

That's No Moon: An Analysis of how Developments in Military Space Weaponry Influence United States' Security Strategies



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Abstract

This study explores how advancements in military space weaponry by U.S. adversaries have influenced United States national security strategies. Grounded in realism, the research hypothesizes that military developments by adversarial states lead to reactive adjustments in U.S. security strategies. The study employs a processtracing methodological approach, focusing on Russia's November 15, 2021 anti-satellite (ASAT) missile test as a pivotal case. By analyzing the rhetorical elements of government documents before, during, and after the event, the research identifies a clear shift in U.S. strategic posture—from general competitive rhetoric to direct condemnation and expanded military planning in space. The findings reinforce the realist view that security dilemmas extend into the space domain, where power balancing and strategic competition shape state behavior. The research underscores the growing importance of proactive space security strategies and international cooperation to prevent escalation and maintain strategic stability in an increasingly contested domain.

Methodology and Case

Methodology

Approach:

- -Single Case Process Tracing
- -Rhetorical Analysis of Archical Sources,
- *See Rhetorical Coding Guide; Framework adapted from Dr. Lantis (2025, p. 10)
- Documents Utilized in Research:
- -Government and Military Reports
- -Official Press Releases

Sources Obtained from the Following:

- -The National Security Archive
- -Aerospace Center for Space and Strategy Archive
- ·Homeland Security Digital Library
- -Center for Strategic and International Studies'
- -Aerospace Security Document Library
- -Official Government Websites

Case

- -November 15th, 2021 Russian ASAT test on its own satellite in orbit
- -US reponse was immediate
- -Provided a tangible, pivitol case to analyze
- -Documents were analyzed before, during, and after the case to trace shifts in US security responses



| Rhetorical Element | Description | Indicators | Example |
|---------------------------------------|---|--|---|
| Condemnation/ | An individual, | The US faces a threat or | From March 2022: |
| Assigning Blame | organization, or government body is blamed for some type of wrongdoing (Adapted from Lantis, 2025) | competition; there will be a need to "beat" an adversary The US faces a threat or competition; there will be defensive shifts in language; emphasizing national security or framing of arms buildups | "China and Russia, in particular, are developing various means to exploit the perceived U.S. reliance on space- based systems and challenge the U.S. position in the |
| | | • | space domain" |
| Shifts in Space Engagement Rules | A change in how the US government would approach military action in space | The US faces a threat or competition; an introduction to new policies with language of necessity or security The US faces a threat or competition; justification for expanded authority in space, defensive measures | From December 9, 2020: " the United States will continue to use space for national security activities, including for the exercise of the inherent right of self-defense. Unfettered access and freedom to operate in space is a vital national interest." |
| Increased Investments of Space Assets | The increased investment of space assets or modernizing of military technology by the US | The US faces a threat or competition; emphasis of space as a strategic domain linking investments to security The US faces a threat of competition; framing space as essential to superiority, linking investments to global leadership | From May 2021: "The national security space community, and in particular the Space Force, must work aggressively and strategically with commercial partners to integrate new and emerging capabilities, leverage and support innovation, and respond intelligently to the rapidly changing technological landscape." |

Research Question and Hypothesis

Research Question:

How have developments in military space weaponry influenced U.S. national security strategies?

Variables:

Independent Variable: Developments in Military Space Weaponry
Dependent Variable: Shifts in United States' Security Strategies

Hypothesis:

Developments in military space weaponry by United States adversaries lead to reactive shifts in United States' security strategies.

