

if tested construction techniques are employed and that interaction with wildlife can be minimized by careful route selection.

The Transport Minister explained that the Canadian Institute of Guided Ground Transport came into being formally in May 1970. Its sponsors are the Ministry of Transport, Canadian National Railways, Canadian Pacific Limited and Queen's University. Its goals are to carry out investigations and research - short-term and long-term - in order to improve Canadian guided ground-transportation systems, and to develop a university interest in transportation among graduate and undergraduate students. *The Railway to the Arctic* is the first major study to be completed by the Institute.

NATO FORCE GETS NEW 'COPTERS

The Canadian Forces have retired their last remaining operational CH-112 *Nomad* helicopter, known as "Old 280", at a ceremony in the Black Forest area near Lahr, West Germany.

The event was marked by a "fly-past" and "roll-past" at the Royal Canadian Dragoons lines in Lahr, with the commander of the 4th Canadian Mechanized Battle Group, Brigadier-General Jacques Chouinard, taking the salute.

The *Nomad*, or *Hiller*, as the Canadian Forces called the machine, first entered service with the Canadian Army and the Royal Canadian Air Force in 1961. The Canadian Infantry Brigade Group in Soest, West Germany, received nine of them in 1962.

The Canadian Army used 25 machines in the reconnaissance and liaison role, while the RCAF used its three for training purposes.

The light three-seater helicopter was powered by a *Lycoming* air-cooled six-cylinder engine, had an endurance of 2½ hours and a maximum speed of 87 knots. By comparison, its replacement, the turbine-powered four-seat *Kiowa*, has an endurance of 3½ hours and a top speed of 120 knots.

For Captain Peter Dudley of the Fort Garry Horse and Warrant Officer Richard Middleton, who led the fly-past in "Old 289", the event brought back memories. Ten years ago, in Soest, Lieutenant Peter Dudley flew the then new 280 and Corporal Middleton serviced it.

SEARCH FOR OLD SHIPS OF WAR

Complex electronic devices will be used this summer to seek the resting-place in Lake Ontario of two American naval vessels of the War of 1812.

The search, to be led by Dr. Daniel A. Nelson of St. Catharines, Ontario, will be conducted under the auspices of the Royal Ontario Museum. Dr. Nelson, a research associate of the Museum, had had extensive underwater experience. The headquarters ship,

the *Porte Dauphine*, has been lent to the expedition by the Great Lakes Institute.

The warships, *Hamilton*, of ten guns, and *Scourge*, of nine guns, sank in a storm while manoeuvring to engage a British flotilla. Since the precise location of the wrecks is not known, a broad expanse of Canadian waters at the western end of Lake Ontario must be searched. Because of the extent of the area, and depths of up to 300 feet, no diving will be attempted. Instead a magnetometer will be used.

Towed astern of the search vessel with the sensor close to the bottom, the magnetometer is an instrument that reacts to the presence of iron and registers its findings as a "print-out" on deck. The instrument and the technique were perfected by Dr. Nelson during submarine searches in the British Virgin Islands.

When the wrecks are discovered they will be examined by means of underwater television cameras to determine the possibilities of raising them whole.

The expedition, which is likely to produce results of exceptional historical importance, is supported by government grants, including one from the Historic Sites Board. Extensive co-operation has also been received from the Canada Centre for Inland Waters, Barringer Research Ltd., Hunttec 70 Ltd., and Comdev Marine Ltd.

NORTHERN RESEARCH GRANTS

Grants totalling \$430,000 will be made available during 1972 and 1973 for northern scientific research and training, it was announced recently by Mr. Jean Chrétien, Minister of Indian Affairs and Northern Development.

The grants program is administered by the Northern Science Research Group for the Northern Development Program of the Department.

The 1972-73 grants represent an increase of \$50,000 over those available for 1971-72, and include \$300,000 awarded under the program of general grants to assist in the training and education of scientists for northern work.

TO WHOM AWARDED

The grants for northern studies are awarded to committees and institutes for northern research at 12 Canadian universities, and to the Arctic Institute of North America, which provides facilities and other support for scientific research in the North. Also included in the program is a grant of \$30,000 to the Arctic Institute of North America to assist in the publication of the *Arctic Bibliography*, a unique reference work for northern scientists.

Additional funds totalling \$100,000 also are provided for special grants to universities and research institutes to investigate problems of particular interest to the Department.