

THE WINNING GOAL

On September 28 in Moscow, 3,000 Canadian fans attending the final game of the Canada-U.S.S.R. hockey series, and millions watching it on television in Canada, went wild with joy when Paul Henderson of Team Canada scored the winning goal just 34 seconds before the end of the game. Phil Esposito, Canada, seen opposite, raises his stick jubilantly, while Russian goalie Vladislav Tretiak falls after his attempt to stop the puck.

The eight-game series — four played in Canada, four in the Soviet Union — ended with Canada winning four, the U.S.S.R. three, with one game tied. The Henderson goal broke a 5-5 tie in the final game after they had lagged two goals behind the Russians up to the start of the third period.

On their arrival at Montreal International Airport on the evening of October 1, the triumphant Canadian players were greeted by Prime Minister Trudeau, Montreal's Mayor Jean Drapeau and about 10,000 frantic fans.

Jamming a special civic reception in Toronto later the same evening were another 80,000 fans, some of whom had waited all day in the pouring rain to welcome home Canada's hockey heroes. (UPI photo)



ARMED FORCES AIR-SENSING UNIT

Space-age equipment and techniques are helping one of the newest units in the Canadian Armed Forces make significant advances in pollution control and in forestry and agricultural management.

The Canadian Forces Airborne Sensing Unit (CFASU), based at Canadian Forces Base, Uplands, near Ottawa, has just completed a year of service in a co-operative venture with the Canada Centre for Remote Sensing, an element of the Department of Energy, Mines and Resources (EMR). The unit was formed July 1, 1971.

During this period, the sensing unit has flown 28,000 "sensor-line miles" in most of Canada's ten provinces and in the two territories, performing aerial coverage for a list, at last count, of 102 customers.

EMR, the driving force behind the work, is the scheduling organization. Universities and various federal and provincial government departments contract with EMR for information that ranges from details on thermal pollution in the Ottawa River to insect infestation in the forests of British Columbia; from silt formation in Montreal harbour to pollution in the potash fields of Saskatchewan. While the scientific know-how for the work is mainly the domain of scientists with EMR, credit for the aerial skill goes to CFASU.

The commanding officer of the unit is Major E.W. Gardiner, a 42-year old career pilot with the Forces from Prince Albert and Kinistino, Saskatchewan. While a staff officer at headquarters in Ottawa, he designed the unit he was later appointed to command.

The unit started off with a CF-100 all-weather

interceptor and a *Dakota* transport aircraft. Its staff includes eight pilots, two navigators and 23 support personnel, for a total of 33 all ranks. A modern *Falcon Fanjet* has since been added, bought by EMR and operated by the squadron.

A fourth aircraft, another *Dakota*, has recently been acquired and converted for service with the airborne sensing unit.

WORK WITH EARTH SATELLITE

With additional personnel and equipment, Major Gardiner hopes to fly more than 100,000 miles in the second 12-month period. One of the unit's most challenging jobs will be to interrelate information it gets, at altitudes from 1,000 to 40,000 feet, with that obtained by Canada in "reading-out" the U.S. satellite ERTS A (Earth Resources Technology Satellite).

Placed in orbit in July, ERTS A will be "read-out" from Prince Albert. So far, Canada is the only nation that has contracted with the U.S. to receive images from this satellite. Data retrieved will be processed at the Canada Centre for Remote Sensing in Ottawa.

Major Gardiner explained that the satellite, to be in orbit for a year, completely scans Canada in 17 revolutions of the earth. "What they're trying to do is devise a method by which they can study the surface of the earth from a high altitude and on a continuing basis without launching aircraft," he said.

By comparing various photographs and other types of imagery, taken from both satellite and aircraft, this may be possible before too long.