

international air carriers. The international communications stations at Vancouver, B.C., Montreal, Que., Moncton, N.B., and at Goose and Gander, Nfld., form a major contribution on the part of Canada to international aviation. Two international stations, at Sydney and Yarmouth, N.S., provide very high frequency coverage to international airlines flying the Gander-New York route. The services provided by these international stations may be divided broadly into three classes: (1) communication facilities for Meteorological Services ;(2) communication facilities for the Air Traffic Control Services; and (3) facilities for the benefit of the airline operating agencies to provide communication with their aircraft and between their despatch offices.

Because Class 3 is provided solely for the convenience of the airline operating agencies, a system of charges has been introduced to recover from the airlines the cost of providing this portion of the service. The charge is \$13 per aircraft per oceanic crossing. Revenue for the year ended Mar. 31, 1954, was approximately \$227,000.

Very High Frequency Communications.—Owing to the overcrowded conditions of the high frequency portion of the radio spectrum and to the fact that communication in the very high frequency portion of the spectrum is relatively free from atmospheric interference, progress is being made in providing air-ground communications on the latter frequencies. Very high frequency air-ground communication facilities are now provided at 93 range stations, 2 radio-beacon stations, 7 air traffic control centres, and all 21 airport control towers. Very high frequency equipment has been provided also in all control towers and in a large number of airport vehicles to facilitate direction to traffic on the airport surface.

Weather Reporting Stations.—Weather reporting stations are located at strategic points throughout the country from coast to coast and into the Far North. Reports from these stations enable meteorological personnel to forecast weather trends that are of great importance to both domestic and transoceanic flying operations. Some of these stations are located in remote areas with which radio is the only means of communication. Radio stations are established in such areas to enable the weather reports to be rapidly forwarded to meteorological offices where the data are correlated. Four such communications stations are located at Dease Lake, B.C., Nitchequon and Indian House Lake, Que., and Coppermine, N.W.T.

Marine Communications.—Two coast stations operating on both medium and high frequencies are maintained in conjunction with the aeronautical stations at Seven Islands, Que., and Goose, Nfld., for the exchange of communications between ships and the shore. Communications are conducted by both radio-telegraph and radiotelephone. The station at Frobisher, N.W.T., provides radiotelephone facilities on high frequencies only.

Improvements in Radio Aids to Air Navigation.—The Montreal to Windsor airway is being equipped with VHF omnidirectional ranges. This type of facility enables the pilot in the aircraft to select, at will, his desired course. These stations operate in the very high frequency band between the portion reserved for the ILS localizers and that portion used for very high frequency. A contract has been let for a radar ground-controlled approach system for Gander, Nfld., airport. Work on the design of buildings, towers and underground cable system is continuing.

Wireline Services.—The Airway Traffic Control interphone system was expanded to satisfy requirements stemming from an increasing volume of both civil and military air operations. Telecommunications Division teletype circuits were