

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 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 on 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 that will produce harmful interference to broadcast reception is not permitted. The Telecommunications Division of the Department of Transport maintains 54 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, 1950-53

Item	1950	1951	1952	1953
	No.	No.	No.	No.
Sources Investigated—				
Electrical distribution systems and power lines.....	1,919	1,836	2,307	2,191
Domestic and commercial electrical apparatus.....	5,383	7,756	5,022	6,205
Defective receivers and radio apparatus.....	934	1,054	1,123	1,786
Industrial, scientific and medical apparatus.....	1,196	456	50	128
Miscellaneous (external cross-modulation, etc.).....	2	2	4	7
Totals.....	9,434	11,104	8,506	10,317
Action Taken—				
Sources reported cured.....	7,219	8,976	7,177	9,068
Sources not reported cured.....	2,130	2,029	1,287	1,130
Sources having no economic cure.....	85	99	42	119

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. Regulations require that radiation from such apparatus, which is liable to cause interference to radio-communications, 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 manufacturers, and the types that fulfil the requirements of the Department are listed as non-interfering. The radiation from all such sources on communication frequencies must not exceed the tolerances specified by the Canadian Standards Association.