



Promoting Cooperative Solutions for Space Security

***Exchange of Views Statement,
United Nations Committee on the Peaceful Uses of Outer Space
February 2010***

Mr. Chairman, on behalf of the Secure World Foundation (SWF), I would like to offer congratulations on your election as Chairman of this subcommittee. We look forward to your guidance of this subcommittee's work. We also note the continued excellent work of the Office of Outer Space Affairs (OOSA) under the direction of Dr. Mazlan Othman. We are confident that this subcommittee and OOSA will continue successfully to provide support for the peaceful uses of outer space resources, especially for emerging space States.

SWF is pleased, once again, to attend this Subcommittee meeting as a permanent observer. In all of our work, we are active in promoting the development of sound policies to support the long term sustainability of outer space activities and the use of space activities for the benefit of Earth and its people. Today I would like to summarize our activities since the June 2009 meeting in the three major themes in which we are active:

- **Space Sustainability and Security** : Developing the foundation for the effective management of space operations for a sustainable space environment and the peaceful uses of outer space.
- **Human and Environmental Security**: Maximizing the international cooperative use of space assets for the benefit of humanity.
- **Planetary Defense**: Promoting a unified international policy approach to protection of our planet from the threat of near Earth objects (NEOs).

Space Sustainability

Mr. Chairman, since its inception in 2004, SWF has each year expanded its efforts toward the long term sustainability of space activities. We continue to be one of the major contributors to space sustainability activities in the non-governmental sector. The following examples summarize our recent work in this field.

Space Security Index—Along with the Government of Canada, the Simons Foundation, and Project Ploughshares, SWF has contributed directly to the research, writing and production of the 2010 Space Security Index report. This report is the premier analytic summary of space security related activities around the world. SWF is proud to have contributed to this important

document, the latest version of which can be downloaded for free from <http://www.spacesecurity.org>. The executive summary of this report will be made available to delegates during this Subcommittee meeting.

Ifri Workshop—In late June, SWF partnered with the Paris-based Institut Français Relations Internationales (Ifri) in an international workshop that examined the draft European Union Code of Conduct for Space, space situational awareness, and issues related to kinetic anti-satellite weapons. This workshop resulted in a report that recommended steps that could be taken to improve the safety and sustainability of the space environment. These include the creation of an international civil space situational awareness architecture to improve the ability to avoid satellite collisions and the research and testing of the removal of large debris from orbit. This report is available on-line at: http://www.secureworldfoundation.org/siteadmin/images/files/file_384.pdf.

International Astronautical Congress Plenary Session—As part of our outreach to the space technical community, Secure World Foundation organized a plenary session during the 60th meeting of the International Astronautical Congress in Daejeon, Republic of Korea, which included the membership of the International Astronautical Federation, the International Academy of Astronautics, and the International Institute of Space Law. The plenary, which was held on the day of the congress specifically devoted to the theme of peace, was entitled “Achieving a Sustainable Space Environment for Future Space Activities.” It featured as speakers, Dr. K. Kasturirangan, former director of the Indian Space Research Organization, Nicolas Johnson, director of NASA’s space debris activities, Dr. Sergio Camacho, director of El Centro Regional de Enseñanza de Ciencia y Tecnología del Espacio para América Latina y el Caribe (CRECTEALC) and Dr. Kai-Uwe Schrögl, director of the European Space Policy Institute (ESPI).

Planetarium Show by the University of Colorado Fiske Planetarium. During this year we will complete work, in partnership with our sister foundation, One Earth Foundation and the University of Colorado Fiske Planetarium, on two 25 minute planetarium shows devoted to the subject of space sustainability. The first show will illustrate for a wide variety of audiences the debris that now exists in space, why the growing amount of space debris poses a threat to safe operation of space systems, including the International Space Station and what is being done about it. That show is scheduled for completion this July. The second show, which is scheduled for later this year, will describe the life cycle of a satellite, from satellite creation to its fiery reentry into the atmosphere at end of life. Both these planetarium shows will be distributed for free to the nearly 900 planetariums around the world, including those in developing countries. SWF offers this show without cost for the use of any organization throughout the world who would like to use it in planetariums.

