Flying Schools and Clubs.—At the end of 1963, 88 commercial flying schools were registered as members of the Air Transport Association of Canada. During the year, these schools instructed and graduated 1,569 students as private pilots and 331 students as commercial pilots.

Membership in the 35 flying clubs connected with the Royal Canadian Flying Clubs Association numbered 8,647 at the end of 1963. During the year these clubs instructed and graduated 1,132 students as private pilots and 76 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 three 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, 1964, the Branch maintained 281 surface synoptic and hourly weather reporting stations, a network of 32 radiosonde stations including five in the Arctic operated jointly with the United States, 61 stations recording upper winds, and 1,949 climatological stations. One Ocean Weather Station in the Pacific, 1,000 miles west of Vancouver, is maintained under International Agreement (see also p. 43).

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.

On Apr. 1, 1964, the Department of Transport operated 75 low frequency radio ranges (with one under construction) and 36 VHF omni-directional ranges (with 11 under construction and five in the planning stage). Instrument Landing Systems in operation totalled 42 (with four under construction) and there were 197 non-directional beacons in operation (with 10 under construction). All of the operating facilities are regularly flight-checked and calibrated by civil aviation inspectors.

| 2.—Aircraft Landing Areas classified by Type of Facility and Operator, by Province, |
|---|
| as at Apr. 1, 1964 |

| Type of Facility and Operator | Nfld. | P.E.I. | N.S. | N.B. | Que. | Ont. | Man. | Sask. | Alta. | B.C. | N.W.T. | Y.T. | Total No. |
|---|-------|-------------|-------------|---------|-------------------------|------------------------|-------------------|---------------------|-------------------------|--------------------------|------------------|---|----------------------------|
| Licensed Airports (Land)— Department of Transport Municipal. Private. Heliports. | 1 | 1 -1 -2 - | 3 1 1 | 2 3 3 - | 7 20 24 2 | 20 20 35 8 | 4 5 7 1 | 18 11 — | 6 17 16 | 22 17 1 5 | 12 -1 | 5 2 — | 87 104 104 16 |
| Unlicensed Aerodromes— Department of Transport Municipal. Private. Abandoned or unknown Heliports | 3 | = = = | 3 1 1 | | 3 11 26 6 1 | 6 4 14 7 4 | 2 3 31 2 | 2 32 108 5 | - 11 27 4 - | 9 16 66 39 3 | 5 1 7 1 | $\begin{bmatrix} \frac{4}{3} \\ -\frac{4}{4} \\ -\end{bmatrix}$ | 32 89 294 73 8 |