Literature Reviewed

Major Fields Studied
Realism and Structural Realism

- •Key assumptions of realism vital in security-focused environment (Savu 2021)
- Offensive and Defensive Realism
- The Security Dilemma

Evolution of Arms and

Technology

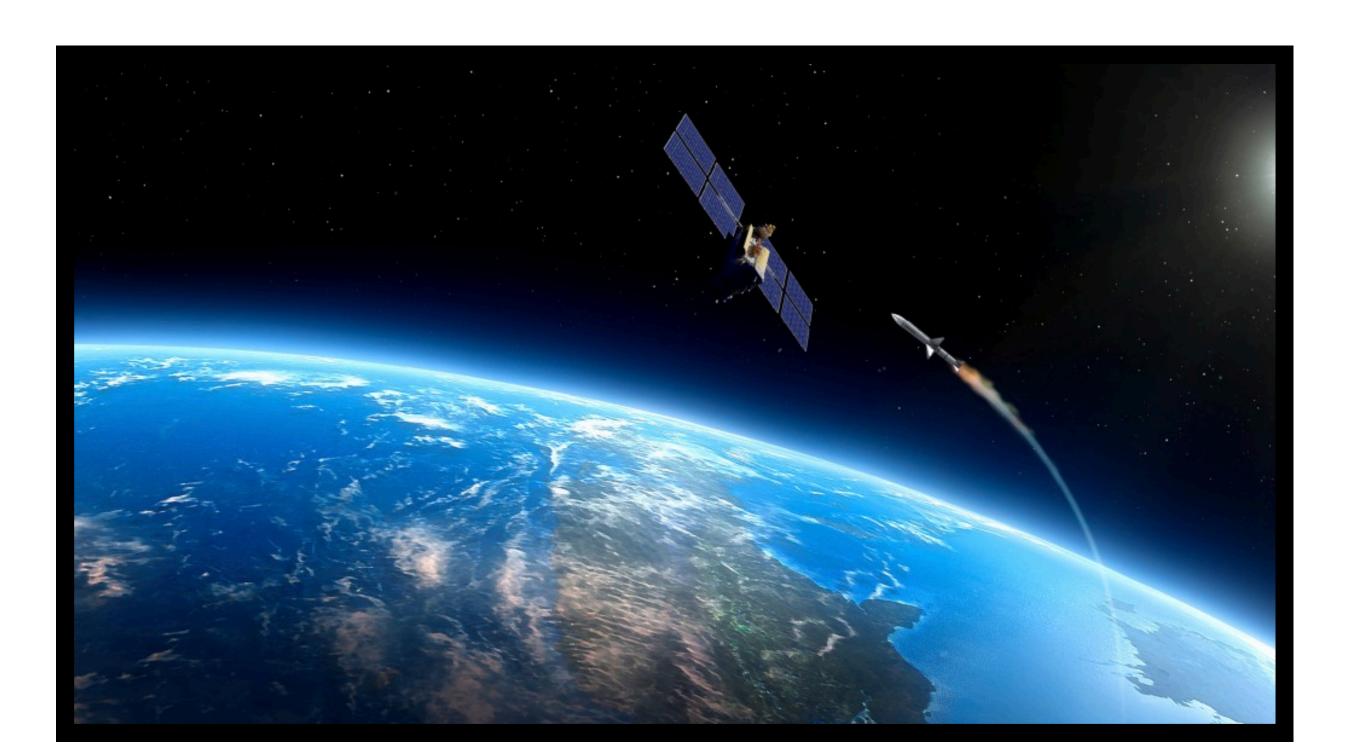
- Arms Races
- •Global Reach Capabilities (Lee and Thompson 2017)

Space Power

New frontiers, Old Realities(Dolman 2012); Structural realismSpace Hegemony

Analysis Findings

The progression of the documents indicates that the Russian ASAT test served as a catalyst for a change in U.S. security strategies, with space at the forefront. It evolved from a forceful condemnation to a strategic adjustment, solidifying the U.S. perception of space as a warfighting domain that requires active defense. This is in line with my initial argument and hypothesis—based on a defensive realist position we will expect to see a reactive shift on the part of the United States if an adversary engages in developments in their space weaponry.



Conclusions

- -This study proved effective in capturing shifts in security strategies through a process-tracing approach. It allows for a deep and nuanced analysis of rhetoric and its shifts.
- -Limitations:

The findings of this study are based on publicly available government documentation, which does not fully capture classified security strategies or government responses.

While this study provides evidence of reactive security shifts, the single case study design does limit its generalizability.

-Further research could expand upon this topic by incorporating additional cases.

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