Deterrence in Space: It's Not Complicated

By

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Outer space is often described in strategic terms as the "high-ground" or a "contested-domain," depending on the political environment and policy objectives. The application of deterrence, most often discussed in a nuclear context, ebbed and flowed over the past six decades with successive changes in policy. It is often over-thought and complicated to support academic or political assumptions. The idea of deterrence is a fundamental concept applied to terrestrial domains that began to see application to outer space. Yet the concept and its application to outer space adds additional complexity to what is fundamentally simple.

Deterrence Is Domain Agnostic

Thomas Schelling, in *Arms and Influence*, writes, "Deterrence involves a threat to keep an adversary 'from starting something,' or 'to prevent [an adversary] from action by fear of consequences.'" That threat must include not only a capability but the political will to use that capability if an adversary decides to "start something" despite the capability being threatened.

If an adversary decides the political will does not exist to use the capability, there is no deterrence. Conflating deterrence with academic concepts such as hard deterrence, soft-deterrence, or integrated deterrence does not create deterrence. Rather, these concepts deny the fundamental truth of what deterrence is and what it takes to achieve it; a nation must possess the capability and will to use force.

In the space domain, this means the United States must have the capability and will to apply force in outer space. It is also important to remember that adversaries like Russia and China may view deterrence differently.

The United States is consistently guilty of mirror imaging when it comes to its views on deterrence—assuming the Russians and Chinese think in similar terms about costs and rewards. This creates the false belief among Americans that a capability designed to deter will do so, when, in fact, the adversary thinks very differently. For the People's Liberation Army (PLA), for example, preemption or compellance is a deterrence doctrine. What does this mean for deterrence in outer space? Consider the following scenario.

The PLA launches a limited kinetic anti-satellite (ASAT) attack on American space assets or those of an ally. The attack destroys key space assets vital to mount military operations prior to an invasion of Taiwan. Simultaneously, the People's Republic of China (PRC) utilizes ASAT capabilities in geosynchronous orbit to interfere and disable commercial space assets, which affect the general population of the United States.

Following these attacks, the PRC employs hybrid warfare to encourage the US to avoid interfering with its annexation of Taiwan or risk the loss of further space assets. The loss of these space assets, while not debilitating, coupled with the PRC's messaging, creates a psychological response that compels the president to sit out the conflict. In short, the lack of American offensive and defensive space capabilities forces the United States to capitulate when it cannot deter Chinese aggression.

A second scenario involves the PRC employing fractional orbital bombardment systems (FOBS) utilizing nuclear-armed hypersonic glide vehicles. The PRC employs multiple FOBS as a first strike against the United States' nuclear arsenal. With no space-based capabilities to deter or defend against such systems, the US loses critical second-strike assets.

After the attack, the PRC takes advantage of the psychological impact of a first strike to fracture the confidence of the American people and compel the president to restrain from using the nation's ballistic missile submarines, which are still needed to deter Russia and additional strikes from China.

In short, the lack of effective space-based deterrence capabilities once again play a critical role in American decision-making.

In both cases, deterrence failed because of assumptions about the PRC rooted in mirror imaging. The lack of acknowledgment of the PRC's stance on deterrence, which is compellance, results in the political failure to deploy a capability to deter attack and, if deterrence fails, respond with overwhelming force.

Resilience Is Not Deterrence

Over the past decade, many space professionals turned to resilience as the best method for deterrence in space. The theory of resilience relies on the redundancy of American space assets as the means for deterring adversary attack. This view also mirror images adversary thinking and makes assumptions about adversary behavior that is rooted in idealism and not realism.

Resilience is not deterrence. It is a quiet acknowledgement of inadequate defensive/offensive capabilities and a façade for a lack of space-based deterrence capabilities and the will to use them. At present, the United States lacks the capability needed to hold adversary space assets at risk and, by default, deter those adversaries from harming American interests in space.

Conclusion

Deterrence is not complicated. The formula is simple. Effective deterrence = capability x will x communication. Norms, resilience, and other alternatives to this simple formula never set the conditions for effective deterrence. At best, they give the allusion of deterrence and allow politicians to temporarily escape hard decisions.

However, that time is quickly coming to an end. President Biden and future presidents will undoubtedly face increasing risk in space and must make the tough decisions. The United States cannot afford to lose the next war because it is left blind and deaf because of attacks on its space assets. Now is the time to take a hard look at Russian and Chinese views on space warfare and stop assuming they have the same aspirations as Americans.

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