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Action Item #1: Protect U.S. Space Systems

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The Trump Administration on June 30, 2017 resurrected the National Space Council, which, in the words of the president "will be a central hub guiding space policy within the administration."

The council, terminated in 1993 by President Bill Clinton, will be chaired by Vice President Mike Pence and foster space activity coordination, cooperation, and space technology and information exchange among agencies and with the private sector.

Mr. Pence's first agenda item must be shaping top-level policy guidance to boost protection of national security space systems.

Proliferation of space and counter-space capabilities is a concern inadequately addressed in existing policy and strategy documents, particularly when it comes to the development of a space deterrence strategy and the acquisition of systems to defend U.S. interests in space.

Both China and Russia continue to move steadily towards the development of counter-space weapons designed to deny, degrade, disrupt, deceive or destroy America's satellites, depriving it of its global "eyes and ears" and world-circling data processing platforms so essential to its national security.



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The Pentagon has particular concerns about weapons for jamming GPS signals and satellite communications, dazzling satellite sensors with ground-based lasers, and destroying satellites using ground-based guided missiles and orbiting anti-satellite platforms.

China's 2007 destruction of a defunct Chinese weather satellite in space sparked international outrage when the anti-satellite weapon launched from earth created thousands of pieces of space debris.

China's most recent direct-ascent ASAT tests took place in January 2010, January 2013, July 2014, and October 2015 using the same tracking, targeting, and guidance systems as the interceptor tested in 2007, although these tests did not involve debris-producing collisions with satellites.

In May 2013 China launched an object into space on a ballistic trajectory that took it near geosynchronous orbit where the United States operates critical early warning, intelligence, and communications satellites.

Russia too is investing significantly in a full range of capabilities, to include ground-based and orbiting ASAT kinetic weapons, lasers, jammers, and cyber weapons.

Increasingly an extension of war on earth, the United States must respond when national security space systems are violated and not risk giving the impression that perhaps the country does not have either the capability or the will to follow through on its declared policies.

As history has shown, deterrence may succeed when the enemy finds the threat of intolerable punishment to be likely, if not certain, in response to its aggression.

But establishing effective deterrence in space is a challenge. There are no universal boundaries to frame the adversary's decision-making and base our own expectations about what is likely to happen, all of which would facilitate the formulation of a deterrence strategy.

The United States must instead work to tailor deterrence strategies to the particular adversary and contingency and communicate that threat to the responsible and accountable leaders. Deterrence must exploit adversaries' strategic vulnerabilities, which are different for every nation and which may include satellites.

U.S. leaders must clearly spell out for the targeted country what it will mean when U.S. national security space networks come under attack, networks that could very well include U.S. or foreign government or commercial systems that provide national security functions.



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For deterrence to work, the adversary should have a good understanding that the United States holds its assets at risk, be they in space, or on land, at sea, or in the air. For this, the United States must be able to identify the attackers and hold the source of aggression accountable, which requires improved space situational awareness capabilities, to include more sensors in space.

The United States should invest political and monetary capital in the development of required weapons. Resources allocated to the space protection and space control missions thus far have been paltry, with funding for space research and development at a 30 year low.

The entire earth and the space above it is a potential battle ground for missile defense and satellite defense. This is an existing and unavoidable reality.

Given this reality, the addition of space-based interceptors to the current Ballistic Missile Defense System would improve protection against increasingly sophisticated ballistic missile systems and provide a line of defense against boosting satellite attack missiles.

Space-based interceptors would be capable of intercepting ASATs in very low earth orbit, which would make the space debris issue negligible. This needs to be urgently investigated.

Strategic messaging is critical to a successful deterrence strategy, especially communicating what will be done should deterrence fail.

The National Space Council needs to reaffirm the U.S. right to self-defense in space and strive to be clear on what other nations should expect should they violate U.S. space systems.

Council members also should strive to educate American citizens and allies about the realities of national security space before critical capabilities are lost. This public education is important if U.S. leaders are to develop new policies and initiate new programs to further the space protection priority.

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