Security Council

Topic:

Implication of the militarization and the potential dangers of the space arms race

Chairs:

Braulio López Zigler

Kevin Palma Yáñez

Introduction:

Established in 1946, the Security Council (SC) was created by the United Nations (UN) after World War II to address the weaknesses of the League of Nations in maintaining world peace. As one of the United Nations' six principal organs, the SC is tasked with maintaining international peace and security under the principles and purposes of the UN, addressing all affairs that may threaten these objectives.

Powers and Responsibilities:

Under Chapter VII of the UN Charter, the SC holds unique authority within the UN to make decisions that member states must accept, carry, and implement. These decisions focus on practices against UN principles while minimizing the impact of the measures.

The SC's approach varies based on the status of the situation, with measures tailored to specific cases. In situations with a threat to peace, the initial action is to recommend a peaceful agreement. In cases of hostilities, the focus shifts to ending the conflict swiftly. The SC's tools include:

1. **Investigation and Mediation:**
    - Dispatching missions.
    - Appointing special envoys.
    - Recommending principles for settlement.

2. **Economic Sanctions and Measures:**
    - Calling for economic sanctions.
    - Imposing measures such as arms embargoes, commercial relations breaks, and financial penalties to prevent the use of force.

3. **Military Actions:**
    - Taking military actions in hostile disputes.
    - Sending military observers and peacekeeping UN forces.
    - Implementing blockades to reduce tensions and separate opposing forces.

4. **Regulation of Armaments:**
    - Formulating plans and strategies to regulate armaments and their use.

5. **Advisory Role:**
    - Providing advice to the General Assembly or Secretary-General.
6. **Composition:**

The SC consists of 5 Permanent Member States: China, France, Russia, the United Kingdom, and the United States. each holding the "right to veto." Additionally, ten non-permanent members, with five elected years for two-year terms, ensure equitable representation among geographic regions.

Current Operations:

The SC oversees 12 operations across three continents, involving nearly 88,000 uniformed personnel. Since its inaugural meeting, the SC has maintained a permanent residence at the United Nations Headquarters in New York City, where a representative from each member is always present for immediate meetings if required.

Background:

Space exploration has played a fundamental role in the evolution of the modern era, driving exponential growth in scientific, economic, and technological sectors. As our society becomes increasingly dependent on space exploration, nations worldwide have intensified efforts to discover and harness the potential benefits and knowledge it holds. Despite having explored only a fraction of outer space, global spending on space programs reached approximately USD 103 billion in 2022, reflecting the growing importance of space as a resource.

However, the surge in efforts to control space, especially by major global powers, has led to an escalation in military capabilities to safeguard national interests. As the militarization of space expands, so do the associated threats. This has prompted the emergence of consequences that, if left unchecked, could result in catastrophic outcomes.

Origin and Historical Context:

The militarization of space involves using outer space for military purposes, including surveillance, communication, and navigation. The roots of this issue trace back to the Cold War, marked by the launch of the Soviet Union's artificial satellite, Sputnik, in 1957. Subsequently, nations engaged in a race to deploy satellites and spacecraft to demonstrate technological superiority. Nearly 50% of these satellites served military

reconnaissance purposes during the Cold War, providing critical information to ground soldiers.

During this period, anti-satellite weapons (ASAT) and ballistic missiles were developed to counter potential threats in space. The lack of space regulations led to a critical point where significant powers were developing prototypes intending to deploy them in space. Amid this uncertainty, international conversations about space usage began.

International Efforts and Agreements:

In 1959, the UN General Assembly established the Committee on the Peaceful Uses of Outer Space (COPUOS) to oversee international cooperation and address potential conflicts in space. Despite political conflicts hindering full international cooperation, significant agreements were reached in the 1960s and 1970s to prevent the weaponization of space. Key agreements included the Partial Test Ban Treaty (1963), the Outer Space Treaty (1967), and the Prevention of an Arms Race in Outer Space document (1981).

