting to include Mexico may help the Joint Force better plan for and execute HD and DSCA missions.**

(U) Desired Objectives: 1) Describe current OSD policy on defense of the homeland. 2) Describe how current agreements and relationships with Canada and Mexico help the joint force perform homeland defense and DSCA missions. 3) Evaluate utility of defining North American Defense as a concept that includes protecting Canada, the USA, and Mexico from all hazards and threats. What benefits would result and what challenges would need to be overcome?

☐ **8. <u>Joint, Interagency Common Operating Picture for DSCA / HD missions</u>**

**(U) Information sharing is still conducted iteratively, and through LNOs. Do emerging technologies allow for real-time updates to threat and hazard information, location and status of joint/interagency assets and personnel, and/or other information that would help coordinate the actions of the joint force and interagency partners?**

(U) Desired Objectives: 1) List the type of information most useful to the coordination of joint and interagency actions. 2) Propose a format/solution for a shared COP that would enable real-time updates of this information. 3) Identify the information sharing and security concerns to address, based on the classification of information being shared, along with proposals for how best to mitigate these concerns.

## U.S. ARMY PACIFIC

☐ **1. Contested Logistics in the Pacific**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **2. Command and Control Guam**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **3. Large Scale Mobilization of the Reserve Component in the Pacific**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

## 8th ARMY (8A)

(U) Students who select a research topic from this list may pursue a traditional research route but should also consider leveraging other creative resources such as wargaming expertise resident at the Center for Strategic Leadership.

☐ **1. Field Armies in Multi-Domain Operations**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **2. Challenges of Non-Combat Evacuation Operations**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **3. RSOI Operations in a Korea Conflict**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **4. Integrated Deterrence in Korea**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **5. Attracting the Right Talent to 8A**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **6. Modernizing War Gaming and Analysis**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **7. Command Relationships in Competition and Conflict**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **8. Setting the Theater**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **9. Use of Rotational Forces**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **10. Multi-Front Conflict**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **11. Timely Mobilization of Forces**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **12. Mission Readiness at the Point of Debarkation**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

☐ **13. Utilization and C2 of Theater Enablers**
**Research question and description are controlled unclassified information (CUI). Email SSI from an official government account to request a full list.**

# SECURITY FORCE ASSISTANCE COMMAND

## 1. Security Force Assistance in Multi-Domain Operations

**(U) With the evolution of MDO, what is the role of SFA in Crisis?**

(U) SFA forces provide early and sustained indicators to enable conflict type determination and situational understanding based on forward presence and standing relationships in an area of operations (AO). Utilizing SFA liaison teams in competition and rapidly re-purposing them in crisis as FSF support teams may significantly increase FSF combat power. SFA teams may be surged to enable the rapid integration of forward stationed or contingency deployed Army forces with the partner FSF into defensive, offensive and stability plans. SFA already in place when crises occur are already acclimated to the operational environment (OE) and ideally situated for assisting, supporting, and liaising with the staffs of follow-on Army forces upon arrival. SFA can focus on the most critical FSF interoperability tasks to enable effective coalition operations. SFA units and teams may provide assessments of FSF and critical linkages to early arriving and follow-on Joint Forces and may be able to leverage FSF for augmenting port opening, APOD/SPOD security, rear area protection, and other tasks to preserve BCTs for main efforts farther forward. In crisis, SFA may be relocated to assume a theater reserve role outside of the crisis area to build partner FSF and coalition combat power for future offensive operations back in the JOA.

## 2. Security Force Assistance in Large Scale Combat Operations

**(U) In a complex LSCO environment what can forces dedicated to SFA contribute to the Conflict?**

(U) During the conflict phase, SFA will be supporting FSF with key enablers and capabilities and conducting liaison functions to ensure FSF synchronization with the Joint Force and Army. Additionally, SFA elements will be advising training, equipping, rebuilding/building, and liaising with FSF and where possible, the FSF supporting functions of Governance, Executive, Generating, and Operational (G-EGO). Advisors will assist and support the FSF by employing key capabilities such as joint fires to create exploitable opportunities. There may be a need to rapidly recruit and train to replenish FSF forces to reconstitute or regenerate those FSF who have become casualties. Conflict may be a time of building and rebuilding to restore partner FSF capabilities, as a method to reduce security vulnerabilities, reduce requirements for the Joint Force employed in conflict.

