

securing new markets through participation in technical areas of strategic importance, such as automation and robotics, and materials processing in space.<sup>9</sup>

Additionally, there is a real and substantial return on our investment in Space Station in terms of national prestige, and from scientific and industrial linkages to be established through participation in a major international project.

The Canadian Institute for Advanced Research (CIAR) supports Canada's participation in Space Station:

We feel that the prime objective of a Canadian Space Station Program would be to stimulate the development and diffusion of advanced technology that will strengthen the competitiveness of the Canadian economy. In other words, we view the Canadian Space Station Program as a technology driver program.<sup>10</sup>

Very positive comments were also made about Space Station by the Canadian Prime Contractor, Spar Aerospace Limited:

Our role in building the Mobile Servicing Centre is much more than constructing a mission-critical integral component of this exciting project. It is in a very real sense a beacon for our best intellectual talents—in attracting them to where the action is, here at home in Canada...<sup>11</sup>

To a degree, this Committee shares in the excitement of Space Station and the strong sense of national purpose that is associated with our participation. But we have also received a substantial body of testimony expressing serious concern about this project.

The most obvious concern is about the possible military uses of Space Station by the United States. The Federal Government has rightly expressed concern about this issue. Canada agreed to participate in Space Station on the understanding that it would be designed, developed, operated and used as a civil space station in a manner consistent with international law. The Committee supports this position.

There may be certain uses of Space Station, however, which some observers would define as "military" but which the Committee believes should not be rejected outright. One such possible use of Space Station could be for testing of arms-control verification technologies. The Committee believes that the use of Space Station for such a purpose would be acceptable.

*Overt military use of the Space Station is unacceptable to the Committee.* To the degree that basic scientific research in space can be accurately categorized as military or non-military, we believe that experimentation dedicated to the development of weapons systems, including the Strategic Defense Initiative (SDI), should not be performed on Space Station.

Canada's investment in Space Station will only pay acceptable dividends if the managerial and technological expertise gained in the development of the MSS can be transferred to terrestrial applications<sup>12</sup>. Canada needs adequate access to the Space Station's working areas—the pressurized modules—to pursue experiments in space science, particularly materials science, in a microgravity environment.

<sup>(9)</sup> Ministry of State for Science and Technology, *The Canadian Space Program: New Initiatives*, Ottawa, May 1986, p. 3.

<sup>(10)</sup> Canadian Institute for Advanced Research, Issue No. 17, March 9, 1987, p. 17:23.

<sup>(11)</sup> Spar Aerospace Limited, Brief to the Standing Committee on Research, Science and Technology, March 9, 1987, p. 4.

<sup>(12)</sup> For an interesting discussion of the link between space and terrestrial applications in the use of hydrogen, see the testimony of the Hydrogen Industry Council, Issue No. 34, June 12, 1987.