



Preventing the Militarization of Outer Space

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Introduction

For decades, the question has been whether the use of outer space would be on the table for the use of all nations and humanity. Amid the most rapid technologically advancing period in human history, the question of whether another great space race would be on the horizon. Beyond getting to Mars, or developing the next colony for human inhabitation, the current state of the world revolves around the number one driver of our society... technology.

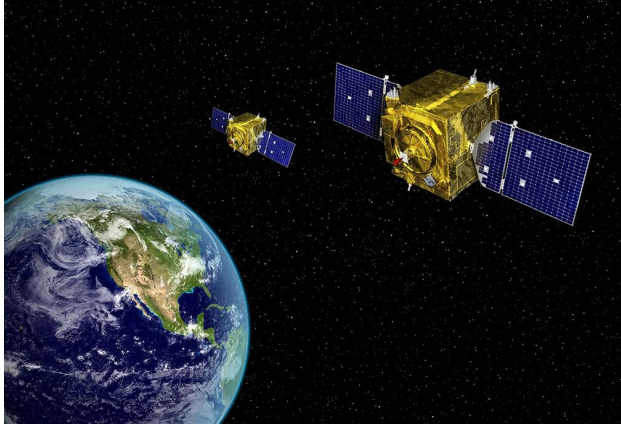
With so much dependence on technology ranging from satellites for cellular service to national security, it's only a matter of time before uncomfortable conversations arise that would impose an inherent safety risk revolving around the militarization and weaponization of outer space. With this in mind, the question presents itself. Can the use of outer space as we know it be protected, or is it only a matter of time before a geopolitical frenzy causes the next World War with a galactic endorsement?

Background

The regulation of outer space by the United Nations stems back to the 1960s when the Treaty on the Peaceful Uses of Outer Space was agreed in 1967.¹ This was a major milestone at the time as the space race and Cold War were in full swing. The treaty restricted weapons of mass destruction from being placed in space, restricted military activities, and most importantly designated space as a communitive zone of peace. Further, this initial treaty was

¹ 'Outer Space Treaty', *Wikipedia*, n.d., https://en.wikipedia.org/wiki/Outer_Space_Treaty

fundamental in establishing international space law which helps govern space as we know it today.



Current Situation

Beyond the militarization of space in itself, outer space as a whole has become much more commercialized in recent years. Ranging from independently wealthy individuals to large multinational corporations, access to space is easier than ever. This is accompanied by the fact that many countries have more of their integral governmental functions anchored in outer space, this has made space an essential measure of not only national security but a fundamental source of infrastructure in itself.

Among the globally recorded number of satellites, there are more than 15,000 satellites in orbit to date. This has exponentially increased over the last several years, with companies such as Starlink and OneWeb planning on launching upwards of 40,000 new satellites in the coming years to bolster their worldwide services. In doing so, this just increases the “space traffic” with more items in orbit.

In relation to military operations and government agencies, the current use of space revolves around national security and intelligence gathering. This ranges from reconnaissance missions, navigating expeditions, preemptively planning for attacks, monitoring air space, providing secure communications

channels, and more. This is fundamental to the operations of countries and militaries around the world making it an invaluable asset.

In the case of several countries, there has been a development of Space Force or equivalents. For example, the United States started its Space Force in 2019 with the goal being, “Maintaining space superiority is an emerging capability required to protect U.S. space assets from hostile attacks.” (U.S. Space Force, 2024). This belief has driven many countries to look at space as the next means of protecting their country. With the increase of satellite activity, growth of technology, and integral government operations increasing, the fear of the weaponization of space is prevalent.

As the number of satellites and space traffic increases, it can be a serious security risk as more non-mobile objects create the risk of collisions and loss of data. Therefore, the fear is that the next direction countries may take is the aspiration of global supremacy through the use of outer space.

Some may ask, “Why is global supremacy in outer space bad?”. Well, as seen in what can only be described as spy expeditions in the last several years, it is only time before countries utilize space resources to do the same. There is an ever-prevalent fear that there is a matter of time before countries or private citizens/corporations gain unauthorized access to government-owned or powerful satellites. This would be a rather severe threat to not only national security but also detrimental to the relationship internationally regarding space use.

With one of the largest reasons for war being the attainment of resources, what is keeping countries from going to war over the use of space? It is already very clear that the militarization of outer space will be disastrous for all involved, as any war, battle, or even disagreement may lead to blind spots even possibly resulting in the potential for susceptible ground attacks.



