Qantas Empire Airways Ltd., operating between Sydney, Australia, San Francisco, U.S.A., and Vancouver, Canada.

Sabena Belgian World Airlines, operating between Brussels, Belgium, Shannon, Ireland, and Montreal, Canada.

Seaboard and Western Airlines, Inc., operating between points in the United States, Gander, Canada, and points in Europe.

Swiss Air Transport Company Ltd. (Swissair), operating between points in Switzerland, Montreal, Canada, and points in the U.S.A.

United Air Lines, Inc., operating between Vancouver, Canada, and Seattle, U.S.A.

West Coast Airlines, Inc., operating between Calgary, Canada, and Spokane, U.S.A.

Western Air Lines, Inc., operating between Calgary, Canada, and Great Falls, U.S.A.

Flying Schools and Clubs.—At the end of 1962, 80 commercial flying schools were registered as members of the Air Transport Association of Canada. During the year, these schools instructed and graduated 1,328 students as private pilots and 74 students as commercial pilots.

Membership in the 39 flying clubs connected with the Royal Canadian Flying Clubs Association numbered 9,646 at the end of 1962. During the year these clubs instructed and graduated 1,141 students as private pilots and 52 students as commercial pilots.

Weather Services.—Weather services are provided by the Meteorological Branch, Department of Transport, to meet the demands of the general public and all basic economic endeavours such as agriculture, industry, forestry, shipping and fishing. Meteorological service is provided to national and international aviation. The military meteorological requirements in Canada and overseas are met by special co-operative arrangements with the Department of National Defence. The observing and forecasting of ice conditions in navigable waters, both inland and coastal, have expanded rapidly in recent years.

There are 52 forecast offices in Canada, one on shipboard and four in Europe. Forecast offices are linked by 55,300 miles of teletype and radio-teletype circuits, and a national facsimile system 14,600 miles long is used for the distribution of meteorological information in chart form. As of Jan. 1, 1963 the Branch maintained 266 surface synoptic and hourly weather reporting stations, a network of 31 radiosonde stations including five in the Arctic operated jointly with the United States, 59 stations recording upper winds, and 1,878 climatological stations. One Ocean Weather Station in the Pacific, 1,000 miles west of Vancouver, is maintained under International Agreement. (See also pp. 55-56.)

Ground Facilities.—Aircraft landing areas in Canada are classified in Table 2 by administrative agency, as licensed or unlicensed land facilities or seaplane bases, and military airfields. The unlicensed aerodromes and seaplane bases shown are kept in varying degrees of readiness but lack one or more of the facilities usually found in licensed airports, such as lights, passenger accommodation, ground/air communication, etc. Associated with these facilities is a network of radio aids to navigation designed to facilitate en route navigation and safe landings under low visibility conditions.

As at April 1963, the Department of Transport operated 77 low frequency radio ranges and 36 VHF omni-directional ranges (11 additional ranges were under construction). Instrument landing systems in operation totalled 39 (one of which was scheduled for decommissioning and three additional systems were under construction) and there were 183 non-directional radio beacons in operation (an additional 19 were under construction). These facilities are regularly calibrated and flight-checked by civil aviation inspectors.