

Weather Services.—Weather services are provided by the Meteorological Division of the Department of Transport to meet the increasing demands of aviation, agriculture, industry and the general public. The expanding weather services required by the Department of National Defence are a major responsibility of the Division, both in Canada and with Canadian Armed Forces abroad. In 1955 a Central Analysis Office was operated in Montreal together with 47 forecast offices across Canada and four in Europe. Forecast offices are linked by teletype, radio teletype and a national facsimile system. As of July 1, 1955 the Division maintained 246 synoptic stations taking six-hourly observations, a network of 32 radiosonde stations (including five in the extreme Arctic operated jointly with the United States) taking upper air soundings and 69 stations recording upper winds. In addition there were in operation 1,228 climatological stations. One ocean weather station taking weather observations every three hours in the Pacific, 1,000 miles west of Vancouver, is maintained under international agreement.

Air Industries and Transport Association.—Commercial flying schools, which are members of the Air Industries and Transport Association, numbered 45 at the end of 1954. During 1954 the number of students instructed and graduated as private pilots was 567, the number graduated as commercial pilots was 86, and the number of instructional hours flown was 38,999.

Royal Canadian Flying Clubs.—At the end of 1954 there were 37 flying clubs connected with the Royal Canadian Flying Clubs Association. The total membership was 7,588 and the aircraft available for instructional purposes numbered 168. During the year 1,002 students were instructed and graduated as private pilots and 97 as commercial pilots. Instructional hours of flying totalled 74,856.

International Air Agreements.—The position of Canada in the field of aviation as well as its geographical location makes co-operation with other nations of the world engaged in international civil aviation imperative. Canada took a major part in the original discussions that led to the establishment of the International Civil Aviation Organization (ICAO) which has its headquarters at Montreal, Que. A special article on The International Civil Aviation Organization and Canada's Participation Therein appeared in the 1952-53 Year Book, pp. 820-827.

In recent years Canada has been a signatory to agreements concerning civil aviation with Australia and New Zealand; Belgium, Denmark, France, Ireland, Japan, Mexico, the Netherlands, Norway, Peru, Portugal, Sweden and with the United Kingdom and the United States.

Section 2.—Air Services

Air Transport Services.—These services are grouped into two broad classes—Scheduled Services and Non-scheduled Services. The first group provides regular point-to-point service on scheduled advertised routes and the second group includes:—

- (1) Specific Point Services from a designated base to specific points on the basis of unit rates that may be undertaken as the traffic warrants and that are not on a time schedule;
- (2) Chartered Services operated on the basis of the private chartering of an entire aircraft for a specific trip;
- (3) Contract Air Services which operate on one or more specific contracts—these do not operate on a time schedule nor need the contractor take the entire space of the aircraft; and
- (4) Specialty Air Services concerned with large scale forestry and utility surveys according to some specific agreement.

Trans-Canada Air Lines.—During 1954 TCA provided air transportation for 1,438,349 passengers and carried 16,741,568 lb. of freight and 4,762,763 lb. of express over its North American and international routes. Passenger traffic increased 10 p.c. over 1953 and in performing its services TCA flew 15 p.c. more revenue ton-miles. Staff at Dec. 31, 1954 numbered 7,991.

Super-constellation service was introduced by TCA for the first time on transatlantic routes and transcontinentally in 1954. The transatlantic service includes first class and tourist accommodation. Also in 1954 TCA took delivery of its first propeller-turbine