

and selling oats and barley during the present crop year, prior to the removal of price ceilings on these grains, were entitled to an adjustment on the part of the Dominion Government. Mr. Howe emphasized that these payments apply only on oats and barley delivered and sold by producers between August 1, 1947, and October 21, 1947.

The Canadian Wheat Board has been instructed to proceed with these payments as rapidly as possible.

**MARK-UP ON ONIONS, APPLES:** The Wartime Prices and Trade Board announced reimposition of mark-up control on imported apples and onions, effective July 9, 1948.

This action is in line with the policy of imposing control on fresh fruit and vegetables which are subject to the import controls.

Importing wholesalers are allowed a markup of 12 1/2% for apples and 15% for onions on sales to retailers. When an importing wholesaler sells to another wholesaler he is only allowed a markup of seven per cent for apples and nine per cent for onions. The secondary wholesaler is then allowed a markup of six per cent on apples and seven per cent on onions. A retailer who buys from a wholesaler is permitted a markup of 25% for both products.

**EASTERN ARCTIC PATROL**

**SEVEN VESSELS EMPLOYED:** Seven vessels will be used to carry supplies to posts in the Eastern Arctic this summer, the Hon. James A. MacKinnon, Minister of Mines and Resources, announces in a statement giving details of the 1948 Eastern Arctic Patrol.

These ships will visit all settlements, medical centres, R.C.M.P. detachments, trading posts, missions, and weather and radio stations in the Far North. In former years the Patrol was carried on by R.M.S. "Nascopie", which was lost on a reef off Cape Dorset last year.

First vessel to leave for the Northland will be the M.V. "Regina Polaris", owned by the Hudson Bay Vicariate Transport Limited, which will sail from Montreal on July 10 to visit the settlements in the Hudson Bay area and on the south side of Hudson Strait and Ungava Bay.

S. J. Bailey will represent the Northwest Territories Administration as Administrative Officer on the "Regina Polaris", and will conduct inspections at the various settlements, paying particular attention to welfare conditions among the Eskimos.

Aboard the "Regina Polaris" will be Dr. H.W. Lewis, of the Department of National Health and Welfare, who in the capacity of Medical Superintendent for the Eastern Arctic, will give necessary medical treatment to the natives at the various ports of call. Medical inspection trips to Baffin Island posts have been made earlier this year.

The M.V. "Terra Nova" chartered by the Hudson Bay Company, will sail in August to the settlements along the eastern and northern coasts of Baffin Island. Alex Stevenson will be the Administrative Officer.

The other vessels carrying Government supplies will be the M.V. "Eskimo", owned by the Hudson Bay Company, which will serve Lake Harbour, Frobisher Bay, and certain other posts in Hudson Strait and Hudson Bay; the M.V. "Clarendville", which will be used by the Hudson Bay Company to help supply the northern Baffin Island trading posts; the M.V. "Earl Trader", also operated by the Hudson Bay Company, sailing from Sydney, N.S. with supplies for Baker Lake, N.W.T.; the Baffin Trading Company's N.V. "Ice Hunter", which will visit the Ungava Bay posts, and the Government ice-breaker "N.B. McLean", carrying supplies from Churchill to Southampton Island.

**RADAR AIDS MARINE NAVIGATION:** The "Radel", a 65-ft. motor vessel owned by the National Research Council, is operated as part of the Radio and Electrical Engineering Division's programme of radar aids to navigation. The vessel is equipped with the latest type of radar in which discrimination and minimum range have been so improved that the vessel can navigate safely in narrow channels (200 ft.) or enter harbours and approach within 75 ft. of buoys or wharves under conditions of low visibility. During radar investigations the ship's course is controlled by the use of steering equipment below decks with no outside view whatever. Photographs of radar displays made from the ship permit the construction of mosaic maps for navigational purposes.

This summer the "Radel" will carry out comparison trials between NRC merchant marine radar and a commercial prototype on the Ottawa River during the first two weeks of July. The "Radel" will also be used to conduct maximum range trials on small radar buoys, and to determine the necessary spacing of buoys laid out in patterns so as to give a well-defined echo indicating some definite hazard to navigation. Patterns of buoys as, for example, in squares or three in line, will be used to replace single coloured buoys for radar identification, as radar does not distinguish colours, but only shapes. Department of Transport radar buoys will be used in the determination of the most suitable type of reflector for maximum range. Consideration will be given to size, weight, and ease of construction of two different types.

After 12 July, the "Radel" will proceed via the Rideau River to Kingston, where a demonstration of radar equipment will be made before members of the National Defence College. Later, the vessel will proceed to Toronto where work begun last year will be continued on radar mapping of the lake shorelines, harbour entrances, and trials of blind navigation in and out of all available small har-

bours. Observations will be made on Lake Ontario of conditions of abnormal propagation of radar signals.

