

Preventing an Arms Race in Outer Space

A backgrounder on the militarization and weaponization of outer space

Definitions

Militarization of Outer Space: Space has been militarized since the earliest communication satellites were launched. Today, militaries all over the world rely on satellites for command and control, communication, monitoring, early warning, and navigation with the Global Positioning System. Therefore, “peaceful uses” of outer space include military uses, even those which are not at all peaceful—such as using satellites to direct bombing raids or to orchestrate a “prompt global strike” capability, which is “the ability to control any situation or defeat any adversary across the range of military operations.”

Weaponization of Outer Space: Space weaponization is generally understood to refer to the placement in orbit of space-based devices that have a destructive capacity. Many experts argue that ground-based systems designed or used to attack space-based assets also constitute space weapons, though are not technically part of the “weaponization of outer space” since they are not placed in orbit. Some also argue that weapons that travel through space in order to reach their targets, such as hypersonic technology vehicles, also contribute to the weaponization of space. Many elements of the US ballistic “missile defense” system currently being developed or planned could constitute space weapons as well, as many possess “dual-use” characteristics, allowing them to destroy space assets as well as ballistic missiles.

Preventing an Arms Race in Outer Space (PAROS): The overwhelming majority of UN member states are concerned that the weaponization of outer space will lead to an arms race and insist that a multilateral treaty is the only way to prevent such an arms race, emphasizing that this treaty would not limit space access, but would prevent such limitations. Russia has argued that if all states observe a prohibition on space weaponization, there will be no arms race. Russia and China also support establishing an obligation of no use or threat of use of force against space objects and have submitted a draft treaty to the UN on preventing the placement of weapons in outer space. (See the fact sheet on Outer Space and the United Nations.)

Effects on arms control and nuclear disarmament

The weaponization of space will destroy strategic balance and stability, undermine international and national security, and disrupt existing arms control instruments, in particular those related to nuclear weapons and missiles. These effects will inevitably lead to a new arms race. Space weaponization would seriously disrupt the arms control and disarmament process. The United States' withdrawal from the Anti-Ballistic Missile Treaty in 2001 and the development of US ground- and sea- based “missile defenses” have already increased tensions with Russia and have led to increased missile proliferation.

The deployment of these technologies or the development of space-based technologies will likely cause Russia, as well as the United States (in response to Russia), to make smaller and smaller reductions of their nuclear arsenals and to reject the development of new treaties to regulate nuclear weapons and their delivery systems. China would likely build more warheads to maintain its nuclear deterrent, which could in turn encourage India and then Pakistan to follow suit.

The United States: The biggest obstacle to keeping space for peace

While as far as anyone knows there are currently no weapons deployed in space, the US policy on outer space is concerning. Under the Bush administration, the 2006 US National Space Policy explained that the US will “preserve its rights, capabilities, and freedom of action in space; dissuade or deter others

from either impeding those rights or developing capabilities intending to do so; take those actions necessary to protect its space capabilities; respond to interference; and deny, if necessary, adversaries the use of space capabilities hostile to US national interests.”

At that point, the United States rejected treaties “limiting its actions” in outer space and its space policy firmly opposed “the development of new legal regimes or other restrictions that seek to prohibit or limit US access to or use of space,” and insisted that “proposed arms control agreements or restrictions must not impair the rights of the United States to conduct research, development, testing, and operations or other activities in space for US national interests.”

In July 2010, the Obama administration released the new US National Space Policy. It states that the US shall pursue bilateral and multilateral transparency and confidence-building measures to encourage responsible action in, and the peaceful uses of, space. The new policy also notes that the US will consider proposals and concepts for arms control measures if they are “equitable, effectively verifiable, and enhance the national security of the US and its allies.” The language in this new policy suggests that this is a significant departure from its predecessor. However, the actual implications of this change are still unknown. While claiming that it is open to considering space-related arms control concepts and proposals, the US argues that such proposals must meet the “‘rigorous criteria’ of equitability, effective verifiability, and enhance the national security interests of the US and its allies.” The Russian-Chinese joint draft treaty on the Prevention of the Placement of Weapons in Outer Space (PPWT) would not meet these criteria according to the US, as it is “fundamentally flawed” and would not provide any grounds for commencing negotiations.

The United States Department of Defense continues to invest in programs that could provide anti-satellite and space-based weapons capabilities. While the technology itself is highly controversial, it presents major business opportunities to companies that know how to overcome moral, logistical, and financial roadblocks. War has always been highly profitable, and dominance of outer space leads to further profits in conventional warfare. As the Air Force Space Command stated in its 2003 Strategic Master Plan, “the ability to gain space superiority (the ability to exploit space while selectively disallowing it to adversaries) is critically important and maintaining space superiority is an essential prerequisite in modern warfare.” Superiority in conventional warfare relies on military assets in space, especially satellites, which are used for intelligence, remote sensing, navigation, and monitoring, among other things. Since the US currently asserts its political will through force, protection of its own space assets and disturbance of others’ is key to guaranteeing US dominance.

More information

Reaching Critical Will
www.reachingcriticalwill.org

Global Network Against Weapons and Nuclear Power in Space
www.space4peace.org

Space Security Index
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