## 3. Security Force Assistance and Integrated Deterrence

**(U) How can forces dedicated to SFA enhance integrated deterrence in MDO?**

(U) Recent events in Eastern Europe have shown that in the era of strategic competition, Security Force Assistance (SFA) may become the primary effort by strategic necessity—both to deter our adversaries prior to conflict, and to strengthen our partners and allies before, during, and after, large scale combat operations. Developing foreign security force (FSF) capacity, capability and enabling interoperability for Multidomain Operations (MDO) may deter and if necessary, enable the defeat of increasingly sophisticated threats in the future OESFA is now more important than ever in preparing for future multinational operations. Competitors at every level are leveraging trends in science, technology, and the information environment to challenge the U.S. and its allies and partners across the globe. The Army is adapting the way it organizes, trains, educates, staffs, and equips itself to fight these future threats structured around the MDO concept, but the Army may potentially improve this with the assistance of its partners and allies. Since MDO require advanced capabilities, capacity, and interoperability which some partners and allies currently lack, SFA may be an option for improving Foreign Security Forces' (FSF) MDO capabilities.

☐ **4. Security Force Assistance in the Competition Continuum**

**(U) How can SFA, as an Army capability, support operations across the competition continuum?**

(U) The entire SFA enterprise must be optimized to assess, build, and leverage the capacity, capability, and enable interoperability of our partners and allies. In the future, this may mean SFA enabling FSF synchronization, alignment, even convergence with MDO. This unity of effort in MDO may provide increased overall multinational force combat power and therefore provides options to the Joint Force Commander across the competition continuum. SFA activities already contribute to information advantage which improves access and influence with partners, and converging information advantage with FSF MDO capabilities may provide significantly more capability. SFA is one of the key tools enabling the Army to be globally integrated as part of an increasingly multidomain, Joint, interagency, and integrated multinational team. This concept describes the key challenges, recommended solutions, and supporting capabilities required for Army SFA to enable MDO across the competition continuum, and against near-peer competitors to accomplish campaign objectives and protect U.S. national interests.

☐ **5. Enabling Foreign Security Forces through Security Force Assistance**

**(U) How can SFA forces best enable FSF Integration into MDO, thus providing a means for FSF to support achieving integrated deterrence during crisis and conflict?**

(U) SFA may be the preferred method for the Army as part of a multinational alliance, coalition, or partnership to enable FSF synchronization, and integration in MDO. Throughout the competition continuum SFA supports MDO capabilities. While units, teams and elements conducting SFA may build FSF capacity and capability, enable interoperability and improve access and influence, these efforts alone, or even collectively, do not necessarily ensure success in MDO. SFA enabling FSF integration into MDO may be needed to optimize coalition force success.

## RUSSIA STRATEGIC INITIATIVE

(U) The Russia Strategic Initiative (RSI) is a program of research led by the Marshall Center and funded by USEUCOM as part of a larger U.S. Department of Defense effort. Its mission is to enhance understanding of the Russian way of war, decision making, and critical vulnerabilities to inform strategy and planning. RSI has identified the following priority areas for research and analysis based on their assessment of the needs of the Department of Defense. The academic year 2023 research agenda emphasizes primary sourcing, where appropriate, and research methodology where applicable, to better enable DOD leadership to shape and execute strategic choices in the Russian Problem Set, balanced against the Department's pacing challenge of the People's Republic of China.

**1. The Russian State**

**(U) Russian Views of Deterrence, Escalation Management, and Conflict Termination.**
**(U) Russian Defense Industry – Domestic and Exports.**
**(U) Russian Use of Private Military Companies After the War in Ukraine.**
**(U) Domestic Stability Impacts on National Security Decision Making.**
**(U) Russian Security Reactions to NATO Expansion.**

(U) See notes at head of section.

**2. <u>Examination of Russian Critical Vulnerabilities</u>**

**(U) Systemic Weaknesses at the State level.**

**(U) Critical Vulnerabilities to Military Operations and Systems.**

(U) See notes at head of section.

**3. <u>Russian Military</u>**

**(U) Military Modernization and Reconstitution.**

**(U) Russian Military as a Learning Organization.**

**(U) Russian Military Training, Readiness, and Morale.**

**(U) Russian Cyber and Influence Activities.**

**(U) Advanced Conventional and Nuclear Weapon Employment.**

**(U) Russian Concepts of Future Warfare and Future Force Design.**

**(U) Senior Military Leader Decision Making and Command and Control.**

**(U) Proficiency and Interoperability in Combined Warfare.**

**(U) Doctrine/Military Thought Related to Use of Non-Strategic Nuclear Weapons.**

**(U) Deployment of Reconnaissance Strike Complex and Supporting C4ISR Architecture.**

(U) See notes at head of section.

**4. <u>Russia-China</u>**

**(U) Security Cooperation.**

**(U) Military Alignment.**

**(U) Defense-Industry.**

(U) See notes at head of section.

**5. <u>Russia's Global Geography</u>**

**(U) Russian Strategy in the Arctic Post-NATO Expansion.**

**(U) Russian Global Engagement After the War in Ukraine**

(U) See notes at head of section.