

Forum: Disarmament and International Security Committee (GA1)
Issue: The militarisation of outer space
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Introduction

Outer space has long been a domain of scientific research and a field of study for all disciplines, but now it is also a stage for global competition. Satellites have played an essential role in global communication, navigation, monitoring climate and scientific research while holding a key position for the defence of various states. This dual role of the satellites blurs the line between civilian assistance and military competition which raises public concern about the potential armament and weaponisation of space.

Recent events continue to build up on these tensions. The 2007 anti-satellite (ASAT) test conducted by China and India's 2019 mission along with the creation of the United States Space Force highlight the ever growing military stakes in the orbit. Along with this, the escalation of commercial satellite constellations intensify the risk of orbital debris which challenges the long term viability of space operations.

Major actors in this agenda include the United States of America, Russia and China while private companies like SpaceX and Blue Origin persist to reshape the landscape. The Outer Space Treaty of 1967 (OST), which is recognized as the foremost safeguard which ensures that space is a realm of all of mankind and its exploration is for peaceful purposes only and the Prevention of an Arms Race in Outer Space (PAROS) initiative which discourages the placement of weapons in the Earth's orbit. They attempt to regulate activity in space but gaps persist. And as the countries continue to challenge these treaties, the threat of orbital dysfunction, or a confrontation in short, seems very much close at hand as an international security and stability concern.

Definition of Key Terms

Militarisation of outer space

Militarisation of outer space refers to the usage, development, and placement of military technology and weapons in Earth's orbit and outer space, deployed either from the Earth or from the orbit of the Earth itself.

Anti-Satellite Weapons (ASATs)

A weapon or weapons system that is used to damage or obliterate a satellite.

Prevention of an Arms Race in Outer Space (PAROS)

A United Nations initiative that aims to refrain from placing any body carrying any type of weapons into the earth's orbit, positioning them on a celestial body and threatening to use force on objects in outer space. It reaffirms the 1967 Outer Space Treaty, which intends to preserve outer space as a place designated for peaceful purposes by forbidding the use of weapons in space and the development of space weapon technology.

Dual Use Technology

Goods, software and technology that can be accessed and used by both civilian and military applications, such as GNSS, which refers to satellite navigation systems (examples include the USA's GPS, Russia's GLONASS) that provide accurate information regarding positioning, timing and navigation throughout the world. It is used for mapping, vehicle navigation and time stamping financial transactions in the civilian world. On the other hand, it is used for the guidance of missiles and Unmanned Aerial Vehicles (UAVs), and coordinating troop movements in the military.

Peaceful Uses of Outer Space

The essential principle of the peaceful uses of outer space has been defined in the UN General Assembly and embedded in the OST, stating that the exploration and utilisation of space is for the benefit of all member nations. The term "peaceful" is ambiguous: while some states understand it as non-military, some interpret it as non-aggressive, permitting military satellites as long as they are not used objectionably.

Background Information

Outer space which was once a domain for scientific exploration and placid cooperation has slowly transformed into a strategic arena where national security interests, technological progression and geopolitical competition supersede the common good. While early space activities were lead keeping scientific goals in mind, the Cold War drastically introduced a new strategic dimension where outer space holds a key position in a country's defence, intelligence gathering and assertion of global power.

Cold War Origins of Space Militarization

The Cold War marked the inception of space as a strategic military domain. The launch of the Sputnik 1 in 1957 by the Soviet Union not only initiated the space race but also marked the beginning of a fierce competition with the United States of America. In response to the launch, the United States established the Advanced Research Projects Agency (ARPA) in 1958, which led to the development of reconnaissance satellites including the Corona series. These satellites were vital in providing critical intelligence on Soviet military operations, which showcases the dual-nature of space technology. Both of these superpowers have also initiated anti-satellite (ASAT) missions; the United States conducted tests under Project SAINT while the Soviet Union developed co-orbital ASAT systems which inherently underscored the militarisation of space during this period.

Anti-Satellite Weapons and Orbital Tests

In the 1980s, the world witnessed significant advancements in ASAT capabilities. The United States conducted direct-ascent ASAT tests, which launched missiles having the ability to destroy satellites in the low-orbit of the Earth. Correspondingly, the Soviet Union developed co-orbital ASAT systems which can intercept and disable enemy satellites. This technology was not just limited to superpowers; other nations have also demonstrated their intellect by the development of ASAT systems. For instance, China conducted a direct-ascent ASAT test, using one of its own satellites for their experiment. This inadvertently generated a lot of space debris. This test raised global concerns about the implications of ASAT tests on space debris and the safety of their orbital assets.

The Outer Space Treaty and Legal Ambiguities

In 1967, the Outer Space Treaty (OST) was signed by the United States, the Soviet Union and other nations which essentially established a thorough framework for the peaceful use of outer space. This treaty clearly prohibits the placement of nuclear weapons in orbit and military activities on celestial bodies. However, this treaty permits non-aggressive military uses but banning overt weaponisation. This vagueness has allowed nations to continue developing and deploying military space programmes under the disguise of peaceful uses, which raises questions in the international community regarding the adequacy of the treaty in addressing modern challenges related to the militarisation of space.

