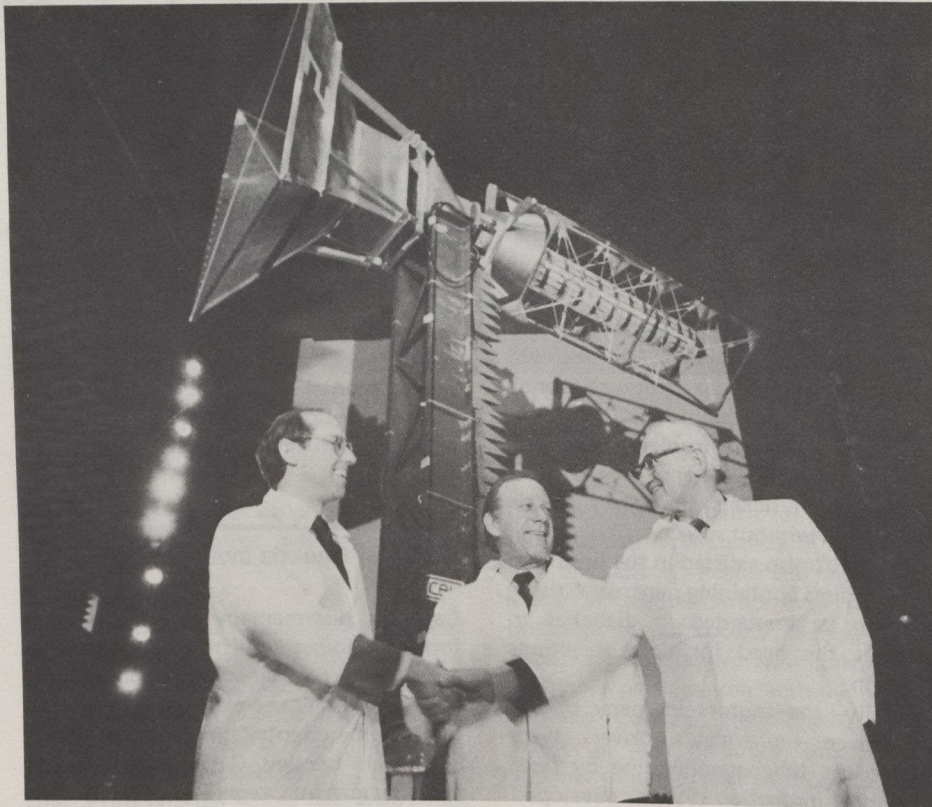


Canadian firm snaps up British satellite contract



Canadian Astronautics Ltd. president Jim Taylor (left), London West Member of Parliament Jack Burghardt and head of Marconi's space division Peter Anson shake on the deal in front of a CAL antenna mounted on a test rig.

Canadian Astronautics Ltd, an Ottawa aerospace company, has won a \$2-million contract with Marconi Space and Defence Systems of Portsmouth, England, to design and build an antenna for the British SKYNET 4 military communications satellite.

This brings the total amount of contracts Canadian Astronautics has landed in the past six months to \$25 million.

Canadian Astronautics won the SKYNET contract over three other aerospace companies, including US giant TRW Inc., which ranks sixty-sixth in the Fortune 500 rankings of the 500 largest US industrial corporations.

"The importance of this contract for Canadian Astronautics can't be underestimated," president Jim Taylor said. "It's the first international contract competition we have entered — the first time we've gone up against the 'big boys' of the international aerospace industry."

The Canadian Astronautics antenna, developed during studies for the federal Department of Communications' mobile satellite program, was chosen because of its ability to handle the satellite's high output, its innovative design and its com-

pact size (about 2.5 metres long), which will be an advantage when the SKYNET 4 satellite is launched early in 1985.

It will be tested at the Department of Communications' David Florida Laboratory at Shirley Bay, west of Ottawa. Canadian Astronautics is also negotiating for other parts of the SKYNET satellite to be tested at the laboratory.

The SKYNET 4 is to replace the SKYNET 2 satellite, which has been in space since 1974.

The SKYNET project is the latest in a series of contracts for Canadian Astronautics in the last six months.

Recent deals for the nine-year-old company include two contracts worth \$3.9 million for airborne radar systems to help ships travelling in Canadian waters avoid icebergs and ice blockages. (See *Canada Weekly*, Vol. 11, No. 45, December 14, 1983.)

Last June, the company landed a \$10-million federal government contract to investigate the effect of the ionosphere — the region between the earth's atmosphere and space — on the earth's climate. That contract was part of Canada's contribution to the space shuttle program.

System sold to New York

Project Ida, a communications system developed by Manitoba at a cost of \$2.2 million, has been sold to the Jerrold division of General Instrument Corp. of New York for \$250 000 (US).

A spokesman for the Manitoba Telephone System said General Instrument would buy the equipment, called Omnitel, and market rights for the United States and Europe. The agreement also gives Manitoba a 2.5 per cent sales royalty, to a maximum of \$5 million (US).

Project Ida, which delivers telephone, television, alarm signals and other communications services through an integrated network, wound up in December 1981. A spokesman for General Instrument Corp. said the firm would market equipment for a second phase of cable television equipment by 1985, which would be two-way rather than primarily a one-way system. If the market develops, millions of units could be sold.

Researchers to probe senses of man and machine

Researchers at the University of Toronto, the University of British Columbia in Vancouver and McGill University in Montreal are collaborating on a multidisciplinary project to investigate the sensory perception aspect of artificial intelligence.

The effort, initiated by the Canadian Institute for Advanced Research, will involve a total of eight or ten electrical engineers, perceptual psychologists, neuroscientists and computer scientists from the three universities.

Social sciences and humanities researchers will also be involved, studying the effects of artificial intelligence technology on human beings.

Other Canadian researchers are seeking to develop problem-solving software and methods of communicating directly with computers — both important aspects of artificial intelligence — but the co-operative effort will concentrate on a third aspect: basic research into the nature of sight in human beings and machines.

Spar Aerospace Ltd. of Toronto will send two or three of its researchers to work for at least six months with the research fellows of the institute. Spar has contributed \$750 000 to the institute over three years.