

# Space Strategic Stability

## Assessing U.S. Concepts and Approaches

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### ISSUE

Improvements in Russian and Chinese counterspace capabilities raise the risk of rapid, and perhaps unintended, military escalation that could endanger the space-based capabilities the United States relies on for a broad array of military and economic functions.



### APPROACH

This report identifies and explores six propositions that undergird U.S. thinking about escalation in space. These propositions encompass the following:

1. the incentives to employ offensive capabilities early in a conflict
2. the benefits of leveraging foreign and commercial systems
3. the utility of communications channels for crisis prevention and de-escalation
4. the feasibility of promoting shared norms of responsible behavior
5. the selective revelation of capabilities to deter adversaries
6. the use of reversible capabilities to manage escalation.

We investigate the implications of each proposition and offer recommendations for how to avoid unintended escalation in space while preserving U.S. advantage.



### KEY FINDINGS

The researchers' analysis yielded the following findings:

- It is plausible that there exists an offensive advantage in space that generates an incentive to attack first. However, this proposition cannot be fully validated given the fact that conflict in space has not occurred. Adversary perceptions of the balance are more likely to determine their reactions to changes in the strategic environment than any objective analysis of the offense-dominant character of the domain.
- Expanding collaboration with allies, partner countries, and commercial organizations is a central plank in the U.S. Department of Defense (DoD) space strategy. Doing so raises the risk of adversary escalation, especially against commercial systems, because China and Russia have indicated their intention to target

commercial actors providing space support to DoD. A desire to avoid horizontal escalation might reduce the relative likelihood of attacks on allied and partner countries.

- Effective communications channels might be more difficult to establish in space because of China's reticence to use existing vehicles for information-sharing or to engage in meaningful space security dialogue.
- The United States is unlikely to soon achieve the norm diffusion necessary to restrict Chinese and Russian space activities given these countries' deeply rooted skepticism about U.S. intent in and dependence on space. These beliefs will be difficult to change without compromising capabilities the United States has indicated it wishes to preserve.
- The selective revelation of information about concealed U.S. space capabilities might reduce uncertainty about U.S. advantages, but challenges in assessing the military balance in space might complicate adversary assessments of the revealed information. The resulting misinterpretations could reduce a disclosure's deterrent effect or even provoke undesired escalation.
- Employing even reversible counterspace capabilities might risk escalation if those capabilities cause accidental damage or their intent is misinterpreted by adversaries.

These findings suggest several implications for the U.S. government, the joint force, and the U.S. Space Force (USSF) in particular:

- The DoD space enterprise should separately evaluate U.S. and adversary incentives to undertake attacks at different stages of crisis and conflict. Similarly, there is value in identifying adversary responses to more- or less-resilient architectures.
- Enhancing the resilience of commercial, allied, and partner country constellations can help deter attacks but might be insufficient. Given that commercial satellites are likely to be targeted alongside U.S. government assets, articulating potential U.S. responses to attacks on commercial satellites can bolster deterrence.
- USSF should prepare for a strategic environment in which communications channels with China are not available in a crisis or conflict. Nevertheless, it might be worth keeping open the offer to develop communications channels if, and when, Chinese perspectives change.
- Despite the obstacles to U.S. norms advocacy, persistent attempts to open dialogue are still valuable to preserve the possibility of future improvements. U.S. norms advocacy might also foster greater cohesion among U.S. allies and partners and help to counter Russian and Chinese alternatives that are contrary to U.S. interests.
- A greater ability to release information on current space capabilities and emerging risks will enhance the U.S. ability to persuade other actors of the dangers inherent to the current environment and the benefits of desired responses.
- Decisionmakers should weigh the prospective signaling benefit of selective revelation against the opportunity costs associated with enabling an adversary to develop countermeasures that might reduce the disclosed capability's military utility.
- Demonstrations or revelations of U.S. space capabilities should be accompanied by additional strategic messaging to improve the likelihood that an adversary interprets the information as intended.



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