Subsequently, a visit will be made to Caribou Island in Lake Superior for performance trials of new radar reflectors on the Caribou Island lighthouse. En route, radar maps will be made of the area around Sarnia and Sault Ste. Marie.

**HARBOUR RADAR AID FOR VANCOUVER:** At the request of the Department of Transport, the Radio and Electrical Engineering Division will shortly select a site for the installation of a harbour radar aid at the port of Vancouver, B.C. A truck, fitted with modern radar communication and photographic equipment, will be shipped to Vancouver early this month and a party of three NRC scientists will conduct the survey. It is anticipated that a suitable site may be found in the vicinity of the Lions Gate Bridge, which will give adequate coverage of the inner harbour and of English Bay.

**NORTH MAGNETIC POLE**

**AERIAL SURVEYS CONTINUED:** Scientists from the Dominion Observatory in Ottawa leaving Ottawa by an R.C.A.F. Canso amphibian, are to continue last year's aerial magnetic surveys aimed at fixing position of the Magnetic North Pole announces the Hon. James A. MacKinnon, Minister of Mines and Resources.

The Joint Mines and Resources R.C.A.F. expedition hopes to determine with greater exactness the position of the North Magnetic Pole, known to be located in the northwestern part of Prince of Wales Island as a result of last summer's "Operation Polco", when the R.C.A.F. flew a similar group north. In addition, it will gather sufficient data to enable completion of the first reliable magnetic charts of Canada's Arctic regions.

Accompanying the party, which will spend about two months in the Arctic islands, will be two scientists appointed by the Geographical Bureau, Department of Mines and Resources.

In charge of the magnetic work will be Paul H. Serson of Ottawa, a veteran of three successful trips to the Arctic, including last year's survey. Mr. Serson will use instruments of his own design which received initial tests last summer on "Operation Polco". He will be assisted by Ralph D. Hutchison of Toronto, a senior student at the University of Toronto, who saw five years' service as a lieutenant in the Royal Canadian Navy during the Second World War.

Scientists being sent north by the Geographical Bureau are John Carroll, an engineer on the staff of the Topographical Survey of Mines and Resources, and J.L. Jenness, of the Geographical Bureau staff, Mr. Carroll who will assist the magnetic party by determining precise latitude and longitude of each site

visited, will also aid Mr. Jenness in making a geographical reconnaissance of the surrounding area. The pair will study landforms, vegetation, wildlife, tides, currents, ice conditions, and other aspects of the physical geography of the area, and will record locations of archaeological sites and other evidence of former native occupation. They will also take air and land photographs to supplement their own observations. Mr. Jenness is the eldest son of Dr. Diamond Jenness, whose membership in the Canadian Arctic Expedition of 30 years ago, led by Dr. Vilhjalmur Stefansson, is recorded in the name of an island near Borden Island, which may be visited again this summer.

Among the islands on which sites for magnetic observations have been selected are Victoria, Banks, Melville, Bathurst, Prince Patrick, Borden, and Ellef Ringnes. They lie within an area bounded by the parallels of 70 and 80 degrees north latitude and the meridians of 100 and 125 degrees west longitude. The region is one of the least-known parts of the Canadian Arctic, and has not been studied by scientists since Dr. Stefansson went there.

The expedition, like the predecessor last summer, will call for skillful flying on the part of the R.C.A.F. crew. Each landing site will have to be reconnoitered carefully before putting the Canso down on the water. Even where ice-free stretches of water are encountered, the crew must be alert against the danger of wind changes forcing ice packs shoreward, trapping the flying boat. The trip will mark the "farthest north" reached by the flying boat, as far as sustained operations are concerned.

In charge of all flying operations during the trip will be Flying Officer D.K. Game, captain of the Canso, Vancouver, one of the R.C.A.F.'s most experienced Arctic flyers. Nine other crew members and ground technicians will make up the R.C.A.F. party. They are: Flying Officer D.R. Guthbertson (pilot) Eastview, Ont.; Flying Officer J.E. Goldsmith (navigator) Halifax; Flying Officer W. Smith (wireless operator) Ottawa; Sergeant A.B. Hillman (flight engineer) Ottawa; Corporal T.M. Roche (electrician aero) Hamilton, Ont.; Leading Aircraftman W.R. Southcombe (airframe mechanic) Sarnia, Ont.; Leading Aircraftman R.A.R. Duhamel (instrument mechanic) Ottawa; Leading Aircraftman A.T. Friberg (aero-engine mechanic) Sooke, B.C.; Leading Aircraftman J.S.J. Paquette (safety equipment worker) of Montreal. F/O Goldsmith, the navigator is a veteran of "Operation Polco."

R.C.A.F. crew members of last summer's expedition added greatly to further knowledge of the Arctic Area by doing pencil aerial reconnaissance sketches of many of the places visited to obtain magnetic readings. In several cases their observations revealed errors in existing maps and their notes were turned over to Mines and Resources as the basis for corrections in further maps of the region.