

# **Steps to Strategic Security and Stability in Space: Banning KE-ASAT Tests**

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# Space Environment of the Future: Serious Risk of Space Instability

- Inherent risk of strategic instability when relatively modest defense investments can create disproportionate danger to an adversary
- Inherent risk of crisis instability when “going first” pays much greater benefits than “going second”
- Evolving technology guarantees greater threats to everyone’s vital space assets in the future, and greater potential for strategic and crisis instability
- Everyone, even non-space powers, will face this risk
- Apart from possible hostile threats, all countries face the growing serious threat of space debris. At current growth rates, by 2035 there will be more than ten times as much debris in space as there is today, already too much.

# Strategic Posture Review Commission: Space Stability Should Be U.S. Security Objective

- Strategic Posture Commission recognized the primacy of space stability when it recommends that the U.S. should “develop and pursue options for U.S. interest in stability in outer space includ[ing] the possibility of negotiated measures.”
- **These words apply to other countries as well**
- Allows everyone to continue to reap civil, military, and commercial advantages of space, allows continuing commercial space development and utilization
- Gives space and non-space powers, allies and adversaries alike, a greater vested interest in avoiding space conflict

# Our Goal Should Be a Stable and Secure Space Regime

- Secure, stable space environment (strategic and crisis stability) that encourages space conflict prevention
- Focus on stability and transparency
- Promote behavior that maximizes the world's ability to utilize space and minimizes operational and other problems
  - Codes of conduct/rules of road, debris mitigation, space traffic management
  - Confidence building measures, agreements that constrain most destabilizing dimensions of offensive space capabilities
  - Modest steps that can be built upon, build confidence and trust
- Reduce incentives to strike space assets or take other destabilizing space actions; ensure space service continuity
  - Distributed capabilities, many nodes, defense in depth; back-ups
  - Enhanced attribution techniques, more robust SSA
- Space-based offense is vulnerable, destabilizing: how can space-based weapons be verifiably banned?

# Strategic Posture Commission on Arms Control and Space

- “This is an issue that will not disappear”
- “The actual promise of space arms control is unclear. The United States should seriously study these issues and prepare to lead an international debate about how to craft a control regime in space that serves its national security interests and the broader interests of the international community.”

# Strategic Dialogue with Russia, China, Others Should Include Space

## Strategic Posture Commission:

- “We also recommend seeking a strategic dialogue with Russia **broader than nuclear treaties**, to include civilian nuclear energy, ballistic missile defenses, space systems, and ways of improving warning systems and increasing decision time. Although the dialogue with Russia is most important in the nuclear field, we also recommend renewing strategic dialogue with a broad set of states **interested in strategic stability, including not just Russia and NATO allies but also China and U.S. allies and friends in Asia.**”
- “There are other serious civilian issues such as space situational awareness, space debris, and space traffic management that could be used to develop international discussion and working relationships”

# Diplomacy and Space

- There are important non-hostile threats as well as hostile threats to be addressed, sometimes both together, e.g., KE-ASATs
- Greater world space dependence suggests we all stand to gain from diplomatic efforts in this area. Should seek steps that:
  - Promote security interests of all states parties
  - Are verifiable
  - Promote space stability
- The United States is reconsidering its past rejection of space arms control, and others should reconsider their stands as well
- Arms control alone won't bring space stability, but doesn't mean it can't help
- Obama Administration likely to overturn current U.S. rejection of space arms control, use as one element of a much larger security toolkit to deal with space infrastructure security and strategic stability in space
- Military to military exchanges are a very important element in the dialogue process

# CFR Task Force Endorses Space Dialogue, KE-ASAT Testing Ban

- “Both China and the United States have recently demonstrated anti-satellite capabilities. Because the United States relies far more on satellites for commercial and military activities, it is far more vulnerable to antisatellite weapons than China is.”
- “However, the United States has refused to discuss space weapons with China and has insisted on complete freedom of action in space”
- “The Task Force believes that the United States has a clear interest in beginning discussions with China on space weapons, including proposals to ban tests of kinetic anti-satellite weapons.”
- “The United States and China, along with Russia, should take the lead in implementing a trilateral test ban, which could form the basis for expansion to a global ban.”

# KE-ASAT Testing Ban

- KE-ASAT debris threat is real; even a modest KE-ASAT space war could create vast amounts of debris:
  - 40 destroyed satellites could quintuple the quantity of space debris, even higher percentages in most trafficked orbits
  - 100 destroyed satellites could produce a ten-fold-plus increase in debris
- Proposal: ban testing or performing launches that intercept orbiting assets
- Could be expanded to include all debris-producing activities
- Need to address “near-miss” testing, peaceful proximity operations, missile defense, and other issues: should not be any “show-stoppers”
- Would not solve all space security issues, but would be an important start
- Could be expanded to cover:
  - All debris-producing space actions
  - All use, not just tests: unacceptable means of combat, like chemicals
- Precedent of 1963 Limited Test Ban Treaty
  - Didn’t solve the entire nuclear testing problem but made an important start
  - Addressed key environmental issue affecting all countries
- Message of the LTBT: Don’t let the best be the enemy of the good
- If we do not solve the space debris problem, we will effectively prevent future generations from reaping space benefits that mankind currently enjoys, a terrible legacy

# Contact Information

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# Congressional Commission on the Strategic Posture of the United States

- Created by FY2008 Defense Authorization Bill, began in May 2008, chaired by Dr. William Perry; vice-chaired by Dr. James Schlesinger
- Bipartisan group supported by five expert working groups, 2 tiger teams
  - National Security Strategy & Policies (Ash Carter, Jim Miller; Michelle Flournoy)
  - Deterrent Force Posture (Denny Blair)
  - Nuclear Infrastructure (Linton Brooks)
  - Countering Proliferation (Arnie Kanter, Dan Poneman; Rebecca Hersman)
  - External Conditions and Trends (Gordon Oehler)
  - Force Structure Tiger Team (Jim Miller)
  - Arms Control Tiger Team (Bruce MacDonald)
- Facilitated by U.S. Institute of Peace
- Congress unsuccessfully wrestling with a number of nuclear issues, growing concerns over nonproliferation and arms control, BMD, cyber, space, etc.
- Intended to inform the Nuclear Posture Review
- Essentially reprised the role of the Scowcroft Commission of 1982-1983

# Council on Foreign Relations Task Force on U.S. Nuclear Weapons Policy

- Begun in Spring 2008, timed for release at start of new Administration, sought to influence Nuclear Posture Review, SPRC status uncertain
- CFR selected Task Force co-chairs, Brent Scowcroft and William Perry, and members:
  - Ash Carter, Michelle Flournoy, Linton Brooks, John Deutch, John Gordon, Arnie Kanter, Frank Miller, Jack Matlock, + 13 others
  - Important overlap with Strategic Posture Commission experts
- Gary Samore, now Obama's WMD "czar" at NSC, was CFR VP for Studies, authorized Task Force start-up and served as a Task Force observer
- Task Force focus was next 4 years, shorter than SPRC
- Bipartisan, but not as equal as SPRC