Elizabeth Brown Ghana UNOOSA-ICAO The Environment and Space Activity

After the landing of Sputnik I in 1957, the United Nations realized the necessity of regulating actions in outer space. As a result, three UNISPACE conferences were held in 1968, 1982, and 1999. The Outer Space Treaty was opened for signature in 1967 and states that governments cannot claim celestial resources, but states that launch an object have control over this object. It also says that space is for everyone. However, this treaty was not thorough enough to solve every problem, and more detailed solutions are necessary. Another problem that must be solved is the abundance of space debris. Space debris is a serious problem in space travel and as it continues to build up, it could prevent future travel. Another environmental issue is the emission of black carbon during launches. The large amount of carbon increases pollution and contributes to climate change. It is imperative to regulate and reduce black carbon emissions in order to protect the environment.

Ghana is not very advanced in space travel, but desires to launch their first satellite by 2020. They recognize that clear regulations are necessary to the continuation of peaceful space travel. They also realize that an increase of space debris could be very destructive to space travel and, as a result, technology and life on earth. An increase in black carbon emission from launches is very destructive to the environment.

Ghana would like to contribute to further regulations of space travel and more clear laws. Furthermore, Ghana will attempt to reduce the amount of space debris produced and try to develop technology that can detect smaller pieces of debris. Ghana also hopes to help discover alternate launch methods that do not require the use of black carbon and are more environmentally friendly.

The Militarization of Space and International Law

Further exploration of space leads to the possibility of conflict between different nations. Countries will continue militarization of space, and this could lead to an arms race. As an arms race progresses, more and more resources are wasted. If a space war were to break out, the destroyed objects would contribute to the already massive amount of space debris. This is a huge issue due to the problems associated with space debris. Fortunately, there are already guidelines in place to regulate militarization such as the UN Outer Space Treaty and the resolution called the "Prevention of Outer Space Arms Race." However, there is also some lack of cooperation, which prevents the passage of additional resolutions. Another issue is the transfer of international humanitarian law from Earth to space. Also, should a satellite be destroyed, it would impact life on earth. Satellites are imperative for technology to function, so the destruction of satellites could potentially lead to loss of life on earth.

The nation of Ghana recognizes the importance of international law to prevent conflict in space that could be very destructive to everyone on earth. International laws such as international humanitarian law must be clarified and adapted in order to be transferred to space. Also, Ghana realizes that increased conflict could lead to more space debris, which could potentially stop all space travel if built up enough. Though Ghana is not influential in space yet, it hopes to soon get off the ground and become a part of the space community, which is not possible if everything has been destroyed because of an arms race.

Ghana hopes to strengthen treaties between nations and clarify international humanitarian law by distinguishing between military and civilian astronauts or objects. Furthermore, Ghana will encourage unity between nations in our common goal to utilize the resources provided in outer space. Militarization and weaponization must be regulated and conflicts should be regulated as well to prevent major loss of life.

Space Commercialization

With further exploration of space comes further commercialization. First, the space transport industry developed. There is also the International Space Station (ISS). This is the largest international scientific/engineering project and brings together many nations to research space. Other commercialization includes space tourism. Companies send regular civilians on sub-orbital trips. Spaceport America is one place that offers these trips, but it is very costly for taxpayers to continue funding. Space tourism requires further regulation to ensure the safety and satisfaction of customers. New industry has also developed as a result of exploration, which requires regulation as well. Asteroid mining, for example, has the potential to violate the Outer Space Treaty. Accommodations must be made for these emerging space industries.

Ghana is interested in contributing to the commercialization of space. As of now, Ghana has no satellites of their own, but they hope to send one up by 2020. After completing this first goal, Ghana hopes to continue to increase their influence in space. Ghana understands the necessity of regulation of commercialization and clear international laws.

Ghana hopes to contribute to the development of new international law to regulate space commercialization. This includes laws to regulate space tourism to keep it safe for everyone involved. Commercial space travel and space tourism can be very dangerous if not kept under control. International law also includes regulations on new industries in space, including asteroid mining. To do so, a revision of the Outer Space Treaty may be required. At the moment, no nation can claim jurisdiction over a celestial body, including asteroids, which is unrealistic should space exploration and colonization continue. Additionally, individual nations, such as the USA with SPACE 2015, are creating their own policies to account for new industry, and the OST must be revised to keep up with these advancements.