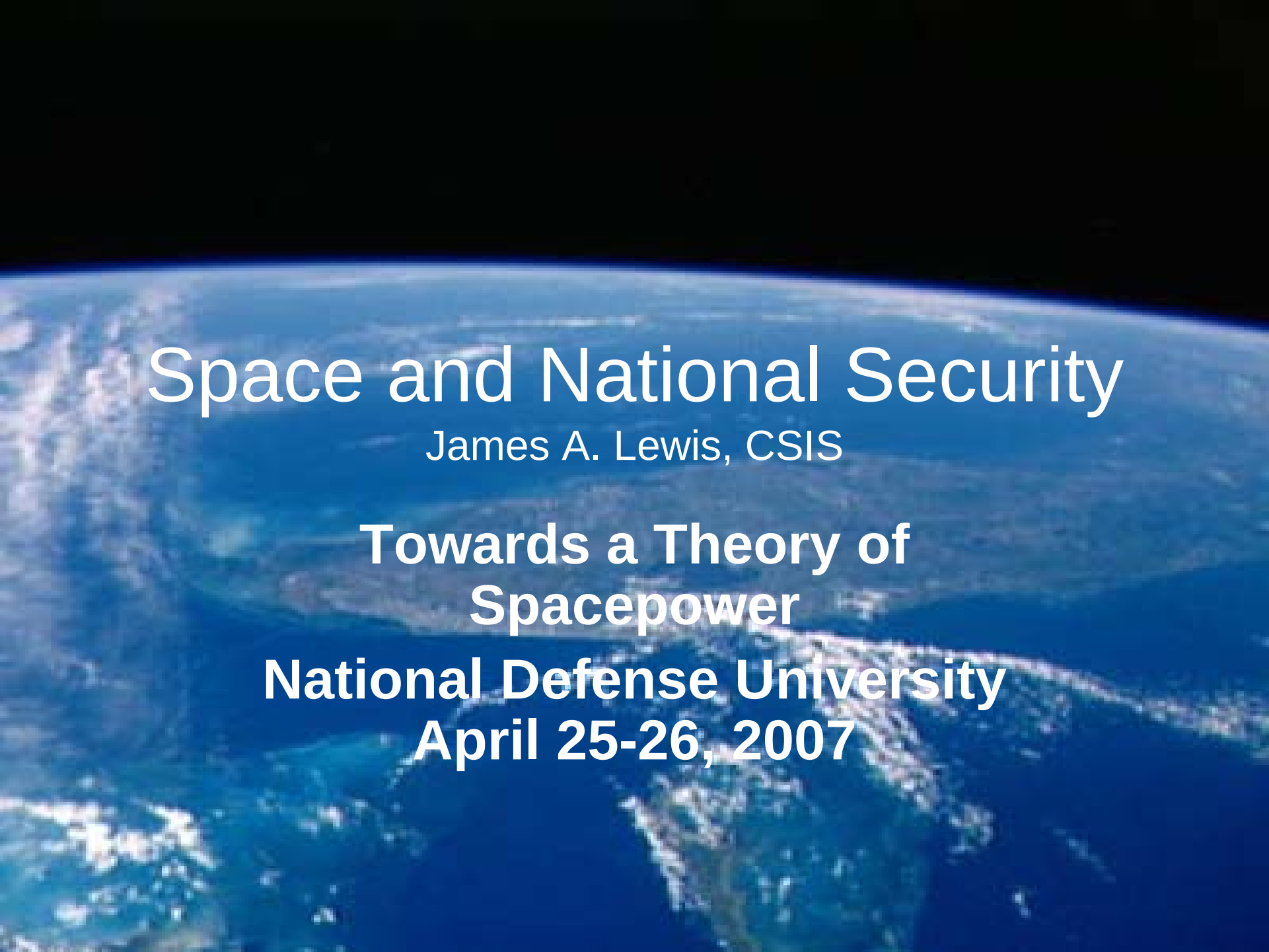


Space and National Security

James A. Lewis, CSIS

Towards a Theory of Spacepower

National Defense University

April 25-26, 2007

National Security Space: Issues and Trends, 1950-2000

- Application of Force and Arms Control
- Organization and Architecture
- Doctrine
- Acquisitions
- National Technical Means and Intelligence

Application of Force

- Firepower
  - From space
  - In space
  - With space
- Space forces, as they are now configured, cannot destroy an opposing force nor are they the instrument of victory in battle.

