

ment exists, supply-side controls are frequently the only means available for curbing proliferation of the weapons system in question.

Supplier states that have adopted a policy of self-restraint have a moral and practical obligation to their publics and to their exporting communities to ensure that their products and technologies are not being diverted to purposes other than those intended. Even where global instruments exist, as in the case of the nuclear non-proliferation regime, there will continue to be a need for effective supply-side controls. Supply-side controls provide an important means of preventing the spread of prohibited weapons to states that remain outside global treaties. They also provide a double check for ensuring that the self-restraint on the part of potential suppliers and potential recipients that has been codified in a multilateral instrument is being respected.

But supply-side controls are primarily a short-term measure. They buy time — for building confidence, for dampening regional tensions, for gathering a consensus on the value of restraining weapons acquisition, for forestalling the rise of dangerously-armed powers in unstable situations. This is valuable time admittedly, but it does not provide the assurance on non-proliferation that we are all seeking, assurance that can only come from effective, comprehensive non-proliferation regimes adhered to by as many states as possible.

That is why the Canadian program of action I discussed earlier includes a blend of supply-side and global measures. It calls for enhancing efforts in relation to the Australia Group, as well as for conclusion of a chemical weapons convention and for strengthening of the BTWC. It calls for strong and effective multilateral controls on dual-use nuclear goods, as well as for shoring up the NPT. It calls for consultations among major conventional arms suppliers, as well as for consultations among suppliers and recipients. It calls for strengthening the MTCR, as well as for reaching a global consensus on the need to stop missile proliferation. In the short-term, in the absence of global non-proliferation measures, our emphasis

may have to be on supply-side control. Even in the long-term, supply-side control will be required to deal with those states that — for whatever reason — remain outside of global regimes. What we advocate is a gradual shift of emphasis away from primary reliance on supply-side control, as we secure agreement on the global measures we need.

Such measures cannot be dictated by suppliers. They can only be arrived at through the cooperation of the international community as a whole. This is why Canada, in seeking to advance its initiative, is assembling a core group of interested countries that includes both suppliers and recipients, countries from East, West, North and South. It is also why we were extremely interested in the proposal by Argentina and Brazil at this year's session of the United Nations Disarmament Commission on seeking norms in the international transfer of sensitive technologies that command universal support. This is an objective in which Canada sees merit.

We fully recognize the right of access of all states to the peaceful uses of technology. In our view, though, this is not a right of assured access. Some states would argue that if you provide us with the technology we will be on our best behaviour; we would respond that you have to be on your best behaviour before we provide you with the technology.

Canada's goal is a global framework of equitable, comprehensive and verifiable non-proliferation regimes of which all well-intentioned members of the international community are part. This is an ambitious goal. It is a necessary goal. We believe it is an attainable goal. The 1990s, marked by the end of the Cold War, the growing commitment to cooperative security globally as well as regionally, and the focusing of minds of the Gulf War, provide us with an unprecedented opportunity to effectively stop proliferation. We must seize this opportunity. Through a combination of political will, public support, official endeavour, and analytic input, we can translate our burgeoning concerns about proliferation into tangible, durable results. We can build a more stable world with fewer and less dangerous weapons. ■

Canadians Brief Space Committee

"Satellites Harming Other Satellites" was the subject of a June 25 briefing to the Conference on Disarmament's Ad Hoc Committee on Outer Space by Dr. Peter Hughes, a leading Canadian space scientist and founder of Toronto's Dynacon Enterprises Ltd., and Mr. Peter Stibrany of Spar Aerospace Ltd. The briefing was based on an innovative research project conducted by Dynacon and funded by EAITC's Verification Research Program.

Mr. Stibrany outlined for Committee members the concept of a "Harmfulness Index," which involves the rigorous classification of the modes of harm one satellite can cause another. Project researchers have developed a computer program called HARMDEX, which can generate a quantitative estimate of the potential harmfulness of any satellite vis-à-vis another. This methodology could form one basis for confidence-building measures (CBMs) in space.

Dr. Hughes demonstrated the pros and cons of various types of keep-out zones, which have been suggested for building confidence regarding the safety of satellites in space. Summarizing Dynacon's work, Dr. Hughes highlighted how an estimate of satellite harmfulness could assist in managing a flexible, "free space" keep-out zone more securely. He also described an outer space CBM involving the use of verification beacons on satellites.

Dr. Hughes' summary of Dynacon's research, entitled "Satellites Harming Other Satellites," has been published by EAITC as *Arms Control Verification Occasional Paper No. 7*.

During the 1991 Conference on Disarmament session, the Verification Research Program also provided expert support on legal matters concerning outer space. Dr. Lucy Stojak of McGill University's Centre for Air and Space Law attended a number of meetings of the Ad Hoc Committee on Outer Space. She concentrated her efforts on the legal aspects of keep-out zones and terminological questions related to arms control and outer space. ■