However, the effectiveness of these agreements faced challenges, particularly regarding the restriction of conventional weapons. Discontent with existing treaties led to the Conference on Disarmament (CD) creation in 1981, which redacted the Prevention of an Arms Race in Outer Space document. In contrast, the CD faced challenges in resolutions submitted, such as Russia's draft treaty in 2007, aimed at preventing the placement of objects carrying weapons in outer space.

Current Challenges and Tensions:

Despite international agreements, the lack of clear boundaries between militarization and peaceful use of space has led to exploiting space for intelligence, communication, and military purposes. Primary weapons in space militarization include anti-satellite weapons and ballistic missiles, with nations like China, the USA, and Russia conducting successful tests. The space competition is intensifying, with potential disadvantages for countries needing to lead in space capabilities.

The discrepancies in definitions, regulations, and agreements drive nations to utilize space more threateningly. The absence of effective international coordination on arms

control and space treaties has been evident in recent events, such as the UN General Assembly's adoption of resolutions on outer space security in 2022, with the United States voting against them several times.

Immediate and Long-term Consequences:

The immediate consequences of space militarization are already evident. One significant issue is the creation of space debris resulting from weapons tests. China's ASAT test in 2017 and Russia's test in 2021 generated substantial space debris, posing a significant threat to space missions, satellites, and future expeditions.

Recent NASA reports indicate more than 25,000 known objects larger than 10 cm, 500,000 objects between 1 and 10 cm, and 100 million particles larger than 1mm orbiting the Earth. As debris in low orbit travels 30 times faster than a commercial jet aircraft, its imminent threat could destroy or severely damage any satellite and device in space.

This put crewed and uncrewed space missions, operating satellites, new spacecraft, and launched technology at risk of becoming inoperable or demolished. The high number of debris resulting from space weapons tests indicates that space debris represents a significant threat to the future, complicating upcoming expeditions due to the substantial probability of being hit by space debris.

Another immediate consequence is the increasing funding for space militarization. Over the years, many nations have allocated more and more of their budgets to developing, testing, deploying, and maintaining space-based military assets. Looking at the current panorama, it is predicted that this situation will continue similarly for the next few years.

Given the high probability of a Belic conflict and the advantage that space would offer in such a case, many countries are involved in an unending competition to determine who possesses more military capabilities in space. In 2020, global government space budgets totaled $82.5 billion, marking a 10% growth compared to 2019. By 2022, this figure had grown to $103 billion, reflecting a 24.8% growth compared to 2020. The space militarization market is projected to grow from $53.7 billion in 2023 to $88.6 billion by 2030 at a Compound Annual Growth Rate of 7.4%.

Urgency and the Way Forward:

Addressing the implications of space militarization is crucial, demanding a concerted effort to find practical solutions promptly. The current trajectory poses risks to scientific progress, human well-being, and the potential for peaceful and cooperative space exploration. International cooperation on arms control and treaties for space use is urgently needed to prevent further escalation.

In conclusion, Kofi Annan's words from 1999 resonate today: "We must not allow this century, so plagued with war and suffering, to pass on its legacy when the technology at our disposal is even more awesome. We cannot view the expanse of space as another battleground for our Earthly conflicts." The global community must collaborate to safeguard the future of space exploration and ensure it remains peaceful and cooperative.

Key terms:

Militarization:
Definition: The utilization of outer space for military purposes, encompassing activities such as surveillance, communication, and navigation, with the primary objective of preparing for potential conflict or war.

Weaponization:
Definition: The process of adapting or modifying something to be suitable for use as a weapon. In the context of space, it involves configuring objects or technologies with the intent of employing them as weapons.

Space Arms Race:
Definition: A competitive scenario where nations engage in the development and deployment of military capabilities specifically designed for use in outer space. This involves a strategic race to gain superiority in space-related technologies.

