

CANADA'S PERSPECTIVE ON SPACE SECURITY

Pearl Williams

I will talk briefly on Canada's perspective on space security, what we have done in the past and where we aspire to be in the "next generation".

As many of you are aware, less than two weeks ago, on 18 March 2008, Canada's two-armed robot called Dextre was successfully installed on the International Space Station. I mention this as evidence not only of Canada's leading role in space robotics, but also of our continued commitment to international collaboration toward the peaceful use of outer space. You will also be aware of the successful launch of the RADARSAT 2 Earth observation satellite in December 2007. This satellite is one of the world's most advanced commercially available Earth observation image providers and will provide users world wide with a range of high-quality data products. It will significantly contribute to monitoring the environment and to natural resource management.

It should come as no surprise, given Canada's strong and continuing advocacy of the non-weaponization of outer space, that Canada has signed and ratified the principal treaties governing space exploration (the 1967 Outer Space Treaty, the 1972 Convention on International Liability for Damage Caused by Space Objects and the 1975 Convention on Registration of Objects Launched into Outer Space).

Nonetheless, if that were all Canada did, we would merely be observing the status quo. If we reflect on the importance of outer space to humankind over the 50 or so years since the launch of Sputnik, what will we observe? There have been a number of significant changes.

Firstly, there is an increasing dependence on outer space as part of our "collective infrastructure"—from global communication and navigation links to the collection of environmental and natural resource management information.

Secondly, there is a rapid expansion in the number of actors in outer space at the state level and also by individual entities. We note for example that the Conference on Disarmament (CD) now has 65 members and the UN Committee on the Peaceful Uses of Outer Space (COPUOS) has 69. This is a far cry from the situation which existed during the early days of space exploration when the number of spacefaring nations, including Canada, was very small.

With this growing level of interest and activity, there is a growing appreciation globally of the need for a rules-based environment to ensure that the governance structure in place is sufficient to safeguard space exploration and its benefits for the future of all humankind. Sadly, we recognize that there are shortcomings. The real question then is what can we do, what structures can we put in place which will contribute positively to the objective of preserving outer space as a global resource for the “next generation” and beyond?

Historically, the CD has been regarded as the world’s pre-eminent disarmament negotiating body whose mandate includes regulating the activities of nations with respect to the prevention of an arms race in outer space. While this may be one of its stated objectives, it is common knowledge that the CD has been deadlocked for years in terms of addressing emerging security challenges. In fact, in January of 2008, the Secretary-General of the United Nations, in an address to the opening session of the CD, stated “the Conference on Disarmament has accomplished a great deal—but its successes are distant memories”. He pointed out that a disarmament stalemate can jeopardize other UN charter objectives, such as the Millennium Development Goals, and reminded the CD membership that the United Nations must lead efforts to improve the global security climate.

Canada has been honoured both in 2007 and in 2008 to have acted as coordinator for the CD agenda item on the prevention of an arms race in outer space (PAROS) (Paul Meyer in 2007 and Marius Grinius in 2008). Based on our observations, we have concluded that in spite of the current stalemate on key issues, there is scope for forward movement which could begin with something as straightforward as CD members agreeing to a programme of work and pursuing it with commitment. There is clear recognition that with the expanded membership of “spacefaring nations” the issues are broader than the “non-weaponization of space”.

The draft treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects, tabled by China and Russia in the CD, will serve to further our discussion on how gaps in the legal framework of space security might be addressed.

As you are aware, many of the technologies used to access the benefits of outer space fall into the category of “dual-use technologies”. From our perspective this affords the opportunity for COPUOS and its subcommittees to play a central role in responding to the challenges and opportunities posed by the international community’s increased reliance on outer space. The work of COPUOS could be optimized by establishing closer links, for example, with the CD. Gérard Brachet, who made an earlier presentation on the long-term sustainability of space activities while addressing an informal coordinators’ session of the CD in February 2008, pointed out that “Vienna’s work covers both non-aggressive military and civilian use of outer space”. In Canada’s view it would be timely and beneficial for both bodies to reduce the outdated, artificial distinctions between the respective mandates of the CD and COPUOS and to initiate a formal, forward-looking collaboration in common purpose. In the case of the CD however, such a move would be predicated on first agreeing on a programme of work.

We note for example, that very useful work is being undertaken in the Legal Subcommittee of COPUOS, which would enhance the effectiveness of the Registration Convention in gathering information on “the manoeuvrability and effective irradiated power capabilities of newly registered space objects”. This additional information could assist other registrants in computing a harm index that would assess the ability of the newly registered space object to interfere, damage or destroy other space objects by contact or at range.

In short, we remain convinced of the need to develop an increasingly broad and encompassing concept of space security that addresses not only the weaponization of outer space but also the broader military, environmental, commercial and civil dimensions of outer space. Practical steps toward achieving a common understanding of space security—steps which include realistically attainable objectives—can serve to establish a foundation for a more comprehensive regime which may be built in the coming years.

Though there is varying emphasis in terms of what activities may be the most useful to pursue, there is growing recognition that transparency and confidence-building measures can play a key role in moving the agenda

forward. Here I am referring, for example, to codes of conduct that provide normative guidelines for certain activities. The Hague Code of Conduct guidelines provide a very useful precedent and we very much look forward to the tabling of the European Union Space Code of Conduct later this year.

In the category of practical steps, I would also include the recently adopted Space Debris Mitigation Guidelines. Although this is not a mandatory requirement, it is yet another step forward in promoting a “rules-based approach” for the use of outer space. Canada will be monitoring its activities to ensure that they are consistent with the guidelines.

With the increasing numbers of actors in outer space, we note that there is growing interest and discussion in various international forums about space traffic management. This is also a very positive example of a practical area which can be worked upon with directly beneficial results.

We have had many lengthy discussions over the last two days on the technical aspects of one approach versus another. For us to preserve the secure and sustainable access to and use of outer space we must redouble our efforts on all fronts, so that we can build mutual confidence among the expanding number of spacefaring nations. It is critical that we do not overlook the awareness-building which will contribute to creating this better understanding among our fellow citizens of how dependent they are on space technologies for many of the critical communication and navigation services they currently enjoy.