

COPUOS: Space Debris

Yuri Alekseyevich Gagarin, Soviet pilot and the first human to journey into outer space, once said, "Orbiting Earth in the spaceship, I saw how beautiful our planet is. People, let us preserve and increase this beauty, not destroy it." While Gagarin said this in 1961 and meant it about the earth, we can speculate that he might have felt similarly about preserving the environment in his beloved outer space as well.

Since the launch of the first satellite ("Sputnik 1") into space by the Soviets in 1957, we have seen a steady increase of satellite and aircraft launches, whether manned or unmanned, into space. Space exploration has allowed us to accomplish a vast array of tasks once thought to be unattainable for humankind. A few notable improvements for humanity which have come as a result of space exploration include the ability to monitor natural disasters, the broadcasting of television, and the relaying of phone calls. Space exploration has also been able to pave the way in research relating to a wide scope of things such as the field of vaccinations, purification of water, osteoporosis treatment, and breast cancer detection.

However, the launching of so many artificial objects into space has polluted near earth airspace. Near earth airspace does not have clear delineated borders, rather an object is said to be in near earth airspace if said object, depending on its mass, can come within 1.3 astronomical units of the sun. These artificial objects pose great threats to both planet Earth and the International Space Center which could hinder the continuation of space research. Space debris has formed due to multiple reasons. Whether it be aircrafts and satellites becoming obsolete, the slow erosion of manmade objects in orbit, or even the loss of astronauts personal belongings during space missions. To date, there are about 20,000 pieces of space debris larger than tennis balls orbiting the earth. Traveling in it's immediate vicinity, these objects are poised to collide with the International Space Station, a potentially catastrophic scenario were it to occur. For the last 50 years, at least one piece of space debris has fallen out of the orbit and towards the earth per day. While most of these objects are burnt up in the atmosphere, a few have made it to the ground intact, one even allegedly colliding with a Chinese commercial aircraft on June 4th, 2013.

While there has been much talk on the international stage, little actual progress has been made in the effort to clean up near earth space. We as the United Nations Committee on The Peaceful Uses of Outer Space are tasked with making sure that we are utilizing the opportunities afforded to us by space exploration efficiently and safely.

Some questions to consider:

- Should we be making efforts to retrieve some of the artificial objects orbiting in near earth airspace? If so, what technologies could we use to retrieve them?
- How should we regulate the launching of future artificial objects into near earth airspace?

- What distinctions, if any, should be made between different types of artificial objects, some of which may have different benefits of varying degrees for science and technology?
- How can we reduce the amount of debris that we place in space in the future, without infringing on the significant scientific developments that inevitably involve producing space debris?
- Are there any regulations we can put in place to protect the safety of the International Space Station and those on board?

Remember, our job here on COPOUS is to encourage world leaders to keep their space programs productive and peaceful. We have the power to make or attempt to make binding agreements for international space law. While these questions might help guide you in your thinking about this topic, there are plenty of other issues you may choose to consider so that you gain a nuanced perspective on the issue at hand. Remember that you are representing the views of your country. I urge you as delegates to get a thorough knowledge of your countries respective space programs, as well as their presence or lack thereof on the forefront of space exploration. As you begin researching your topics and writing your papers keep in mind that everything will be checked for plagiarism on [turnitin.com](https://www.turnitin.com); if you have any comments, questions, concerns, or just want guidance on how to approach your preparation feel free to reach out at avigayiladouth@gmail.com!

All the best,
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