

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.

Analogous inspections of aircraft radio stations are carried out. Standards are provided specifying in detail the requirements to be met to ensure an airworthy installation. A certificate of airworthiness is granted to manufacturers for each type or model of aircraft radio equipment that has been demonstrated to meet the requirements. Only type-certificated equipment is accepted for use on scheduled airlines, though other equipment, if inspected, is acceptable for other aircraft.

Marine and aeronautical radio operator standards and related regulations are covered by international agreement. The International Telecommunication Convention prescribes the qualifications for radio operators on mobile stations, and the Radio Act, 1938, provides that all operators, both commercial and amateur, must pass examinations to prove their ability to operate the respective classes of stations on which they are engaged. Competent operators are required on all classes of stations in order that the technical requirements prescribed under international agreement be closely adhered to and are particularly essential in the case of ships and aircraft stations in the interests of safety of life.

**Investigation and Suppression of Inductive Interference.**—Under the Broadcasting Act the use of electrical equipment which will produce harmful interference to broadcast reception is not permitted. The Radio Division of the Department of Transport maintains 50 cars equipped for measuring and locating sources of interference to broadcast reception. In addition to locating the sources of interference, advice is given as to how it can be suppressed or eliminated. These cars operate from the permanent Radio Inspection Offices located in 25 cities throughout Canada.

#### 1.—Investigations of Inductive Interference, Years Ended Mar. 31, 1948-51

Item	1948	1949	1950	1951
	No.	No.	No.	No.
<b>Sources Investigated—</b>				
Electrical distribution systems and power lines.....	1,459	1,602	1,919	1,836
Domestic and commercial electrical apparatus.....	5,035	5,499	5,383	7,756
Defective receivers and radio apparatus.....	1,433	1,031	934	1,054
Industrial, scientific and medical apparatus.....	1,474	887	1,196	456
Miscellaneous (external cross-modulation, etc.).....	—	—	2	2
<b>Totals.....</b>	<b>9,401</b>	<b>9,019</b>	<b>9,434</b>	<b>11,104</b>
<b>Action Taken—</b>				
Sources definitely reported cured.....	6,428	7,289	7,219	8,976
Sources not yet reported cured.....	2,725	1,635	2,130	2,029
Sources having no economic cure.....	248	95	85	99

Industrial, scientific and medical apparatus is brought under strict control, in accordance with Regulations for Controlling Radio Interference and under the authority of Section 23 of the Canadian Broadcasting Act, 1936. Regulations require that radiation from such apparatus, that is liable to cause interference to radiocommunications, must be suppressed, either by shielding or by replacing the apparatus with a non-interfering type. The Department of Transport conducts type-tests on diathermy and industrial heating apparatus submitted by manu-