

11. VERIFICATION

BACKGROUND

Verification is now recognized as a key factor in all areas of disarmament and arms control. It is at the heart of the negotiations on nuclear missiles, arms in outer space, chemical weapons and nuclear testing. The issue of compliance often generates controversy and makes it difficult to reach agreements in any of these sectors. However, two important developments have occurred since the end of summer 1987: talks have resumed on verification of nuclear testing after an eight-year hiatus, and the Soviet Union and the United States have signed an agreement to eliminate ground-based intermediate-range nuclear missiles (INF). The INF Treaty contains certain innovative provisions on verification that could set a precedent for future disarmament and arms control agreements.

Over the years, Canada has acquired solid expertise in verification, in the recognition that an arms control and disarmament agreement must be accompanied by provisions designed to ensure compliance and build confidence. Following the United Nations' First and Second Special Sessions on Disarmament, which stressed the inclusion of adequate verification provisions in disarmament agreements, the Canadian Government announced in 1983 the launching of an Arms Control Research Programme, which now has an annual budget of \$1 million. This Department of External Affairs programme involves the Government, the academic community and the commercial sector and includes such projects as studies of problems that arise in international negotiations, creation of specialized technical training programmes and organization of international symposia of experts.

The Arms Control Research Programme focusses on certain Canadian arms control priorities: the achievement of a comprehensive convention to ban chemical weapons; negotiation of a comprehensive nuclear test ban treaty; the development of a treaty to ban weapons for use in outer space; and the pursuit of arms control and military confidence-building in Europe.

The Government's activities include a \$3.2 million upgrading of the seismic array station in Yellowknife, to be completed by September 1989; two studies given to the UN Secretary-General on operational procedures for investigating alleged chemical weapons abuses, and working papers on the prevention of an arms race in outer space and the verification of a future Convention on Chemical Weapons. Canada has also undertaken a feasibility study of two potential applications of space-based remote sensing to the verification of multilateral arms control agreements, known as PAXSAT. PAXSAT 'A' investigated the use of space-based remote sensing for arms control in outer space, while PAXSAT 'B' was concerned with verifying conventional arms control agreements.

In 1985, at the Fortieth Session of the United Nations General Assembly, Canada's UN delegation initiated and sponsored Resolution 40/152 "on all aspects of verification," which was passed by consensus. The Resolution called on member states "to increase their efforts towards achieving agreements on balanced, mutually acceptable, verifiable and effective arms limitation and disarmament measures," and urged them "to communicate to the Secretary-General [...] their views and suggestions on verification principles, procedures and techniques [...] and on the role of the United Nations in the field of