ASATs (Anti-Satellite Weapons):

Definition: Space weapons explicitly designed to disable or destroy satellites for strategic or tactical purposes. ASATs are developed to target and neutralize enemy satellites, impacting communication, navigation, and surveillance systems.

PAROS (Prevention of an Arms Race in Outer Space):
Definition: A diplomatic initiative aimed at preventing the militarization and weaponization of outer space. The objective of PAROS is to establish international agreements and norms to maintain the peaceful use of outer space.

Outer Space Treaty:
Definition: A foundational international agreement that establishes the legal framework for the exploration and use of outer space. Adopted by the United Nations in 1967, the treaty entered into force on October 10, 1967, and outlines principles for peaceful cooperation in space activities.

Satellites:
Definition: Objects that orbit around a larger celestial body. In the context of space exploration, "satellites" typically refers to artificial satellites or human-made objects intentionally placed into orbit around Earth for various purposes, including communication and Earth observation.

Space Debris:
Definition: The collective term for defunct, non-functional, and fragmented objects in orbit around Earth. Space debris includes spent rocket stages, decommissioned satellites, fragments from collisions, and other remnants resulting from human space activities.

Weapons Tests:
Definition: The evaluation and experimentation with military weapons, encompassing nuclear, conventional, or other types of arms. Weapons tests are conducted to assess performance, capabilities, and reliability.

Non-militarized:
Definition: The state or condition of an area, region, zone, or entity that is not equipped, organized, or utilized for military purposes. Non-militarized zones are intended to remain free from military activities to maintain peace and prevent conflicts.

Space Security:
Definition: The protection and safeguarding of space assets, infrastructure, and activities from threats and disruptions, ensuring the peaceful and secure use of outer space.

Orbital Supremacy:
Definition: The strategic advantage achieved by a nation or entity in dominating and controlling activities in Earth's orbit, often through advanced space capabilities.

Space Diplomacy:
Definition: The use of diplomatic means and negotiations to address international issues related to outer space, fostering cooperation, preventing conflicts, and promoting responsible space activities.
Space Situational Awareness (SSA):
Definition: The ability to detect, track, and predict the movement of objects in Earth's orbit, including satellites, space debris, and other potential threats, to ensure safe and secure space operations.

Dual-Use Technologies:
Definition: Technologies that have both civilian and military applications. In the context of space, it refers to technologies with capabilities for peaceful purposes as well as potential military use.

Space Governance:
Definition: The establishment and implementation of rules, regulations, and frameworks to manage and coordinate activities in outer space, ensuring responsible and equitable use of space resources.

Astropolitics:
Definition: The study of politics, policy, and governance related to outer space activities, exploring the interaction between space exploration, national interests, and international cooperation.

Space Ethics:

Definition: The ethical considerations and principles guiding human activities in outer space, addressing issues such as environmental responsibility, equitable access, and the prevention of harmful uses of space technologies.

International Organizations:

UNOOSA (United Nations Office for Outer Space Affairs):

Meaning: The United Nations agency responsible for promoting international cooperation in the peaceful use and exploration of outer space.

COPUOS (Committee on the Peaceful Uses of Outer Space):

Meaning: A committee within the United Nations overseeing the implementation of international cooperation in the peaceful use of outer space and addressing related issues.

IAF (International Astronautical Federation):

Meaning: An international space advocacy organization that promotes the peaceful use and exploration of space, facilitating collaboration among space agencies and industry stakeholders.

ESA (European Space Agency):

Meaning: An intergovernmental organization dedicated to the exploration of space, consisting of European countries working together on various space missions and projects.

CENTERSA (Center for Space Law and Policy):

Meaning: A research and academic center focused on space law and policy, contributing to the development of legal frameworks for peaceful and responsible space activities.

Secure World Foundation:

Meaning: A private foundation working towards the sustainable and secure use of outer space by promoting global cooperation, space sustainability, and the prevention of space threats.

ISU (International Space University):

Meaning: An institution dedicated to providing interdisciplinary education and training in space-related disciplines, fostering international cooperation in space exploration and development.

