

National Defense University Symposium

Towards a Theory of Spacepower

The Influence of Spacepower on History and Implications for the Future

Sponsored by
The Institute for National Strategic Studies
at
Fort Lesley J. McNair, Washington, DC
April 25-26, 2007

This symposium will review the progress of a year-long research effort headed by the Institute for National Strategic Studies, commissioned by the Office of the Under Secretary of Defense for Intelligence, to articulate an overarching spacepower theory. This spacepower theory is designed to provide policy makers and space professionals – whether in the national security, civil, or commercial sectors – with a shared intellectual foundation to address space activities. The goal is a comprehensive, robust, and articulate spacepower theory that describes, explains, and anticipates principles governing the uses of space.

Introduction

In the nearly fifty years since Sputnik first orbited earth, we have made tremendous advances, allowing the use of space and space-based technologies in ways that until recently were unimaginable. Space systems, services, and capabilities are used to improve productivity in areas as diverse as entertainment, information services, banking, farming, mining, construction, surveying, as well as in providing communications, navigation, weather forecasting, and enabling search and rescue missions. Science is improved by space-based monitoring of the Earth and its atmosphere, as well as far-reaching missions to the outer reaches of the solar system. Space may be able to mitigate future environmental and resource challenges such as global warming, environmental disasters, and depleted energy sources. Although space based or space-enabled technologies are ubiquitous across the civil, commercial, military, intelligence, and scientific sectors, debate on the use of space is inconsistent. Protagonists focus intently upon the purported costs and benefits of specific courses of action in the absence of any overarching framework for judging the logic, significance, proper balance, or future implications of space activity. The United States, as the most heavily invested space-faring nation, will benefit from this broadly accepted path for developing the nation's space capability, especially its military and intelligence components. Recent tests of a Chinese anti-satellite system serve to remind us of the need and urgency of establishing this comprehensive framework of spacepower.

Objectives

The draft Spacepower theory presented during this symposium is merely a starting point. This forum provides an opportunity to present ideas, challenge assumptions, and offer alternative views in order to shape the final product. During this symposium we will:

- Solicit feedback on the proposed spacepower theory,
- Engage in a dialogue with experts and the public on spacepower,
- Explore alternate spacepower concepts, and
- Test assumptions and hypotheses.

PROGRAM

Wednesday, April 25, 2007

0730 – 0900 Registration

0905 – 0915 Administrative Remarks

0915 – 0945 Welcome and Opening Remarks

Dr. Stephen J. Flanagan, *Vice President for Research and Director, Institute for National Strategic Studies, National Defense University*

Mr. Thomas G. Behling, *Deputy Under Secretary of Defense for Preparation and Warning, Office of the Under Secretary of Defense for Intelligence*

0945 – 1000 Break

1000 – 1200 Panel I – *Introduction to Spacepower Theory*

Moderator – Ms. Elaine Bunn – *Senior Research Fellow and Director, Future Strategic Concepts Program, Institute for National Strategic Studies, National Defense University*

Presenters:

Dr. Harold R. Winton, *Professor of Military History and Theory, School of Advanced Air and Space Studies, Air University*

Col Charles D. Lutes, *U.S. Air Force, Senior Military Fellow, Institute for National Strategic Studies, National Defense University*

Discussant:

Dr. James J. Wirtz, *Professor, Department of National Security Affairs, Naval Postgraduate School*

1200 – 1345 Lunch and speaker – *Cooperation and Competition in Space*

Ms. Susan Eisenhower – *President Emeritus, The Eisenhower Institute*

1345 – 1515 Panel II – *Mahan, Geopolitics, and the Implications for Spacepower Theory*

Moderator – COL Michael S. Bell, *U.S. Army, Senior Military Fellow, Institute for National Strategic Studies, National Defense University*

Presenters:

Dr. Jon T. Sumida, *Associate Professor of History, University of Maryland*

Dr. Robert L. Pfaltzgraft, Jr., *Shelby Cullom Davis Professor of International Security Studies, The Fletcher School, Tufts University*

Discussant: Dr. Stephen J. Flanagan, *Vice President for Research and Director, Institute for National Strategic Studies, National Defense University*

1515 – 1530 Break

1530 – 1700 Panel III – *Economic Power of Space*

Moderator – Col Charles D. Lutes, U.S. Air Force, Senior Military Fellow, Institute for National Strategic Studies, National Defense University

Presenters:

Mr. Lawrence H. Williams, Vice President, International and Government Affairs, Space Exploration Technologies

Dr. Henry R. Hertzfeld, Research Professor of Space Policy and International Affairs, George Washington University

Discussant: Mr. Edward M. Morris, Director, Office of Space Commercialization, National Oceanic and Atmospheric Administration

Thursday 26 April 2007

0800 – 0920 Panel IV – *Space and the Commonwealth of Mankind*

Moderator – Lt Col M.V. “Coyote” Smith, U.S. Air Force, Visiting Military Fellow, Institute for National Strategic Studies, National Defense University

Presenters:

Mr. Russell L. (Rusty) Schweickart, Chairman, ASE-NEO Committee & founder of The Association of Space Explorers

Mr. Jeff Krukin, Executive Director of the Space Frontier Foundation

Discussant: Dr. Eligar Sadeh, Assistant Director, Center for Space and Defense Studies, U.S. Air Force Academy

0920 – 0935 Break

0935 – 1100 Panel V – *International Perspectives on Spacepower*

Moderator – Dr. Peter L. Hays, Visiting Fellow, Institute for National Strategic Studies, National Defense University

Presenters:

Dr. Alexei Arbatov Scholar-in-Residence and Program Co-chair Moscow Center, Carnegie Endowment for International Peace

Dr. Li Genxin, Secretary General of the China Arms Control and Disarmament Association (CACDA)

Discussant: Dr. James Oberg, Soaring Hawk Productions

1100 – 1120 Break

1120 – 1300 Panel VI – *The Influence of Spacepower on the Future*

Moderator – Ambassador Roger G. Harrison, Director, Center for Space and Defense Studies, U.S. Air Force Academy

Presenters:

Dr. William E. Halal, Professor of Science, Technology, & Innovation and Co-Director, Institute for Knowledge & Innovation, George Washington University

Dr. Stuart Eves, Principal Engineer, Military Systems, Surrey Satellite Technology Limited

Discussant: Mr. George T. Whitesides, Executive Director, National Space Society

1300 – 1445 Lunch and speaker - *The Importance of Space to U.S. Security*

The Honorable Ryan Henry, Principal Deputy Undersecretary of Defense for Policy

1445 – 1615 Panel VII – *Space and National Security*

Moderator – Gen Richard B. Myers, USAF, (Ret), Colin Powell Chair for Ethics, Character, and Leadership, National Defense University and formerly Chairman, Joint Chiefs of Staff

Presenters:

Dr. Michael O’Hanlon, Senior Fellow, The Brookings Institution

Dr. James A. Lewis, Director and Senior Fellow, Technology and Public Policy Program, Center for Strategic and International Studies

Discussant: The Honorable Keith Hall, Vice President, Booz Allen Hamilton and formerly Director of the National Reconnaissance Office

1615 – 1630 Closing Remarks