

ference, to the effect that conclusion of a Convention on chemical weapons should be conditional on progress in nuclear arms control. The Canadian Government emphatically disagrees. A complete ban on chemical weapons is desirable in itself. It is, in the Canadian view, in the interest of countries of all regions. It should not be conditional on progress in other areas.

Mr. President, my list of outstanding 'difficult' issues is by no means exhaustive. Nor is it intended in any way to downplay the importance of others which I have not cited. My purpose has been, rather, to remind us that more than mere good will and the intention to work harder will be required from us if we are to make the sort of progress at this session which both

UNGA 43 and the Paris Conference have called for.

Mr. President, in concluding, I am pleased to be able to tell the Conference that Canada will be joining those member states that have already carried out or plan to carry out test inspections. We will provide the results as soon as they become available." ■

Verification Research Programme Hosts Seminar

On June 1st, 1989, the Verification Research Unit of the Arms Control and Disarmament Division, Department of External Affairs, hosted a one-day seminar for NATO officers and officials, during which Canadian research relevant to the verification of a Conventional Forces Europe (CFE) agreement was discussed. These officials were also in Canada to attend a meeting of the Verification Working Group of the NATO High Level Task Force on Conventional Force Reductions which Canada hosted at Collège St-Jean, May 28-31, 1989. Held at the National Arts Centre in Ottawa, the seminar enabled the Verification Research Unit to demonstrate some of the expertise which has been generated in Canada since the inception of its Verification Research Programme.

The day began with a briefing from Spar Aerospace on Space-based Remote Sensing as a potential contributor to CFE Verification. The briefing drew heavily upon the PAXSAT "B" project which envisages the use of satellites for a treaty such as the CFE. It was concluded that a space-based verification system holds considerable potential as a contributing element to a multi-layered CFE verification package. Satellite verification platforms were held to be particularly effective because of their ability to cover large areas quickly, and detect anomalies which could then be fully investigated through the use of various other verification techniques. However, it was recognized that current and planned civilian satellites because of their insufficient resolution could only

provide "detection" level data. It would not be until into the next century, however, that such satellites could be used in such multilateral verification.

The next presentation was jointly given by INTERA Technologies and Boeing Canada (de Havilland Division), and concentrated on the potential for the use of aircraft as verification platforms for a CFE agreement. The presenter from INTERA described that company's successful use of airborne sensing techniques to conduct land-use and resource surveys, as well as to measure heat loss from buildings over a wide area using infra-red technology, and he drew general conclusions as to how INTERA's experience might be useful in CFE verification. The presenter from de Havilland discussed the potential aircraft requirements in terms of capabilities and numbers, in order to obtain suitable coverage of the area within which the limitations are expected to occur under a CFE agreement. The de Havilland presentation focussed on the DASH 8-300 series aircraft as representative of the type of airframe most suitable for the CFE verification mission given its durability, low life-cycle cost and operational flexibility.

Following lunch and a tour of the National Arts Centre, the afternoon presentations began. The first of these was by Dr. Marc Kilgour of the Department of Mathematics at Wilfrid Laurier University. Dr. Kilgour has been working on the application of game theory to arms control verification under contract to the Verification Research Programme,

and presented some tentative findings. In his presentation, Dr. Kilgour discussed the optimal allocation of inspections using mathematical modelling techniques, and concluded that an emphasis should be placed upon both the randomness of inspections and the spacing of inspections over the life of the agreement as a means of deterring (and discovering) potential violations.

The final presentation of the day was given by a representative of Atomic Energy of Canada Limited (AECL), and outlined AECL's experience in verifying so-called Secure Storage Facilities. Such facilities could be important in a CFE agreement since considerable numbers of Treaty Limited Items may be stored in such areas in order to facilitate monitoring their numbers. AECL's experience with secure storage facilities stems from its responsibilities to store and safeguard spent fuel for inspection by the International Atomic Energy Agency under terms of Canada's Non-Proliferation Treaty obligations. AECL has developed an extensive range of perimeter security and materials accounting techniques in order to fulfil these obligations, and many of these techniques could be directly relevant to CFE verification procedures.

Seminar participants were pleased with the results of the day's efforts. Several of them voiced their appreciation of the degree to which the Canadian Verification Research Programme has spawned such practical and useful research. Far more of its kind will need to be undertaken, as the challenges of verifying a Conventional Forces Agreement become clearer everyday. ■