

Disarmament Commission

PRESIDENT RESEARCH PACKET

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Space Militarization and the US-China Rivalry: Preventing an Arms Race in Outer Space



President's Letter:

Dear Delegates of the Disarmament Commission,

I am honored and delighted to welcome you to the Disarmament Commission as part of KAMUN'26 as we gather to dive into the relevant challenges that are faced globally and protect our future. This year, our committee is not only a forum for debate but a stage for innovation, collaboration, and bold ideas.

I am Raya Khalifa, an eleventh-grade student at King's Academy, and I am this year's president of the Disarmament Commission. The Disarmament Commission is at the heart of promoting peace, security, and cooperation among nations facing some of the toughest questions in the international community. In this forum, we are not only here to address ongoing threats but also to create a space for dialogue and communication that moves us toward sustainable solutions.

As someone who sat where you are now, a keen delegate, eager to speak up and make change, not too long ago, I can tell you that this committee will make you think deeply, argue sharply, and see perspectives you never expected. I hope that it will take you to places in your mind that you've never seen before. And I am eternally grateful that I get to be a part of your MUN journey, whether it's your first experience or your tenth.

This year, we will debate two topics: "Nuclear Disarmament in South Asia: Confidence Building between India and Pakistan," where we will look into the growing tensions in South Asia and explore pathways of communication and transparency to prevent any escalation in the region. "Space Militarization and the US-China Rivalry: Preventing an Arms Race in Outer Space" will follow the emerging challenges of ensuring that outer space remains a peaceful field rather than a new domain for conflict.

Finally, I urge you to be open-minded and take in each other's ideas. Come forth with curiosity and courage. And remember that MUN is not about who speaks the loudest, but who builds the strongest bridges. Believe in yourself, in your opinions, and in the change you can make in this world. In the words of Eleanor Roosevelt: "It isn't enough to talk about peace. One must believe in it. And it isn't enough to believe in it. One must work at it."

Kind regards,

Raya Khalifa

President of The Disarmament Commission

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Introduction:

Satellites play a major role in the United States. The US is dependent on its satellites for various forms of trade, global financial systems, and climate monitoring, as well as for warning of natural disasters. Most importantly, they are utilized for military operations. They are an asset to the national force since they control the movements of the troops, track missile launches, and are the source of communication and navigation with the military. This growing dependence has made the US vulnerable; any disruption to these satellites would initiate a national crisis.

Currently, the United States and China have the greatest global space power. China has been increasingly showcasing its space capabilities with its first successful anti-satellite missile test on January 11, 2007, giving China the upper hand. These missiles have the power to destroy the satellites that the US relies on heavily. These anti-satellite weapons are legal and do not go against the Outer Space Treaty, signed in 1967, that bans the use of nuclear weapons in space. Understanding this, China has demonstrated its capabilities publicly as a way to gain leverage in future disputes like the tensions with Taiwan and discourage any engagement from the US.

China claims Taiwan as a rebellious province and has threatened the use of force for reunification. This has been causing tensions between the US and China because the U.S has been providing military support to Taiwan, and it has been stated multiple times that they would come to Taiwan's aid if they were ever attacked by China. This creates tensions between the states, which makes it more of a reason for conflict between the states/

As both nations are increasingly developing their robust space programs, outer space has been militarized and has become a realm for rivalry and an arms race, where global satellites and other space assets could be jeopardized, and that would create a worldwide crisis.

Since outer space is still a global property, shared by all countries and essential to the future of peace and prosperity, stopping the weaponization of space is vital. Without international collaboration and control, the weaponization competition between the US and China may destabilize not just security in space but also life all over the globe, where any disruption or destruction of space assets would have direct and extensive repercussions.

Definition of Key Terms:

Arms Race:

A nationalistic competition using the accumulation and fashioning of weapons to determine superiority between 2 or more nations, where each side tries to outdo the other side in relation to weapons and military technologies.

Anti-Satelitte Weapons(ASATs):

Weapons created to destroy and take down any type of space assets in orbit, such as satellites, for leverage purposes (refer to Appendix A). These weapons can include anything ranging from missiles to lasers.

Outer Space Treaty:

The Outer Space Treaty, most notably signed by the USA, China, and many other countries in 1967, prevents the use of majorly damaging or nuclear weapons in outer space and requires all states to be held accountable for any damage caused in space activities.