Human and Environmental Security

We at Secure World Foundation believe that today the path to human development depends in large part on the benefits that space technology brings. As a result, one of SWF’s key efforts centers on strengthening or developing the policies and institutions that improve the utility of space technologies in support of human security needs. Earth observing, telecommunications,

and satellite position, navigation, and timing (PNT) systems all have a role in improving human security throughout the world. We believe that we can assist in improving the flow of benefits from space systems by helping to establish effective institutional mechanisms for delivery of services and devising common international data policies for public good data and information.

In order to further the effective use of these systems in support of human security, Secure World Foundation has continued its partnership with *Imaging Notes* magazine, which has had a history of presenting informative and practical articles on the applications of Earth imaging satellites to support human security needs. It is published in hard copy and also on line [<http://www.imagingnotes.com>]. I encourage delegates to consult the *Imaging Notes* website for information on the applied use of remote sensing systems throughout the world.

In September 2009, Secure World Foundation took part in the Sixth International Symposium on Digital Earth, held in Beijing, China by presenting a paper entitled “Earth Observations and Human Security: Opportunities and Challenges”, which focused on a relatively new approach to Earth observations that involves local communities directly in making their own environmental observations. This approach, which is called Community Remote Sensing (CRS), provides a way, through the use of so-called smart phones and other digital devices, for local communities to contribute to their own welfare by collecting local data and adding them to remotely sensed data captured by aircraft and satellites. These additional data add important depth and detail to Earth observations data, enabling these combined data to be of much greater use for local communities than the satellite or aircraft data alone. In 2010, SWF will work with several leaders in the remote sensing field to develop CRS in the context of improved disaster management and emergency response, especially in non-space-faring countries where access to relevant satellite data may be limited.

Planetary Defense

Thanks to the work of many scientists around the world, we now have a much better understanding of the threat that asteroids pose to Earth and its peoples. Among other things, scientists, assisted in no small part by hundreds of amateur astronomers who contribute their own observations, have made remarkable progress in locating the larger asteroids, and are working their way down in size to much smaller ones.

The large body of recent research on near Earth objects raises the following questions: If observers were to discover an asteroid headed toward Earth, how should the world community respond? Should space agencies attempt to deflect it into a safe orbit that would not threaten humanity? What methods should be used? If deflection is not an option, how should the needed emergency response services be organized, especially in populated areas? In order to reduce the potential serious negative effects of a future asteroid strike, all of these questions and more will need to be answered.

Hence, a portion of Secure World Foundation’s limited resources focuses on addressing the important governance issues that a potential asteroid strike on Earth raise for the world. In the view of Secure World Foundation the threat that potentially hazardous near Earth objects present to the world will require an international response.

Workshop on an Information, Analysis and Warning Network—This January, Secure World Foundation partnered with the Association of Space Explorers and CRECTEALC on a workshop in Mexico City focused on an examination of the needed components of an Information, Analysis and Warning Network. An executive summary of the results of this workshop will be presented to Action Team 14 during this meeting.

Space Policy

Finally, Secure World Foundation believes that as increasing numbers of countries and regions enter the space realm, it is important that they become aware of the importance of signing and ratifying the 1967 Treaty on Outer Space and the other space agreements that COPUOS developed. Emerging space States can also benefit from the development of a well-considered space policy to guide their space efforts.

CRECTEALC (Mexico City, Mexico) – Accordingly, in November 2009, SWF partnered with CRECTEALC on a workshop in Mexico City focused on “Space Policy in Latin America and the Caribbean: Looking to the Future”. In this workshop, which was ably hosted by the Mexican Ministry of Foreign Affairs, representatives from several countries discussed their national space activities and policies. They also raised concerns about how to proceed in building a greater space capacity, with larger goal of establishing a harmonized Latin American space policy.

Concluding remarks

In conclusion, Secure World Foundation is dedicated to maintaining the secure and sustainable use of space for the benefit of Earth and all its peoples. It acts as a research body, convener and facilitator to advocate for key space security and other space related topics and to examine their influence on governance and international development. The Foundation believes that the challenge of sustaining the space environment into the future must be dealt with in a truly international manner.

The Secure World Foundation strongly supports the work of COPUOS. As the benefits of space activities expand and improve, keeping outer space available for peaceful activities will become ever more important. As we move into the last half of the first hundred years of the space age, the world community has a unique opportunity to safeguard the secure and sustainable use of the space environment. We look forward to continuing to support the Committee’s efforts to achieve such a future.

Many thanks.

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