

Some years ago the discrimination of underwriters in the matter of insurance rates charged on ships plying to Canadian ports led the Department to feel that any reasonable expenditure which would tend to reduce these charges would be a sound investment. To this end 13 direction-finding stations have been established at specially selected sites with respect to navigational routes—7 on the east coast, 5 on Hudson bay and strait, and 1 on the west coast. These stations are fitted with special apparatus which enables the direction of the incoming radio signal transmitted by a ship to be accurately determined.

A more recent extension of the shore direction finder is the development of the direction-finding instrument on board ship. To assist this development, the Department has established radio beacon transmitters at a number of lighthouses and lightships (see Table 76). These radio beacons transmit characteristic radio signals with an approximate range of 50 miles every hour at advertised times during clear weather and continuously when the atmosphere in the vicinity of the station is so obscure as to impede navigation.

To insure the safety of life at sea, all passenger steamers and freighters plying to and from Canadian ports must carry radio equipment manned by competent operators in possession of a certificate of proficiency in radio. The Department maintains a complete radio inspection service to enforce this regulation. Inspectors located at various ports throughout the Dominion are responsible for checking the efficiency of the radio equipment on ships of all nationalities, and seeing that only competent operators are carried. Examinations for certificates of proficiency in radio are conducted by the Radio Branch, and 4,758 certificates had been issued up to Mar. 31, 1934.

Table 76 shows the name and situation of the Government-owned radiotelegraph stations in Canada and Newfoundland.

76.—Government-Owned Radio Stations in Canada, fiscal year ended Mar. 31, 1934.¹

Name of Station.	Situation.	Name of Station.	Situation.
East Coast.		RADIO BEACON STATIONS.	
Belle Isle, Nfld. ²	Belle Isle Straits.	Cape Whittle.....	Gulf of St. Lawrence.
Cape Race, Nfld. ²	Newfoundland.	West Point.....	Anticosti.
Chebucto Head, N.S. ²	Entrance Halifax Harbour.	Pointe des Monts.....	Gulf of St. Lawrence.
Clarke City*.....	Gulf of St. Lawrence.	Perroquet Island.....	Gulf of St. Lawrence.
Fame Point, Que.*.....	" "	Cape Bauld.....	N.W. Newfoundland.
Father Point, Que.*.....	" "	Cape Ray.....	S.W. Newfoundland.
Grindstone Island, Que.*.....	Magdalen Islands.	Heath Point.....	Heath Point, Anticosti.
Halifax Dockyard.....	Halifax, N.S.	Lurcher Lightship.....	Off Yarmouth, N.S.
Montreal, Que.*.....	St. Lawrence River.	Sambro Lightship.....	Off Halifax, N.S.
North Sydney*.....	Cape Breton, N.S.	Seal Island.....	S.E. of Nova Scotia.
Point Amour, Nfld.*.....	Gulf of St. Lawrence.	Great Lakes.	
Quebec, Que.*.....	St. Lawrence River.	Kingston, Ont.*.....	Barriefield Common.
Sable Island*.....	North Atlantic.	Midland, Ont.*.....	Georgian Bay.
Saint John, N.B. ²	Red Head, N.B.	Point Edward, Ont.*.....	Lake Huron.
Yarmouth, N.S. ²	Nova Scotia.	Port Arthur, Ont.*.....	Port Arthur.
DIRECTION-FINDING STATIONS.		Port Burwell, Ont.*.....	Lake Erie.
Belle Isle D/F.....	Belle Isle Straits.	Sault Ste. Marie, Ont.*	Sault Ste. Marie, Ont.
Canso D/F.....	Nova Scotia.	Tobermory, Ont.....	Entrance Georgian Bay, Ont.
Cape Race D/F.....	Newfoundland.	Toronto, Ont.*.....	Toronto Island.
Chebucto Head D/F.....	Entrance Halifax Harbour.	RADIO BEACON STATIONS.	
Saint John D/F.....	Red Head, N.B.	Southeast Shoal.....	Lake Erie.
Saint Paul D/F.....	Nova Scotia.	Main Duck.....	Lake Ontario.
Yarmouth D/F.....	Nova Scotia.	Long Point.....	Lake Erie.
		Michipicoten Island.....	Lake Superior.
		Cove Island.....	Lake Huron.

¹For footnotes see end of table, p. 786.