Commercialisation and the Emergence of Private Actors

The 21st century has seen the growth of private companies regarding space missions, which presents a new set of dynamics to space militarisation. Companies, notably SpaceX and Blue Origin, are developing satellite constellations and launch capabilities which, while having primarily commercial applications, have potential military uses. This proliferation of private actors in space raises questions about the regulation and transparency of these programmes, which could possibly be weaponised by non-state actors.

Space Debris, Security Risks, and Strategic Imperatives

The militarisation of space has increased the problem of orbital space which poses a critical threat to both civilian and military satellites. ASAT trials, satellite collisions, and the increasing satellite constellations have created threatening hazards in space. For example, the 2007 ASAT test conducted by China produced more than 3000 pieces of trackable debris and countless untrackable pieces. This poses a serious threat to operational satellites.

Simultaneously, countries are integrating space into their military strategies. The US founded the Space Force while Russia and China have developed doctrines to emphasize space based programmes. The reliance on satellites for communication, navigation and reconnaissance make it vital in a country's defence system. These evolutions underscore the need for international harmony and norms to manage militarisation and ensure the long-term sustainability of space operations.

Major Countries and Organisations Involved

United States of America

The United States has made space central to its military strategies with the creation of the Space Force in 2019. Its Space Warfighting Framework, established in 2025, clearly outlines goals such as "space superiority" and denying adversary capabilities via both kinetic and non-kinetic means. It emphasises "space control", which is the ability to maintain freedom of movement in space while being able to degrade the opposing space programmes. In addition to that, the US has conducted several ASAT tests and operates global satellite systems used for conducting surveillance and reconnaissance, which have a dual use.

Russia

Russia has invested in directed energy and laser weapons, which are used to blind and disable

adversary satellite systems. The Peresvet system is one such example that has been officially described as capable of blinding reconnaissance satellites up to an altitude of 1,500 km. This reflects its strategy of developing non-kinetic counter-space capabilities that can neutralise or degrade the space-based systems of others without necessarily resorting to missiles.

China

China has taken the lead in developing dual-use space capabilities and ASATs. It tested a direct-ascent ASAT in 2007 by destroying a weather satellite that was no longer in use, producing thousands of pieces of debris. In addition, China constructed its own satellite navigation system (BeiDou), dual-purpose satellites for Earth observation and communications, and has been frequently mentioned in international reports for creating cutting-edge counterspace instruments. China presents its space operations as essential to both national advancement and strategic security.

United Nations Committee on the Peaceful Uses of Outer Space (COPUOS)

The main international body in charge of space governance is the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS), which was founded in 1959. It encourages collaboration in the peaceful exploration and use of space, creates legal frameworks, and tackles new issues like space debris, satellite traffic, and sustainability. It has more than 90 member states. The 1967 Outer Space Treaty and other important treaties were draughted with COPUOS's assistance. Although its decision-making process is based on consensus, which guarantees widespread legitimacy, it also slows down action, leaving gaps in the regulation of dual-use technologies, militarisation, and the growth of the private sector in the changing space domain.

Viable Solutions

To mitigate the legacy of Cold War style space rivalries, the committee could propose mutual orbital transparency missions where states voluntarily open portions of orbital telemetry or satellite-position data for cross-inspection. This would reduce mistrust by allowing states to verify that others are not covertly militarising satellites initially portrayed as civilian. Over time, such transparency could evolve into shared orbital oversight under UN auspices. The precedent of arms-control confidence-building measures suggests transparency helps reduce misperception and miscalculation.

Given the dangers of debris from ASAT tests, the committee could advocate a global moratorium on destructive ASAT testing, enforced by a neutral monitoring center using consolidated space situational awareness data. In exchange, compliant states might gain priority access to orbital slots or favorable time windows for satellite launches. Such

incentive-based measures can encourage restraint without requiring full disarmament immediately. The 2007 Chinese ASAT test produced over 3,000 trackable debris pieces, making it the largest known debris-creating event; this underlines why such a moratorium is urgent.

To address the loopholes in the 1967 Outer Space Treaty, the committee could propose a non-binding Code of Conduct for non-aggressive military space uses, defining clear norms for permitted dual-use activities (e.g., reconnaissance, communications) and restricting destabilising practices like on-orbit weapons deployment or jamming. Over time, this code could evolve into customary international law as more states adopt it. The benefit is that it preserves flexibility while progressively clarifying “peaceful uses.” Many experts already endorse a non-legally binding international space code of conduct as a next step.

With private entities leading in satellite launches and constellations, the committee should require registration and disclosure of dual-use capabilities for commercial systems via a COPUOS-managed licensing registry. Companies could obtain “responsible operator certification,” giving them access to launch privileges and orbital corridors in return for compliance and transparency. National licensing schemes already adopt similar principles, balancing commercial growth, security, and international obligations.

To reduce the dangers posed by orbital debris, the committee can endorse a “No-First-Debris” pledge, by which states commit not to initiate debris-generating kinetic attacks, and support a multilateral debris-removal fund financed by both states and private operators for developing cleanup technologies. In parallel, creating a neutral orbital crisis hotline would allow competing space actors to rapidly communicate and de-escalate when collision risks are detected. The lasting fallout from China’s 2007 ASAT test, with debris still threatening satellites years later shows how long-lasting debris can be.

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