

## Recommendation 9

**The Committee recommends that the Space Program should have a Space Technology component which would include the technology development activity currently part of the Space Station Project, and appropriate parts of the Remote Sensing activity of the Canada Centre for Remote Sensing. Funding for this component should be at the level of about 15% of the total Space Program budget.**

The foregoing discussion centres on those space projects in which Canada is presently involved and recommends certain changes in the balance of activities in our Space Program which we feel will improve that program. Since there is a realistic concern that a major component of the Space Program, our participation in the U.S. Space Station, may not ultimately go ahead, it is appropriate for the Committee to suggest an alternative course of action which would provide challenging opportunities for our space scientists and at the same time be consistent with Canada's concept of its position in the world community.

Canada is a strong proponent of world peace and comprehensive multilateral arms-control measures. The Arms Control and Disarmament Division of the Department of External Affairs, through its Verification and Research Unit, has commissioned research on space-based verification of arms-control measures. This process has been developed by External Affairs as the PAXSAT Concept, the application of space-based remote sensing for verification of multilateral arms control.

The PAXSAT Concept has two potential applications. The first is designated as PAXSAT 'A' and involves space-to-space remote sensing and deals with the verification of agreements involving space objects. The second, PAXSAT 'B', focuses on the verification of agreements involving conventional forces through space-to-ground remote sensing.

Canada's expertise in satellite remote sensing, combined with our dedication to verification of multilateral arms-control agreements, eminently qualifies us to take the lead in an international collaborative program of the PAXSAT type. Canada's declared interest in this activity was reiterated in the Speech from the Throne on October 1, 1986:

Arms control and disarmament are essential elements of Canadian policy. We are in the forefront of multilateral discussions concerning conventional arms control and confidence-building in Europe. In the nuclear field, both the verification of existing agreements and the conclusion of new accords are vital elements in Canada's efforts.<sup>19</sup>

At the Committee's public hearing in Toronto, the Working Group on International Surveillance and Verification presented the following testimony:

Canada possesses outstanding technical capabilities in remote sensing and surveillant instrumentation which, with a certain amount of political will, could be put to excellent use in the fields of international airborne and satellite surveillance for peace-keeping and arms verification.

The need for this technology is now coming into international prominence as more arms limitation treaties are expected to be made and as the United Nations is being called upon more and more to undertake peace-keeping and arms-verification activities.

In forming a new Canadian space agency there is an opportunity for Canada to be able to provide more international technical expertise in these areas.<sup>20</sup>

<sup>(19)</sup> Speech from the Throne, October 1, 1986.

<sup>(20)</sup> Working Group on International Surveillance and Verification. Brief to the Standing Committee on Research, Science and Technology, May 13, 1987, p. 3.