Russian anti-satellite weapons development

Fifty-seven years ago, through the Outer Space Treaty, the United States and the Soviet Union agreed to codify a fundamental nuclear taboo: nuclear weapons shall not be stationed in orbit or elsewhere in outer space. But there is growing concern that Russia is working on an orbiting anti-satellite (ASAT) weapons system involving a nuclear explosive device that would, if deployed, violate the treaty, undermine space security, and worsen the technological and nuclear arms race.²

The White House confirmed on 15 February 2024 that U.S. intelligence uncovered evidence that Russia is developing an ASAT weapon that “would be a violation of the Outer Space Treaty, to which more than 130 countries have signed up to, including Russia.” Russian President Vladimir Putin issued a nondenial denial, claiming on Feb. 20 that Russia remains “categorically against...the placement of nuclear weapons in space.”

An ASAT system involving a nuclear explosive device could produce a massive surge of radiation and a powerful electromagnetic pulse that, depending on the altitude of the explosion and the size of the warhead, could

indiscriminately destroy, blind, or disable many of the 9,500 commercial and military space satellites now in orbit.

Russia’s reported pursuit of a nuclear-armed ASAT system is another troubling attempt by the Kremlin to challenge the fundamental norms against nuclear weapons and to use nuclear weapons to intimidate and coerce. But it would not be a “Sputnik moment” requiring parallel ASAT weapons system development or radical new countermeasures by the United States.

As with the exotic nuclear delivery systems that Putin first announced in 2018, including a long-range, underwater torpedo and a nuclear-powered cruise missile, a nuclear-capable ASAT weapons system would add a dangerous capability. But it would not alter the existing military balance of terror.

Russia already fields a range of ASAT system capabilities, including co-orbital systems that can launch cyberattacks and engage in electronic jamming of specific adversary satellites. As with China, India, and the United States, Russia has already demonstrated a capability to use a ground-based missile to hit and destroy an orbiting satellite. All nations with nuclear-armed ballistic missiles also have the latent ability to detonate a nuclear explosive device in space. From 1958 to 1962, the United States and the Soviet Union conducted nuclear explosive tests in the outer atmosphere.

The United States, which has the largest number of satellites in orbit, is already working to improve the resilience of its military communications, early-warning, and surveillance assets. A new Pentagon program soon will put constellations of smaller, cheaper satellites into orbit to counter space-based threats. Any corresponding U.S. nuclear-armed ASAT system effort would put U.S. and other

² This section is adapted from Daryl G. Kimball, ‘Keeping outer space nuclear weapons free’,

Arms Control Today, March 2024, <https://www.armscontrol.org/act/2024-03/focus/keeping-outer-space-nuclear-weapons-free>

satellites at even greater risk and do nothing to protect U.S. capabilities in space.

Off-and-on talks designed to maintain the peaceful use of space, including restrictions on ASAT weapons systems, have been stymied for years. A long-standing Chinese-Russian treaty proposal would ban objects placed into orbit with the intent of harming other space objects. It also would ban the “threat or use of force against outer space objects,” which would still allow suborbital and ground-based ASAT weapons capabilities.

Until recently, the United States has been wary of any legally binding restrictions on ASAT weapons systems in part because they might restrict U.S. ground-based missile defense capabilities or a possible space-based, kinetic anti-missile system that could involve a number of orbiting interceptors that provide a thin defense against ground-based missiles. More recently, the Biden administration proposed and rallied support for a ban on direct-ascent ASAT missile tests, which create debris fields that pose a major hazard to orbiting objects.

In the coming weeks, Washington, Beijing, and other capitals need to pressure Putin to abandon any ideas about putting nuclear weapons in orbit. As President Joe Biden noted on Feb. 16, that deployment “hasn’t happened yet, and my hope is it will not.”

The possibility of a Russian nuclear-armed ASAT system should also spur Washington, Moscow, Beijing, and other space-faring nations to get serious finally about additional measures to protect space security. They need to implement effective limits on ASAT weapons systems, including direct-ascent ASAT weapons and space-based systems that can destroy satellites and other objects traveling through space.

Russian ASAT weapons systems are not the only destabilizing factor in the dangerous nuclear and deterrence equation. In the absence of new, agreed constraints on Russian and U.S. strategic nuclear arsenals and measures to halt the growth of China’s arsenal, a costly three-way nuclear arms race could accelerate after the New Strategic Arms Reduction Treaty expires in 2026. In response, Biden needs to rally international pressure on Russia to support his proposals for talks on a new nuclear arms control framework and separate, regular dialogues with Moscow and Beijing on reducing nuclear dangers. Space and global security depend on it.

President Trump’s plan for an ‘Iron Dome’

Russia condemned an executive order by U.S. President Donald Trump to build a new missile defense shield, accusing the United States of trying to upset the global nuclear balance and pave the way for military confrontation in space.³

Trump signed an order that “mandated a process to develop an ‘American Iron Dome,’” a next-generation U.S. missile defense shield against ballistic, hypersonic, cruise missile and other forms of aerial attack.

