

CANADA-FRANCE DEFENCE COMMITTEE

The announcement was made recently in Paris by Mr. C.M. Drury, the Canadian Minister of Industry and Defence Production, and M. Pierre Mesmer, the French Minister of Armed Forces, that the two countries have undertaken to work closely together in certain areas of defence programmes. A preliminary meeting of the Franco-Canadian Committee on Co-operation in Defence Industrial Research, Development and Production, ended in Ottawa just before this announcement.

During the past year, officials of both governments have been jointly studying how Canada and France could co-operate in the field of defence equipment, and have been assessing the possibilities of working together on defence development, production programmes and reciprocal procurement of defence equipment. The formation of the Franco-Canadian Committee will be a direct result of their studies.

Mr. D.B. Mundy, Assistant Deputy Minister of the Department of Defence Production, will head the Canadian delegation on the Committee, which will be composed also of representatives of the Departments of National Defence and Defence Production. M. René Bloch, Director of International Affairs at the French Ministry of Armed Forces, will lead the French delegation.

The establishment of the Committee will be a further step in the context of the Government's policy of developing closer relations between Canada and France. It will meet regularly as required with the locale alternating between Ottawa and Paris.

CANADA'S COPPER CONTROLLED

Under a recent Order in Council, export control was placed on Canadian copper ores, concentrates, matte, anodes, all refinery shapes, rolled copper rod, copper and copper-base alloys in all mill forms, including wire-mill products, secondary ingot and copper and copper-base scrap.

Mr. Mitchell Sharp, the Minister of Trade and Commerce, said that it had become necessary to impose control on copper as a precaution to ensure supply for Canadian users and to assist in maintaining orderly marketing in a situation of increasing shortage in all countries. Canada is the fourth largest copper producer in the free world and is an important source of supply of ores, concentrates and refinery shapes for many countries. Foremost among these are Britain, the United States, Japan and France. The Minister affirmed that Canada would continue to supply its established customers.

The United States, which is an important outlet for Canadian copper, brought copper under export control on November 18. It is expected that normal two-way trade in copper and copper products between Canada and the U.S. will be unrestricted, and that re-exports from either country in circumvention of the controls imposed by the originating country will not be permitted.

NEW QUEBEC POWER RESOURCE TAPPED

A power-line said to carry a higher voltage than any other in the world was opened recently in the presence of Premier Jean Lesage of Quebec and officials from other parts of Canada, and from the United States and Europe. The line connects one of six new hydro plants that are being built on the Manicouagan and Outardes Rivers with Montreal - a distance of 365 miles.

When complete, the Manicouagan-Outardes complex will produce nearly 6 million kw. In addition to constructing the six new stations, Hydro-Quebec, the government corporation controlling the province's power resources, will extend the capacity of two already in existence. The cost of this giant project will be about \$325 million.

SUCCESS FOR ALOUETTE II

Canada's satellite *Alouette II*, launched on November 28 from Vandenberg Air Force Base, California, was detected, and is being tracked, by space defence specialists of the North American Air Defense Command.

Radar detectors at the Ballistic Missile Early Warning System site (BMEWS), Fylingdales Moor, Yorkshire, England, picked up Canada's second satellite and relayed information to the U.S. Aerospace Defense Division, in Colorado Springs, for "cataloguing" and entry in the "book-keeping" system of the space age.

The 9th Aerospace Defense Divisions reported that the Canadian satellite had been "catalogued" with the international designator 1965-98A. Analysts at the Space Defense Centre estimate that the satellite has a perigee of 490 kilometers, with a 3,000-kilometer apogee.

The new Canadian satellite joins *Alouette I*, which has been in circular polar orbit since September 29, 1962.

The launching of *Alouette II* was the first in a series of launchings to be carried out by Canada and the U.S. National Aeronautics and Space Administration (NASA) under a joint programme called International Satellites for Ionospheric Studies (ISIS).

JOB OF SATELLITE

Defence Research Board officials in Ottawa revealed that the 320-pound "topside-sounder" satellite would "sound", or probe, the upper side of the ionosphere. It is designed also to measure galactic and solar radar noise to investigate upper-atmospheric radio signals initiated by lightning strokes and other radio sources, and to detect energetic particles.

Canada's second satellite was launched by a *Thor-Agena* rocket provided by NASA, which put a 215-pound NASA Direct Measurement Explorer spacecraft into orbit simultaneously.

The Canadian contribution to the Space Defense System consists of a *Baker-Nunn* camera sensor at Cold Lake, Alberta, under operational control of NORAD, and a tracker radar at Prince Albert, Saskatchewan, on an "as required as available" basis.