Research Report

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Forum:	*General Assembly 1* *Disarmament and international Security*
Issue:	*Revisiting the provisions on militarization in the outer space treaty*
Position:	*Deputy Chair*

Introduction

In 1966 the Soviet Union, United Kingdom, and United States opened the Outer Space Treaty for signatures. This treaty was an agreement by member states to create guidelines for space exploration. The treaty ensured that space exploration should be for the benefit of mankind, that space should not be sovereign to any nation, that no weapons of mass destruction can be placed in space nor any celestial bodies, and that nations should be responsible for any activities conducted by space agencies, whether state-run or private. The treaty entered into force in 1967, and is currently ratified by 103 member states.

Definition of Key Terms

Spaceflight
Spaceflight is characterised as a craft flying beyond the Earth's atmosphere.

Outer space
Outer space is measured as everything beyond the Kármán line, 100 kilometres above the Earth's surface.

Weapons of Mass Destruction
Any weapon that can cause indiscriminate death or injury on a large scale, such as nuclear, biological or chemical weapons. The Outer Space Treaty bans use or deployment of any WMD's in space.

Conventional weapons
Any weapon that does not classify as a weapon of mass destruction under the above definition, for example small arms or light weapons, such as bombs, shell, or rockets. There are currently no laws governing their use or deployment in space which are binding to spaceflight capable nations.

Satellite
A manufactured object designed to orbit a celestial body. Can be for civilian or military

purposes.

General Overview

There are many loopholes to the Outer Space Treaty. Whilst the use and deployment of weapons of mass destruction is addressed in the treaty, any conventional weapons would still be allowed. The stipulation that space exploration be 'non-aggressive' is also vague and has been exploited: both the USA and the USSR used reconnaissance satellites throughout the Cold War. The 1979 Moon Treaty was meant to be a follow up, and had clauses specifically prohibiting military activity of any kind in space, but as of 2015 only 16 states are party to the treaty, none of which are nations with major spaceflight capabilities. Thus it seems it is in the interest of many states to at least have the opportunity at some point to develop weaponry for use or deployment in outer space. Others argue that allowing the military further involvement in space exploration could in fact increase the rate at which the technology is developed. It is no longer state space agencies such as NASA that are a concern: multinational private corporations such as Virgin Galactic barely fall under the provisions of the treaty, making it look increasingly out-dated. There is also the issue of The Tragedy of the Commons- space is becoming increasingly littered with debris and this could harm future attempts at space exploration.

Major Parties Involved

United Nations
The platform for international discourse. Enforces the Outer Space treaty.

National Aeronautics and Space Administration (NASA)
The United States' agency responsible for spaceflight and research. Whilst a civilian programme, they have co-operated with the US Department of Defence. NASA was the first space agency to land a man on the moon.

Russian Federal Space Agency (Roscomos/RKA)
Following the collapse of the Soviet Union, the RKA became the national space agency of Russia in 1992. Russia was the first nation to successfully put a satellite and later a man into orbit.

Chinese National Space Administration (CNSA)
The Chinese space agency. In 2003 became the third nation to successfully launch a crewed orbital space mission. In 2007 the CNSA successfully landed an unmanned lunar module for research.

European Space Agency (ESA)
Founded in 1975 by Western European nations and now officially part of the European Union. Became the first space organization to land a probe on a comet. Strictly a civilian programme.

Japanese Aerospace eXploration Agency (JAXA)
Japan's national space agency, formed in 2003 following the merging of the Institute of space and Astronautical Science (ISAS), National Aerospace Laboratory of Japan (NAL), and National Space Development Agency of Japan (NASDA). Recent changes in Japan have allowed JAXA to extend its research from purely civilian purposes to include military space development.

Indian Space Research Organisation (ISRO)
India's national space program. Though civilian in intention, the military has used some of the technology developed by ISRO. They have successfully launched satellite missions to the Moon and Mars.

SpaceX
A private company with an interest in spaceflight. They successfully delivered cargo to the ISS on behalf of NASA in 2012 and have flown six missions as of 2015. They have further plans for space exploration.

Virgin Galactic
A private company owned by the Virgin Group. Founded in 2004, they aimed to have achieved spaceflight by 2009 and provide this service to tourists, but they have been plagued by numerous setbacks and have yet to achieve successful stable spaceflight.

Timeline of Events

4th October 1957	The Soviet Union launches satellite Sputnik 1, becoming the first nation capable of spaceflight.
31st January 1958	The United States successfully launches Explorer 1, becoming the 2nd nation capable of spaceflight.
28th February 1959	NASA launches its first spy satellite
28th July 1962	The Soviet Union successfully launches its first spy satellite.
5th August 1963	The UK, USA and USSR all agree to the Nuclear Test Ban Treaty, which prohibited them from testing nuclear weapons in the atmosphere, underwater, or outer space.

26th November 1965	France launches its first satellite, becoming the third nation capable of spaceflight.
10th October 1967	The Outer Space Treaty enters into effect.
11th February 1970	Japan launches a test satellite into orbit, becoming the 4th nation capable of spaceflight.
24th April 1970	The People's Republic of China launches its first satellite, becoming the fifth nation capable of spaceflight.
28th October 1971	The United kingdom launches its Prospero satellite, becoming the sixth nation capable of spaceflight.
18th December 1979	The Moon Treaty is submitted to the General Assembly, but fails to gain any traction amongst nations capable of spaceflight.
24th December 1979	ESA successfully launches its first launch vehicle.
18th July 1980	India launches its first satellite, becoming the seventh nation capable of spaceflight.
19th September 1988	Israel successfully launches a rocket carrying a reconnaissance probe, becoming the eighth nation capable of spaceflight.
11th January 2007	China downs one of its weather satellites, joining Russia and the United States as the only nations to successfully test anti-satellite weapons.
2nd February 2009	Iran launches its Omid satellite, becoming the ninth nation capable of spaceflight.
22nd May 2012	SpaceX successfully launches and carries cargo to resupply the ISS, becoming the first private company to do so.
12th December 2012	The Democratic People's Republic of Korea launches its Kwangmyŏngsŏng-3 satellite,

becoming the tenth nation capable of spaceflight.

Previous Attempts to solve the issue

The Moon Treaty was the only real attempt to make any changes to the current international agreements regarding space weaponization, but this failed due to lack of support from spacefaring nations. Any new agreements regarding the militarization of outer space, whether opting for militarization or demilitarization, would require support from nations with spaceflight capability.

Possible Solutions

Some would argue that the best way to continue protecting space is to update the treaty and to add further provisions for enforcement of the rules, including disarmament of space. Others, however, have argued that a drastically different approach be taken: instead of amending the treaty, get rid of it all together and establish outer space property rights in order to encourage private individuals and corporations to take over space faring. It has been argued that renewed investment could accelerate space exploration and technology, however this would represent a dramatic shift in power from the UN and governments to private corporations.

Useful documents

Outer Space Treaty
Moon Treaty

Appendix/Appendices

Stephen Bainbridge's Journal of Law, Politics, and Culture
National Aeronautics and Space Administration
Russian Federal Space Agency
Chinese National Space Agency
European Space Agency
Japanese Aerospace eXploration Agency
Indian Space Research Organisation
SpaceX
Virgin Galactic
Spaceflight timeline