The White House said the intention was to modernize an outdated system and address a “catastrophic threat” that had become more complex as U.S. adversaries developed new delivery systems.

But Russian Foreign Ministry spokeswoman Maria Zakharova said the plan was aimed at undermining the ability of both Russia and China to exercise nuclear deterrence.

³ This section is adapted from Dmitry Antonov, ‘Russia condemns Trump missile defence shield plan, accuses US of plotting to militarise space’, *Reuters*, 31 January 2019, <https://www.reuters.com/world/russia->

[condemns-trump-missile-defence-shield-plan-accuses-us-plotting-militarise-2025-01-31/](https://www.reuters.com/world/russia-condemns-trump-missile-defence-shield-plan-accuses-us-plotting-militarise-2025-01-31/)

In the sharpest Russian criticism so far of a policy announced by Trump's new administration, she said that the planned U.S. move would hinder the prospects for talks on nuclear arms control - something that both Trump and Russian President Vladimir Putin have said they favor.

"It (the plan) directly envisages a significant strengthening of the American nuclear arsenal and means for conducting combat operations in space, including the development and deployment of space-based interception systems," Zakharova told reporters at a news briefing in Moscow.

"We consider this as another confirmation of the U.S. focus on turning space into an arena of armed confrontation... and the deployment of weapons there.

"The indicated U.S. approaches will not contribute to reducing tensions or improving the situation in the strategic sphere, including creating a basis for a fruitful dialogue on strategic offensive arms," she said.

The White House's Iron Dome statement did not refer to strengthening the U.S. nuclear arsenal but said: "The Iron Dome will further the goals of peace through strength. By empowering the United States with a second-strike capability, the Iron Dome will deter adversaries from attacks on the homeland."

Trump and Putin have both said they would like to meet face-to-face to discuss a range of issues, including the Ukraine war, but Moscow says it has yet to receive any signals from the U.S. on when and where such an encounter could take place.

Role of United Nations

The United Nations plays an integral role in the use of outer space. Above all, the General Assembly established universal global norms and principles to guide all Member States. The UN, through the adoption of the Outer Space Treaty, has protected space as a *global commons*, a place reserved to serve the peaceful needs of all humanity. The treaty does not prohibit all military use of space. Non-weaponized satellites, such as reconnaissance and early warning satellites, are permitted. But space deployment of destructive devices, is banned.

The United Nations General Assembly has no direct power over development or deployment of weapons in space by its Member States. The Member States are sovereign. Under the UN Charter's Article 51, they have a right to self-defense. This article routinely is cited by Member States to justify their military programs.

The role of the General Assembly, since it cannot make enforceable international law, is establishing international principles and norms, the guidelines that all Member States are expected to follow. On issues like this, the General Assembly can *appeal* to Member States and establish an international consensus on acceptable state behavior. If consensus is impossible, it can vote on resolutions, although states on the losing side are likely to reject the authority of such resolutions.

Landmark UN Resolutions

In recent times, the United Nations has convened to make strides towards protecting the use of space, and the safety of the world as a whole through several resolutions.

Illustrating the great importance of the topic, and difficulty of finding consensus, in 2024 the General Assembly approved seven separate

resolutions on peaceful uses of outer space.⁴ This is more than any other topics. The large number shows the impossibility of getting interional consensus. Many of the resolutions are reaffirming previously approved measures, or redirecting support for what was previously discussed in past initiatives and sessions.



Among the most important resolutions passed on this topic in 2024:

Resolution 79/20, No first placement of weapons in outer space, adopted 2 December 2024, ‘Reaffirms the importance and urgency of the objective of preventing an arms race in outer space and the willingness of States to contribute to reaching this common goal’. Resolution 79/20 was highly controversial, adopted on 2 December 2024 with a vote of 129-53-7, the high number of opponents showing the depth of international disagreement.⁵

Resolution 79/21, Further practical measures for the prevention of an arms race in outer space. This resolution, ‘Expressing grave alarm over the threat of an arms race in outer space, which would impair the prospects for limiting and reducing armaments in general and erect

insurmountable barriers to international cooperation in the peaceful exploration of outer space’. It went further, ‘Recognizing the catastrophic consequences of an arms race in outer space, which should be used exclusively for peaceful and creative purposes, or any military conflicts in outer space and that the prevention of an arms race in outer space would avert a grave danger for international peace and security’. Resolution 79/21, ‘Calls upon all States, and above all those with major space capabilities, to this end: (a) To take urgent measures to prevent for all time the placement of weapons in outer space and the threat or use of force in outer space, from space against Earth and from Earth against objects in outer space’. Resolution 79/21 was very controversial, it passed adopted on 2 December 2024 with a vote of 128-50-8, showing exception disagreement.