SWF (Spacewatch. Global):
Meaning: An online platform and organization providing news, analysis, and information related to space policy, security, and exploration on a global scale.

Guiding questions:

National Perspectives on Space Militarization

What is your country's official position on the current state of space militarization, and what are its primary concerns regarding potential dangers?

Could you outline your country's current position and objectives for the coming years regarding space exploration and militarization?

In the event of a space arms race, what role does your country envision playing, and what steps has it taken to mitigate the risks associated with such a scenario?

To what extent does your country support the demilitarization of space, and what measures has it implemented to promote peaceful uses of outer space?

In terms of space weapons and their testing, what is your country's way of acting?

International Collaboration and Balancing Interests

How does your country balance national security interests with the need for international cooperation in space exploration and utilization?

What technological developments related to space militarization is your country currently engaged in, and how do these align with international norms and agreements?

To what extent has your country progressed in the domains of space exploration and militarization?

What is the current level of transparency among nations regarding their space military capabilities?

What initiatives or international collaborations has your country participated in to address the issue of space debris?

Economic and Strategic Considerations

In terms of the topic, which nations does your country consider allies or partners?

What is the budget allocation from your country to space programs?

How significant is the space sector in contributing to your country's economy?
For the year 2023, what were the specific objectives outlined in your country's space program?

Have these objectives been successfully achieved?

Historical Context and Regulatory Framework

Which countries are considered less developed in the realm of space, and which ones are highly developed?

What previous solutions have been proposed to address the challenges related to space militarization, and how effective were these proposals?

Historically, how has your country been involved in addressing the issue of space militarization?

What are the major historical events that have shaped the current state of space militarization?

What existing regulations does your country adhere to in the context of space militarization, and how successful and precise are these regulations?

How would you assess the effectiveness of the United Nations' intervention in addressing the implications of space militarization?

References:

Ares Orbital Debris Program Office. (N.D). Nasa. Retrieved November 7th, 2023, from: https://orbitaldebris.jsc.nasa.gov/faq/

Functions and powers. (N.D). United Nations. Retrieved November 1st, 2023, from: https://www.un.org/securitycouncil/content/functions-and-powers

Outer Space. (N.D). Reaching Critical Will. Retrieved November 3rd, 2023, from: https://www.reachingcriticalwill.org/resources/fact-sheets/critical-issues/5448-outer-space

Paros Treaty. (N.D). Nti. Retrieved November 4th, 2023, from: https://www.nti.org/education-center/treaties-and-regimes/proposed-prevention-arms-race-space-paros-treaty/

Seminari, S. (2021, February 22). Government space budgets surge despite global pandemic. Satellite Today. Retrieved November 5th, 2023, from: https://interactive.satellitetoday.com/government-space-budgets-surge-despite-global-pandemic/

Space debris from anti-satellite weapons. (N.D). Union of Concerned Scientists. Retrieved November 5th, 2023, from: https://www.ucsusa.org/sites/default/files/2019-09/debris-in-brief-factsheet.pdf

The militarization of outer space. (2008, August). Eth Zurich. Retrieved November 3rd, 2023, from: https://www.files.ethz.ch/isn/130808/ISN_Special_Issues_Aug.2008.pdf

The militarization of space and its transformation into a warfighting domain. (N.D). International Information Network Analysis | SPF. Retrieved November 4th, 2023, from: https://www.spf.org/iina/en/articles/nagashima_02.html

The UN Security Council. (2022, September 16). Council on Foreign Relations. Retrieved November 1st, 2023, from: https://www.cfr.org/backgrounder/un-security-council

Voting system. (N.D). United Nations. Retrieved November 1st, 2023, from: https://www.un.org/securitycouncil/content/voting-system

What is the Security Council? (N.D). United Nations. Retrieved November 1st, 2023, from: https://www.un.org/securitycouncil/content/what-security-council