Militarization of Space:

The use of different space assets to carry out military activity without putting weapons in space. This can include the use of GPS, Communication satellites, surveillance, and missile warnings and detectors.

Weaponization of Space:

The act of placing weapons in orbit whose purpose is to take down other space assets. This could include the illegal use of nuclear and highly damaging weapons, or the legal use of ASATs.

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Major Parties Involved:

The United States of America:

Possessing the largest number of satellites in orbit, with 5,184 operating satellites in orbit, the United States of America relies heavily on these satellites for various state operations, primarily military operations, where they are used for navigation, missile detection, communications, and surveillance. It also utilizes many of these satellites to control trade, organize the regional economy, and serve as a form of communication, as well as provide GPS for civilians.

The People's Republic of China:

A direct competitor with the U.S over dominance in space, the People's Republic of China possesses 628 operating satellites in orbit. Although it is significantly less than the number of US satellites, China has the upper hand when it comes to the weaponization of space. China has been increasingly showcasing its space capabilities with its first successful anti-satellite missile test on January 11, 2010. This gives China the upper hand because these missiles have the power to destroy the satellites that the US relies on heavily.

Commercial Space Companies:

The Private industry is now a driving force in space security. SpaceX (US), Blue Origin (US), and OneWeb (UK-based) are among the companies launching thousands of satellites into orbit for communications, internet, and navigation. As their role grows, they are both vulnerable targets in a conflict and important partners for governments in providing secure space infrastructure.

The Russian Federation:

Russia has moved to consider space as a battlefield and has built ASAT capabilities like the Nudol ground-based missile. It has also been charged with testing co-orbital "killer satellites" that can attack U.S. and allied assets. Russia pairs its activities in space with robust electronic warfare and jamming capabilities. It frequently stands with China on U.S. dominance in space while trying to maintain its status.

Taiwan:

Although not a major space power, Taiwan is at the focal point of the U.S.-China rivalry because of its geopolitical significance. In any U.S.-China conflict over Taiwan, satellites would be a key element for both sides: U.S. satellites for communications, intelligence, and navigation in the defense of Taiwan, and Chinese Space assets (ASATs) to counteract U.S. support. Because of this, Taiwan may cause a major conflict and the major weaponization of outer space.

Timeline:

1955:

President Dwight Eisenhower developed the principle of the "freedom of space," which gives the right to explore and pass through outer space.

1957:

The USSR launches its first satellite, named Spuntik. This sparked the US to suggest the establishment of rules for the use of outer space to the United Nations.

1959:

The US conducted its first ASAT test following the Bold Orion Program. It was a successful test and showed the military power of the US again.

1967:

The Outer Space Treaty, which put in place regulations on the use of space, most notably the prohibition of nuclear weapons in orbit, yet did not explicitly ban the use of ASATs. This treaty was initially signed by the US, UK, and USSR, and was later signed by China.

1985:

The United States successfully destroyed its own satellite using an air-launched ASAT. They used this both to take down the satellite and to demonstrate their own outer space capabilities since the USSR was dominating the space region.

Late 1980s:

The US decided to shift its focus from the use of ASATs in outer space because of the political and environmental concerns from its first ASAT test. Instead, they moved to the development of non-kinetic counterspace measures.

1997:

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The US created its "vision for 2020," which included its plans to have "control of space" and the protection of its own technologies in space. This caused China to develop counterspace assets such as ASATs to ensure that the US did not have space superiority because of their conflict over Taiwan.

2001:

The Commission to Assess U.S. National Security Space Management and Organization issued a warning to the US that they were potentially vulnerable to attack because of the development of different space assets from its space rivals, the USSR and China. This motivated the US to continue and advance its space security and strengthen its space weaponization and militarization.

2007:

China launches an ASAT to destroy its own weather satellite "Fengyun-1C", showcasing its nuclear capabilities, giving China the upper hand in the US-China conflict because these missiles have the power to destroy the satellites that the US relies on heavily for military and political purposes.

2008:

Operation "Burnt Frost" was started up by the US, which was an ASAT used to destroy a malfunctioning spy satellite, which was used as both a safety measure and an opportunity to showcase its ASAT capabilities.