Organization

- Bifurcation and diffusion from the start
  - Intra-service competition
  - Civil / Security
  - Military / Intelligence
- **Goldwater-Nicholls, the most important military reform in American history, does not extend into space.**

Architecture

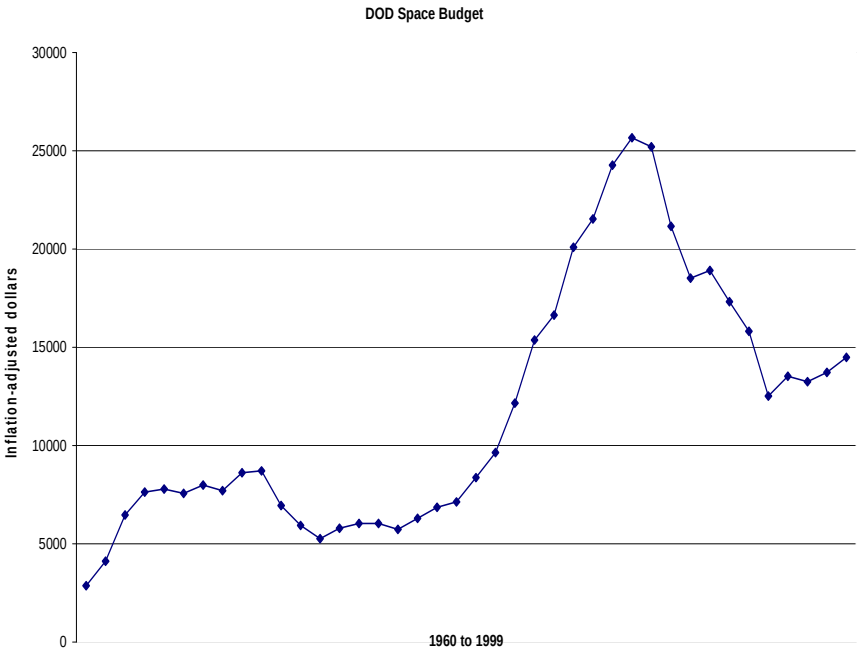
- Reflects organizational diffusion
- Incremental, stovepiped approach to space presence.
- **The most important point about national security space architecture is that until the 1990s, there was none.**

Doctrine

- **Space shapes larger trends in military thinking; trends in military thinking shape space doctrine.**
- 1980s - Qualitative superiority
  - Information and intangibles
  - The accidental space war
- 1990s – Formal space doctrine appears
- From national/strategic to operational/tactical
  - Integration of space assets and services

Acquisitions

- U.S. faces increased complexity and risk.
- U.S. response is decreased investment and increased oversight.
- **Could the U.S. ever again have a Corona program, with its 13 consecutive failures?**



Intelligence After the Cold War

- Issues
  - New classes of opponents
  - New technologies to collect against
- Advances
  - NGA/ NSA cooperation
- Evolving role of spatial intelligence
  - Support the warfighter as core mission?

Opponent Response

- Counter U.S. informational advantages
- Concealment, mobility and deception
- Jamming and spoofing
- Anti-satellite weapons
  - Directed Energy
  - EMP
  - Kinetic attack
  - Network attack

Arms control

- US was first (1950s) to propose peaceful uses.
- Washington Naval Conference Redux?
  - Unverifiable
  - Inexperienced/untrustworthy partners
  - Inadequate venues
  - Multilateral assurances as a substitute for asymmetric advantage.
- **Every Administration since Eisenhower (even Carter!) has decided that space arms control was not in the national interest**

Conclusions

- Spacepower remains less useful than airpower, sea power, or land power.
- The diffusion of technology and an integrated global economy is reduceing the historic advantage provided by space.
  - Legacy investments and the U.S. capability to utilize space assets still provide unique advantages.
- Organization and development of doctrine remain key challenges for the U.S. national security space effort.