



# The Impact of the Changing Nature of Deterrence on Space



A Forces Transformation and Resources Seminar  
Marshall Hall, Room 155, Fort Lesley J. McNair, Washington, DC 20319  
April 13-14, 2009

## Monday, April 13<sup>th</sup> - Actions and Responses

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- 0900-0915**      **Welcome and Introductory Remarks**  
**Dr. James M. Keagle**, Director, Transforming National Security Seminar Series, Center for Technology and National Security Policy, NDU
- 0915-1000**      **Keynote Address: Strategic Assessment**  
**Brigadier General Jay Santee**, Principal Director, Space and Cyber Policy, Office of the Assistant Secretary of Defense for Global Strategic Affairs
- 1000-1030**      **Break**
- 1030-1145**      **The Contested Regime: Space Treaties, Pledges and Initiatives**  
*Theme: What are the advantages and disadvantages of a treaty-based approach? How can American priorities help shape such initiatives? What role will changing technologies play in supporting or undermining international agreements in space.*  
**Dr. James Lewis**, Senior Fellow, Center for Strategic and International Studies  
**Colonel Philip A. Meek**, USAF (Ret.), Attorney and Counselor, Austin, TX  
**Colonel M.V. Smith**, USAF, PhD Student, University of Reading, U.K. and (Former) Chief, Future Concepts, National Security Space Office
- 1145-1245**      **Lunch**
- 1245-1400**      **A New Balance: Thresholds for a Successful Strategy of Deterrence**  
*Theme: What constitutes a hostile act? How do space capabilities affect the strategic calculus for the conduct or deterrence of irregular, conventional, or nuclear conflicts? In an escalating conflict, for instance, is the destruction of a military satellite equivalent to the loss of a naval destroyer? Is it appropriate for the U.S. to draw clear 'red lines?'*  
**Major General Jim Armor**, USAF (Ret), CEO, The Armor Group, LLC  
**Mr. Dean Cheng**, Senior Asia Analyst, Center for Naval Analyses  
**Mr. Bruce MacDonald**, Senior Director, Congressional Commission on the Strategic Posture of the United States, United States Institute of Peace
- 1415-1430**      **Break**
- 1430-1545**      **Response Options**  
*Theme: Is an attack against U.S. space infrastructure equivalent to other kinds of conventional attacks? The challenge is not to become enamored by the more fascinating threats, but to address the more simple and probable ones. Consider, for example, how the U.S. might respond to the destruction of a commercial imager? What constitutes the range of possible responses?*  
**Colonel Sean D. McClung**, Director, National Space Studies Center, Air University  
**Dr. Karl Mueller**, Senior Political Scientist, RAND  
**Marcia S. Smith**, President, Space and Technology Policy Group
- 1545-1600**      **Closing Remarks**  
**Dr. James M. Keagle**, Director, Transforming National Security Seminar Series, Center for Technology and National Security Policy, NDU

## Tuesday, April 14<sup>th</sup> – Technologies, Capabilities, and Resources

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- 0900-0915**      **Welcome and Introductory Remarks**  
**Dr. James M. Keagle**, Director, Transforming National Security Seminar Series, Center for Technology and National Security Policy, NDU
- 0915-1030**      **Understanding Dependencies - Physical Infrastructure**  
*Theme: Overview of space military architecture, current vulnerabilities, and threats. Discussions will include a possible framework for incorporating space-based assets into nuclear, information, and conventional deterrence strategies.*  
**Mr. Richard H. Buenneke**, Deputy Director, Office of Missile Defense and Space Policy, Bureau of International Security and Nonproliferation, U.S. Department of State  
**Dr. Roger F. Pajak**, Senior Intelligence Officer, National Reconnaissance Office  
**Mr. Brian Weeden**, Technical Consultant, Secure World Foundation
- 1030-1045**      **Break**
- 1045-1200**      **Understanding Dependencies - Electronic Infrastructure**  
*What steps can the DoD take to protect against disruptive electronic, cyber, and targeted attacks against America's vital space architecture? How can the interagency work with private industry and the international community to produce more resilient security posture?*  
**Dr. Martin Libicki**, Senior Management Scientist, RAND  
**Mr. Martin Oetting**, Senior Project Lead, Space Protection Program, The Aerospace Corporation  
**Dr. Scott Pace**, Director, Space Policy Institute, Elliott School for International Affairs, George Washington University
- 1200-1300**      **Lunch**
- 1300-1415**      **Scenario: A Space Degraded Environment**  
*Theme: How should the DoD plan to function in a space-degraded environment? What are the implications for other domestic agencies? This panel should consider examining terrestrial and space-based contingencies.*  
**Dr. Andrew May**, Analyst, Office of Net Assessment, Office of the Secretary of Defense  
**Dr. S. Pete Worden**, Director, Ames Research Center, NASA  
**Dr. Peter L. Hays**, Associate Director, Eisenhower Center for Space and Defense Studies
- 1415-1430**      **Break**
- 1430-1545**      **Senior Policy Panel**  
*Theme: This panel will consider the meaning of "space based" issues. As part of the global commons, the importance of space is related to its broader strategic context. Space policy, consequently, demands a cross-cutting, whole-of-government approach. How can policy-makers help ensure space is one part of the issue, rather than the entire issue?*  
**Ambassador Roger Harrison**, Eisenhower Center for Space and Defense Studies, United States Air Force Academy  
**Dr. Ronald M. Sega (Ret)**, Vice President for Energy, the Environment and Applied Research, Colorado State University Research Foundation  
**Major General Richard E. Webber**, Assistant Deputy Chief for Air, Space and Information Operations, Plans and Requirements, Headquarters U.S. Air Force
- 1545-1600**      **Closing Remarks**  
**Dr. James M. Keagle**, Director, Transforming National Security Seminar Series, Center for Technology and National Security Policy, NDU