

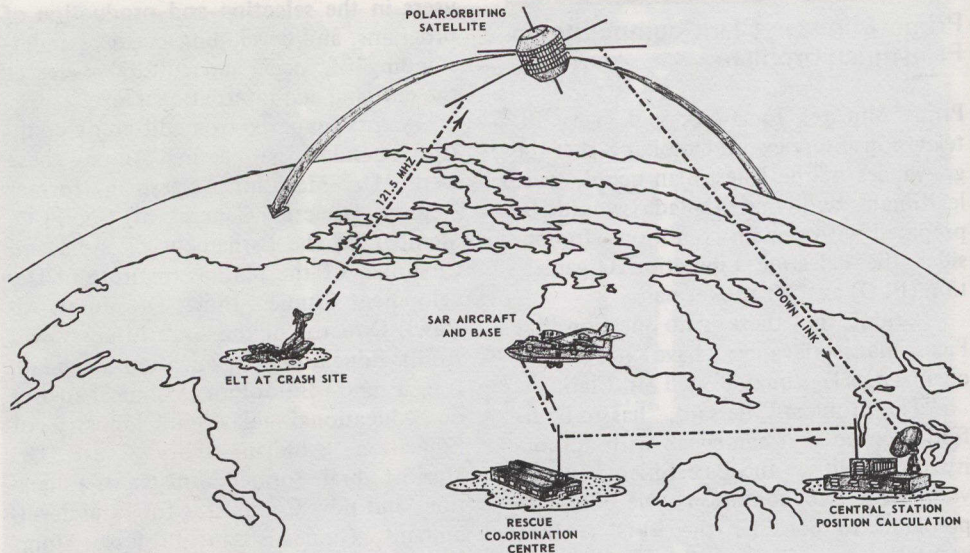
Canada, U.S. and France in satellite search and rescue program

In a continuing effort to improve search and rescue response capabilities, the Canadian Government has approved a \$13-million program to participate in the development and evaluation of an experimental search and rescue satellite system (SARSAT) during the next four years, Defence Minister Allan McKinnon has announced.

A fully operational SARSAT system would reduce the notification time of a mishap to a maximum of three hours and narrow a search to within 20 kilometres. The ability of the system to dramatically reduce response times to accidents gives it potential for saving lives and reducing loss of properties.

Canada, the United States and France are taking part in the initial stages of the experiment which involves equipping and launching three U.S. weather satellites with special electronic instruments called repeaters and processors. The experimental SARSAT system will use existing aircraft emergency locator transmitters (ELTs) and emergency position-indicating radio beacons (EPIRBs) found in marine vessels.

While in orbit, the satellites will monitor emergency transmissions from ELTs and EPIRBs and relay them to a ground-based terminal which will determine the



SATELLITE-AIDED SAR SYSTEM CONCEPT

origin of the distress signal. The terminals will disseminate the information to the appropriate Rescue Co-ordination Centre which would direct search and rescue resources to the site of the emergency.

Canadian participation in the international SARSAT program is being co-ordinated by the Department of National Defence, the major Canadian government contributor to the project. Also involved are the Ministry of State for Science and Technology, Department of Fisheries and Oceans, Department of External Affairs, Transport Canada and the Department of Communications, which is developing the SARSAT system technology in conjunc-

tion with the United States National Aeronautics and Space Administration and the Centre National d'Etudes Spatiales of France.

The Soviet Union, which intends to develop its own SARSAT system to be inter-operable with the Western system, is also co-operating in the program. A number of other countries have also expressed interest in the program.

The 15-month demonstration and evaluation phase is scheduled to commence in 1982. If the experiment is successful, it is expected to lead to international acceptance for implementing a fully operational SARSAT system world-wide.

Canadian space pioneer dies

John Chapman, the driving force behind Canadian satellite programs for the past 20 years, died recently in Vancouver.

Dr. Chapman, who was 58, guided Canada's entry into space by way of the *Alouette* and *ISIS* satellites.

"Canada has lost an extraordinary individual," Communications Minister David MacDonald said of the loss of his Assistant Deputy Minister for Space Programs. "He was known around the world for his drive, vision and competence."

Jeanne Sauvé, Communications Minister in the former Government, said Dr. Chapman had been known as Mr. Space.

"We owe to him to have broken down the isolation of the men and women living in remote areas, to have brought them the hope of access to education and medical services and to the innumerable means of communication which have

become so indispensable."

Born in London, Ontario, Dr. Chapman studied physics at the University of Western Ontario and McGill University and went to work as a senior scientist at the Defence Research Telecommunications Establishment near Ottawa in 1951.

He led the team that built *Alouette*, the research satellite launched in 1962 that made Canada the third country to develop and orbit its own satellite. The *Alouette* series was designed to do research on the ionosphere and was one of the most successful satellite series of its kind.

He was also instrumental in launching the *Hermes* satellite in 1976, a forerunner of the direct-to-home broadcast satellite that went into service recently in remote areas of Ontario.

Dr. Chapman was to have been honoured in Toronto with the 1979 McNaughton Gold Medal Award of the Institute of Electrical and Electronics Engineers.

B.C. sells coal to South Korea

Major coal sales contracts between three British Columbia suppliers and Korea Electric Company were signed recently in Seoul.

Under the three contracts, Kaiser Resources Ltd., Fording Coal Ltd. and Crows Nest Industries Ltd. will supply the state-run utility with a combined 800,000 tons of coal annually for five years, beginning in 1982.

The signing of the contracts at the South Korean Energy and Resources Ministry was timed to coincide with the visit of a seven-member economic mission from British Columbia led by provincial Premier William Bennett.

The 800,000 tons of Canadian coal are expected to meet about 30 per cent of the 2.7 million tons needed annually for a 560,000-kilowatt power plant south of Seoul.