Resolution 79/22, Reducing space threats through norms, rules and principles of responsible behaviours, adopted 2 December 2024, ‘Reaffirms that all States must conduct their activities in the exploration and use of outer space, including the Moon and other celestial bodies, in conformity with international law, including the Charter of the United Nations, urges Member States to ensure that their space policies comply with their obligations, and encourages those States that have not yet become parties to the international treaties governing the exploration and use of outer space to give consideration to ratifying or acceding to them in accordance with their national law’.⁶ This resolution was somewhat controversial. It did not get consensus support. Instead it passed on 2 December 2024 with a by a vote of 169-8-5.

⁴ All seven 2024 resolutions and votes can be found at ‘Resolutions adopted by the General Assembly at its 79th session’, UN General Assembly Resolutions Tables’, n.d., <https://research.un.org/en/docs/ga/quick/regular/79>

⁵ *No first placement of weapons in outer space*, A/Res/79/20. New York: United Nations, 2 December 2024, <https://docs.un.org/en/A/RES/79/20>

⁶ *Reducing space threats through norms, rules and principles of responsible behaviours*, A/Res/79/22. New York: United Nations, 2 December 2024, <https://docs.un.org/en/A/RES/79/22>

Resolution 79/87, International cooperation in the peaceful uses of outer space, adopted 4 December 2024, ‘Urges Member States that have not yet become parties to the international treaties governing the uses of outer space 14 to give consideration to ratifying or acceding to those treaties in accordance with their national law, as well as incorporating them into their national legislation’.⁷ It also ‘Urges all Member States, in particular those with major space capabilities, to contribute actively to the goal of preventing an arms race in outer space as an essential condition for the promotion of international cooperation in the exploration and use of outer space for peaceful purposes. This resolution achieved consensus. It was passed without a vote.

Country and Bloc Positions

China advocates for the peaceful use of outer space, firmly opposing the weaponization of space and any arms race associated with it. The Chinese government asserts that all its military activities in space are defensive and peaceful. Furthermore, China is concerned that U.S. space programs may destabilize global security and is actively seeking mutual treaties to limit U.S. militarism in this domain.

On the other hand, the European Union (EU) emphasizes the importance of strengthening international law regarding outer space. The EU calls for universal principles that apply to all states and is advocating for a treaty that would prohibit the deployment of anti-satellite weapons (ASAT) in outer space. The EU opposes any initiatives that would grant permanent national advantages or specifically target its military programs.

Meanwhile, the Non-Aligned Movement (NAM), which consists of 120 member states,

supports the preservation of outer space as a global commons. NAM generally endorses measures proposed by the U.S., China, Russia, and the EU, provided that these align with their interests. The movement is particularly focused on ensuring access to the benefits of space exploitation in any agreements reached.

Some possible proposals for action

With such a diverse topic that is still developing day by day, there are many options the United Nations can implement. The delegations at First Committee at ODUMUNC represent sovereign Member States. This leaves them free to develop the proposals they think in the best national or global interest. Some possible paths for action are suggested below.

The General Assembly can reaffirm the principles of the *Treaty on the Peaceful Uses of Outer Space*. The exact wording could be controversial. If the proposed resolution asks states not to further weaponize outer space, it specifically tries to stop deployment of defenses against missile attacks, for example, the United States and its allies can be expected to strongly protest. If it asks states not to deploy weapons on Earth that work in outer space, such as anti-satellite weapons, Russia almost certainly will demand rejection.

The GA can specify implementation of restrictions on the uses of outer space. It can ban all military activity in outer space. Or it can establish global norms and principles for which military activities are permitted and which should be avoided.

The GA can establish a governing body that directly oversees the functions of outer space. This body, which can be made up of countries

⁷ *International cooperation in the peaceful uses of outer space*, A/Res/79/87. New York: United

Nations, 4 December 2024, <https://docs.un.org/en/A/RES/79/87>



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from a diverse background of regions and space exploration experience would oversee a UN department that effectively serves as security for outer space. Scaled properly, this would allow the governing body to report periodically on space activity and ensure everyone is adhering to the agreed-upon initiatives. Incentives will be required to give the new agency authority. Many powerful Member States will be tempted to ignore it. Incentives will be necessary to encourage their cooperation.

The GA can implement a technological development plan that would allow countries to

continue to bolster their needs and infrastructure responsibly. This could include limiting the number of satellites and orbiting material to prevent traffic that is eminent in the next several years.

Another option is to create regional pacts to aid each other in space exploration and technological development. This would not only decrease the financial burden from one country to another but also increase collaboration within regions that foster the goal of the greater good which is emphasized throughout UN resolutions.

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