2015:

China forms the Strategic Support Force (SSF), which is a branch of the People's Liberation Army committed to cyber, electronic, and space warfare, which points to Beijing's emphasis on military space power.

2019:

The United States officially establishes the U.S. Space Force, the first new U.S. military branch in decades, to shield satellites and counter threats from rivals such as China and Russia.

2020s:

Tensions increase regarding Taiwan, with experts cautioning that any future war may include ASAT attacks. China and the U.S. both develop dual-use satellite technology, jamming, and space deterrence capabilities, with outer space becoming a new arena of great power competition.

Implications:

A potential arms race in outer space not only endangers the daily lives of citizens in the US and China but also the global community. Satellites are essential assets for communication because they facilitate rapid communication between people, and they are also crucial for government communication. Their main purposes are communication, navigation, trade, and weather monitoring. Any disruption to this would make any nation vulnerable. If this arms race occurs, all nations with satellites in outer space are at risk of having their satellites taken down or targeted.

This arms race would also force governments to allocate more funds for the development of additional ASATs, satellite protection systems, and defensive missiles. This would drain government funds and prevent the use of these funds for other, more important topics, which would make both nations vulnerable to national debt, which would start much broader conflicts, which would negatively impact national security and international relations.

Globally, this conflict threatens current global frameworks for international cooperation, such as the Outer Space Treaty that was put in place to ensure global stability and inhibit the weaponization of space. This may cause an upward spiral of other nations establishing and improving their own military space programs. That will cause a long-term threat to international security and stability since it not only increases the likelihood of war in orbit but also makes discussions on responsible space behavior, debris management, and the deployment of dual-use technologies more difficult.

Proposed Solutions:

- 1. <u>Calls all</u> Members of The Outer Space Treaty (1967) to renew their commitment to peace in the exploration and use of outer space and prevent its militarization;
 - i. The signatories should reaffirm that they will not place weapons of mass destruction into orbit, and extend this undertaking to include conventional anti-satellite weapons (ASAT) that would be threatening to civilian or military satellites,
 - **ii.** Signatories must establish a collective control mechanism within the United Nations framework to oversee compliance, report violations, and encourage dialogue among space-faring nations so that an escalation does not occur,

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- 2. <u>Urges</u> the United States of America and the People's Republic of China to implement a space arms control and de-escalation policy through the framework of the United Nations Office for Outer Space Affairs (UNOOSA) and other relevant international organizations:
 - **a.** Both countries are required to disclose their space-based military capabilities, including anti-satellite weapons (ASATs), satellite defense systems, and dual-use technologies, periodically to the opposing country and the UN for inspection,
 - i. Such disclosures should be made biannually and include technical specifications, testing updates, and development schedules,
 - ii. Reports must be examined by an unbiased UN expert group to prevent manipulation of data and ensure credibility of revelations,
 - **b.** The implementation of a cooperative inspection and monitoring regime, announced and unannounced, to secure compliance with agreed limitations on the space weaponization and to prevent the covert production of offensive systems,
 - i. Unannounced inspections would be aimed at launch sites, test ranges, and satellite control centers to guarantee the non-presence of hidden offensive programs,
 - ii. Announced inspections would provide a formal opportunity for transparency, with both the US and China being able to demonstrate compliance and reduce mistrust,

"Food for Thought":

- Is a ban on all space weapons a feasible one to enforce, and how might compliance be monitored?
- How might an unintentional or intentional sabotage of satellites by a country affect the lives of civilians daily worldwide?

- Can an arms race in space be avoided without limiting technological development for exploration and scientific pursuits as well?
- What are some ways miscommunication or ambiguity in space operations can trigger clashes among great powers?
- What happens if signatories of the Outer Space Treaty violate the treaty and use space as a place for nuclear arms and nuclear arms testing? How would that impact the environment?
- Should there be legal limits on the development or launching of anti-satellite weapons? Why or why not?
- How does Taiwan's strategic value impact China's militarization of space, and might tensions regarding Taiwan contribute to the escalation of space weaponization?
- In what way can a U.S. versus China space arms race influence smaller countries that rely on satellites for communication, commerce, or meteorological observation, and what is the responsibility of major powers to prevent global disruption?

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