

Outer Space Security

Canadian Ambassador Paul Meyer opened the panel by discussing outer space security from the his nation's perspective. Meyer stressed Canada's opposition to the weaponization of space and its commitment to seeing the Conference on Disarmament in Geneva (CD) play a major role in the pursuit of the Prevention of an Arms Race in Outer Space (PAROS). Meyer said that a lack of agreement in this forum has led to an impasse on PAROS.

Meyer mentioned that Canada had also (1) advocated for a legally binding ban on space-based weapons, (2) contributed to the establishment of the Spacesecurity.org consortium, and (3) encouraged complementary action through political commitments related to space security (e.g. Code of Conduct for space activity).

Meyer said that unblocking the impasse in the CD would make more productive use of the current dialogue on outer space security. He remarked that the best way to do this is to adopt a balanced Program of Work that would include: (1) Negotiation of the Fissile Material Cut-Off Treaty, (2) Nuclear Disarmament, and (3) PAROS.

Meyer also proposed alternatives should the impasse remain. These included arranging for an organized discussion of outer space issues vis-à-vis the three incoming six presidencies of the CD and the establishment of a PAROS experts group.

Meyer concluded by stating that it would be better to take preventive action to ensure that an outer space arms race never occurs. He pointed out that a precedent for preventive action exists with both the Outer Space and Sea-Bed Treaties.

Brigadier General Simon Pete Worden (ret.) spoke on outer space security from the American military perspective. He stated right off that the U.S. does not have a massive and secret space weapons development program. He admitted that the U.S. spent a lot of money on space programs, but that only a fraction was spent on what could loosely be considered space weapons development (technology hedge programs).

Worden said that the American political leadership has been preoccupied with national security space policy. This culminated in (1) the Rumsfeld Commission, (2) the creation of a more coherent national security space management structure, and (3) the beginning of a U.S. space force.

Worden pointed out that despite the national leadership's interest, there has not been a space weapons push and the overall U.S. military focus on a space force has declined. He said that U.S. military concern with space dominance has morphed into a concern with space situational awareness, with a lesser focus on defensive counter space.

Worden argued that this change in military focus occurred because (1) the security threats the U.S. faces come from places other than space, (2) there is no rapid rise of

technological adversaries, and (3) the U.S. space industry is incapable of delivering a space capability.

Worden concluded by stating that the real threat to U.S. space security is a loss of U.S. space superiority. He said that the U.S. lags far behind on space technologies due to not having deployed the necessary vision in space capabilities.

Ye Ru'an gave the Chinese perspective. Ye emphasized that it is an inalienable right for all states to explore outer space for peaceful uses, stressing that outer space should not be the domain of just a few super powers.

Ye said that space would become increasingly important to all states. He pointed to the increase in the value of the military and strategic uses of space. He argued that the increase in space weapons research and development in particular was problematic.

Ye remarked that the existing international legal instruments governing space activity have been overcome by changes in international relations and technological advancements. The 1967 outer space treaty bans the use of weapons of mass destruction in space but excludes sophisticated conventional weapons.

Ye referenced the international community's efforts to address this concern, such as the establishment of a CD Ad Hoc Committee (now defunct) on PAROS. He also mentioned that the United Nations General Assembly has adopted approximately 20 resolutions on PAROS, which received an overwhelming majority of votes in favor of them.

Ye concluded by calling on the international community to learn from the Cold War and prevent the weaponization of outer space before another "Genie comes out of the bottle."

Richard Garwin completed the panel discussion by discussing outer space security from a scientific perspective. He began by mentioning the importance of geosynchronous satellites to national security.

Garwin highlighted that the characteristics of space make satellites vulnerable since any object can travel in a similar orbit. He cited in particular the vulnerability of U.S. reconnaissance satellites to "space mines."

Garwin spoke about the need to protect U.S. satellite capability. He emphasized that the available protective techniques (e.g. encryption and anti-jamming measures) were neither sufficient nor universally employed.

Garwin strongly advocated a ban on space weapons and ASAT tests as a means to protect U.S. space assets. However, he pointed out that the U.S. does not support negotiating limits on space-based weapons because such weapons do not exist. He said it was to the Americans' advantage to address this threat before it realizes.

Garwin closed by calling on the U.S. to issue a declaration stating that it would not be the first to deploy or test space weapons or to further test destructive anti-satellite weapons in parallel with a U.S. initiative to codify an international treaty to this effect. Garwin argued that this would allow the U.S. to legitimize the use of sanctions or force against those who attack U.S. space assets.

During the Question and Answer session, Ye was asked what China's response would be if the U.S. decided to put weapons in space. Ye responded that Chinese scientists and engineers are intelligent enough to think of ways to protect their interests without joining the U.S. in the space weapons race. Garwin was asked about the utility of a treaty in preventing parasitic satellites from attaching themselves to other satellites. Garwin responded by saying that a treaty would mitigate this from happening but that some instances of counter-satellite activity were inevitable.

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