

**SUBJECT: 2019 General Larry D. Welch Deterrence Writing Award**

**KEY POINTS:** The Commander, United States Strategic Command (USSTRATCOM) is sponsoring a competition for the best research papers on the subject of strategic deterrence. Participating schools and researchers are asked to submit papers to USSTRATCOM by 10 May 2019. Submissions will be judged in one of two categories (“Senior Researcher” and “Junior Researcher”). The winning author in each category will be recognized with an award, as well as an invitation and funding to attend the 2019 Deterrence Symposium in Omaha, Nebraska scheduled for 31 July & 1 August 2019.

- Criteria for papers are:
  - Recommended paper length: 10-20 double-spaced pages (however, paper length is flexible to meet individual school requirements)
  - Thorough citing of references and historical facts
  - Submissions must not contain any classified references or material
  - Submit papers electronically to Mr. Michael Powell, michael.w.powell6.civ@mail.mil
- A team of deterrence experts will judge papers on the following criteria:
  - Applicability to current deterrence issues
  - Quality of argument
  - Implications for future deterrence analysis, planning, and operations
  - Historical accuracy
  - Quality of reference material

**SAMPLE RESEARCH TOPICS:** Strategic deterrence is a broad subject. Potential paper topics should not be limited to nuclear deterrence. Possible topics include, but are not limited to:

- How might emerging capabilities of U.S. and allies/partners contribute to deterrence?
- How might nuclear deterrence fail in a limited way and what should we do if it does?
- U.S. Deterrence Credibility: Do Gaps Exist?
- How do nations either bilaterally or internationally establish norms, rules of the road, and thresholds for emerging capabilities, and how do they contribute to deterrence? What are meaningful thresholds with space and cyber capabilities?
- How might potential adversaries use emerging capabilities to contribute to their deterrence strategies?
- How might operations in space and cyberspace affect intended or unintended escalation?
- How can the use of space and cyberspace capabilities contribute to escalation control?
- What systems/structures are necessary to develop and execute integrated deterrence campaigns (both within DOD, USG and with allies and partners)?
- How should our approach to deterrence change as we continue to reduce the number of nuclear weapons?
- How does the development of international space operations norms contribute to deterrence?
- What are the challenges for deterring attacks on space capabilities (e.g., attribution, what constitutes an attack, and symmetry in response)?
- How do space operations contribute to deterrence in other domains?
- What are the unique challenges for deterrence in the cyberspace Area of Responsibility (e.g., attribution, diversity of threat (cyber hacker to nation state), possible cascading effects in response, and how to deter without revealing capabilities)?

- How do cyberspace operations contribute to deterrence in other domains?
- What kind of arms control measures should we pursue or avoid too strengthen deterrence and assurance?
- What criteria should be used to evaluate the effect of arms control on deterrence?
- Does arms control deter attacks in space and cyberspace? If so, how?
- What kind of arms control measures might Russia pursue or avoid too strengthen their deterrent?
- What are the deterrence implications of a fissile material control regime?
- What are the differences and commonalities in deterring Violent Extremist Organizations (VEOs)?
- How does asymmetry of stakes affect deterrence?
- How can United States Strategic Command areas of responsibility contribute to deterring VEOs?
- Where should operations aimed at deterring VEOs be focused (e.g., at the suicide bomber or the financier who supports the organization)?
- What can we learn from business practices (e.g., hostile takeover, mergers, etc.) that might be applicable to deterrence theory?
- Are deterrence concepts from law enforcement & criminology relevant to strategic deterrence issues?
- Are the lessons learned from “non-cold war” deterrence relevant to today’s challenges?
- How can advancements in cognitive and neural sciences improve our understanding of adversary decision making?
- Would increased US extended deterrence commitments change our capability requirements? If so, how?
- In a proliferated world is deterrence a series of bi-lateral or multi-polar interactions?
- Do further reductions in nuclear capability resulting from arms control contribute too or detract from the nation’s non-proliferation goals (e.g., what are the implications for extended deterrence)?
- What nuclear capability is sufficient to provide central & extended deterrence?
- What are the enduring requirements for the nation’s nuclear forces?
- How do New Start Treaty nuclear force reductions (or further reductions) affect U.S. deterrence and its ability to hedge against geopolitical and technological challenges?
- What are the deterrence implications of possible changes in force posture (possibly in combination with reduced force levels)?
- Do phase zero deterrence operations enable deterrence during conflict? If so, how?
- What are the unique challenges to re-establishing deterrence after nuclear use?
- What can we learn from history regarding deterrence during conflict (e.g., why didn’t the Germans and Allies use chemical weapons during WWII)?
- What is the role of non-military elements of power in deterrence operations during conflict?
- What new interagency structures/bodies are required to operationalize a whole of government approach for deterrence operations?
- How do other nations view deterrence conceptually, how are their views different from the U.S., and what are the pros and cons of each view?
- Does the global rise of BMD and other defensive capabilities suggest increased emphasis on deterrence by denial? What are the implications for U.S. and allied deterrence strategies?
- What are the deterrence, assurance and stability implications of ongoing regional crises (e.g., Ukraine, South China Sea, and East China Sea)?
- What are the deterrence and assurance implications of Russia re-embracing their nuclear capabilities?

- Nuclear modernization in today's environment?
- Does the concept of extended deterrence apply in space and cyberspace?
- Are there more effective ways to achieve deterrence, assurance and stability objectives?
- Should nations pursue capabilities that negate potential adversary deterrent capabilities?
- Given the complex & rapidly changing security environment, how do we ensure our deterrent and assurance capabilities remain credible?
- How do we develop and operationalize an integrated capabilities (space, cyberspace, conventional, nuclear, etc.) deterrent strategy?
- What is the future of arms control among major state powers?
- What are the deterrence, assurance and extended deterrence implications of changes in the Middle East?
- What are the deterrence, assurance and stability implications of state initiated Grey Zone conflicts?

**QUESTIONS:** If you have any questions, you may contact Mr. Michael Powell, Telephone: 402-232-7758, DSN: 272-7758, email: [michael.w.powell6.civ@mail.mil](mailto:michael.w.powell6.civ@mail.mil).