

investigator for scientists and engineers from 17 different agencies in Canada. A second flight was scheduled for March 1987, but this was postponed due to the Challenger disaster. A new date for this flight is still being negotiated with NASA.

The presence of humans in space serves very well to increase public awareness of the Space Program and its benefits. It is also hoped that the existence of an astronaut corps will encourage young Canadians to pursue careers in science and technology. The astronauts have already touched the public imagination in a way that no other part of the Canadian space program (except perhaps the CANADARM) has. To date over 1,400 requests have been received for astronauts to speak to various groups and some 300 of these requests have been accepted.

The Canadian space industry, although relatively small, is both innovative and productive. Industry sales in 1985 were about \$320 million and some 3,500 people are presently employed. More than 70% of Canadian space products and services are sold in export markets. The industry has a growth record averaging 20% per year over the past decade. An important characteristic of the industry is the fact that it is 90% Canadian-owned, a remarkable achievement in a country where foreign ownership is often the rule.

International cooperation in space projects is an enduring and vital characteristic of Canada's Space Program. While our most active international partnership has been with the United States (Alouette-ISIS, WAMDII, WISP, LANDSAT, CANADARM, Space Station), Canada has enjoyed productive relationships with other countries, including Japan (remote sensing, rocket and satellite experiments), France (SPOT satellite, WINDII, SARSAT/COSPAS), the Soviet Union (SARSAT/COSPAS), Sweden (VIKING Satellite), as well as Australia, the United Kingdom, West Germany, and Brazil. This list does not, of course, include all of those countries with whom Canadian companies do business, including many Third World nations who are utilizing Canadian technology and expertise in communications and remote-sensing applications.

An important Federal Government activity is this country's relationship with the European Space Agency (ESA). Canada has had a formal agreement with ESA since 1978, and we are the only non-European country to enjoy that status. Our membership in ESA requires Canada to contribute to the Agency's general budget, albeit at a lower level than the European member states. In 1987, our contribution will be about \$2.5 million. In addition to that, Canada contributes to, and participates in, a number of important space projects with ESA, notably the ERS-1 remote sensing satellite and the OLYMPUS telecommunications satellite.

The Federal Government's participation in space activities is presently scattered among a number of departments and agencies. The principal actors include the Department of Communications (DOC) which originally developed the Alouette-ISIS programs and the CTS-Hermes satellite. Personnel and technology transferred from DOC developed the Anik satellite series, now owned and operated by Telesat Canada. Although Canada's space communications system resides in the private sector, DOC retains an important reservoir of expertise in space communications systems, electronics, mechanics and applications in the department's Communications Research Centre (CRC) at Shirley's Bay near Ottawa. This establishment includes the David Florida Laboratory (DFL), a world-class facility for testing satellites and components prior to launch.