

1.—Radio Stations in Operation by Class, as at Mar. 31, 1949

| Department of Transport Stations | | Other Stations | |
|--|-----|--|------------------|
| | No. | | No. |
| Coast | 2 | Ship (Class A) | 1,856 |
| Combined Coast and L.F. Direction Finding | 1 | Ship (Class B—Receiving only) | 150 |
| Combined Coast, Radiotelephone and L.F. Direction Finding | 11 | Limited Coast | 8 |
| Combined Coast and Radiobeacon | 3 | Aircraft | 863 |
| Combined Coast and Radiotelephone | 23 | Public Commercial | 3,699 |
| Combined Coast, Radiotelephone and Radiobeacon | 1 | Private Commercial | 112 |
| Radiobeacon | 40 | Municipal Police Private Commercial | 112 |
| Combined Radiobeacon and L.F. Direction Finding | 1 | Private Commercial Broadcasting— Operated by the Canadian Broadcasting Corporation ¹ | 63 |
| Combined Radiobeacon and Radiotelephone | 1 | Operated by private owners | 144 |
| Radiotelephone | 18 | | 207 |
| Ionosphere | 5 | Technical or training schools | 8 |
| H.F. Direction Finding | 2 | Experimental | 141 |
| Monitoring | 5 | Commercial Receiving | 417 |
| Land | 1 | Commercial Receiving (Special) | 100 |
| Ship (Class A) | 105 | Amateur Experimental | 5,755 |
| Aircraft | 20 | Private Radio Receiving | 2,045,017 |
| Radio Range ¹ | 43 | Free to the blind | 7,815 |
| Combined Radio Range, Radiotelegraph and Radiotelephone ¹ | 49 | Free to Hospitals and Charitable Institutions | 33 |
| Fan Marker | 10 | Free to Schools | 4,866 |
| Weather Reporting ² | 6 | Free to Crystal Receivers | 10 |
| Frequency Modulated Relay | 6 | Free to Federal Government | 68 |
| Logan (Long range aid to navigation) | 3 | | 2,057,799 |
| | | Total | 2,071,586 |

¹ Station location ("Z") markers are installed at 90 Radio Range Stations. ² Two stations, at Port Harrison, Que., and Coppermine, N.W.T., perform restricted coast station service during the season of navigation but since their primary function is that of a weather reporting station, they are shown under this heading only. ³ Includes 19 repeater stations.

Control and Licensing of Marine and Aeronautical Radio.—Under the Safety of Life at Sea Convention, and the Canada Shipping Act, most passenger ships and larger cargo ships must be fitted with radiotelegraph equipment, primarily for use in cases of distress. This requirement includes certain standards that equipment must meet to fulfil the purposes for which it is fitted, as well as standards of proficiency of operating personnel. Type approval is given for each make and model of equipment which comes up to the required standard and, in addition, the ship station as a whole is inspected before the licence is issued, and periodically thereafter. Foreign ships are subject to inspection before sailing from Canadian ports to ensure that they conform with the requirements of the Safety of Life at Sea Convention. Approximately 3,000 ships are inspected annually.

Analogous inspections of aircraft radio stations are carried out and about 298 aircraft radio stations were inspected in 1948.

Standards are provided specifying in detail the requirements to be met to ensure an airworthy installation. These requirements are contained in Radio Division Circular C.R. 1, copies of which can be obtained from any Departmental Radio Inspector.

A 'Type Certificate' of airworthiness is granted to manufacturers for each type (model) aircraft radio equipment that has been demonstrated to meet the requirements. These requirements are contained in Circular C.R. 2, "Requirements for Type Certificate of Airworthiness for Aircraft Radio Equipment". Only type-certificated equipment is accepted for use on scheduled airlines and, while other equipment may be acceptable in other aircraft upon inspection at the time of installation, the purchaser of type-certificated equipment is assured that it will