

is essential in computing observations on celestial bodies, three Canadian coast stations—two on the west coast and one on the east coast—transmit time signals at advertised hours daily.

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 network of 25 radio beacon stations is maintained on the Atlantic and Pacific coasts and on the Great Lakes to enable a ship or aircraft station equipped with its own direction-finding apparatus to determine its bearing or direction in relation to the radio beacon station. The operation of these radio beacons is automatic, the transmissions being made in clear weather hourly or half-hourly as advertised, and continuously during foggy weather. At Point Atkinson, B.C., the signals of the radio beacon are synchronized with the emissions of the fog alarm at that place during foggy weather for distance finding. 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. Ships are also surveyed with a view to the issuance of the necessary certificates prescribed under the Safety of Life at Sea and Load Line Conventions Act, 1931. Examinations for certificates of proficiency in radio are conducted by the Radio Branch, and 6,340 certificates had been issued up to Mar. 31, 1936.

1.—Government-Owned Radio Stations in Canada, fiscal year ended Mar. 31, 1936.<sup>1</sup>

Name of Station.	Situation.	Name of Station.	Situation.
<b>East Coast.</b>		<b>East Coast—concluded.</b>	
Belle Isle, Nfld. <sup>2</sup> .....	Belle Isle Straits.	<b>RADIO BEACON STATIONS.</b>	
Canso, N.S. <sup>2</sup> .....	Nova Scotia.		
Cape Race, Nfld. <sup>2</sup> .....	Newfoundland.		
Camperdown, N.S. <sup>2</sup> .....	Entrance Halifax Harbour.		
Clarke City.....	Gulf of St. Lawrence.		
Fame Point, Que.*.....	" "		
Father Point, Que.*.....	" "		
Grindstone Island, Que.*.....	Magdalen Islands.		
Halifax Dockyard.....	Halifax, N.S.		
Montreal, Que.*.....	St. Lawrence River.		
North Sydney*.....	Cape Breton, N.S.	Cape Whittle.....	Gulf of St. Lawrence.
Point Amour, Nfld.*.....	Gulf of St. Lawrence.	East Point.....	Prince Edward Island.
Quebec, Que.*.....	St. Lawrence River.	West Point.....	Anticosti.
Saint John, N.B. <sup>2</sup> .....	Red Head, N.B.	Pointe des Monts.....	Gulf of St. Lawrence.
Yarmouth, N.S. <sup>2</sup> .....	S.E. of Nova Scotia.	Perroquet Island.....	Gulf of St. Lawrence.
<b>DIRECTION-FINDING STATIONS.</b>		Natashquan Point.....	Gulf of St. Lawrence.
Belle Isle D/F.....	Belle Isle Straits.	Cape Bauld.....	N.W. Newfoundland.
Canso D/F.....	Nova Scotia.	Cape Ray.....	S.W. Newfoundland.
Cape Race D/F.....	Newfoundland.	Heath Point.....	Heath Point, Anticosti.
Camperdown D/F.....	Entrance Halifax Harbour.	Lurcher Lightship.....	Off Yarmouth, N.S.
Saint John D/F.....	Red Head, N.B.	Sable Island.....	North Atlantic.
Saint Paul D/F <sup>2</sup> .....	Cabot Strait.	Sambro Lightship.....	Off Halifax, N.S.
Yarmouth D/F.....	S.E. of Nova Scotia.	Seal Island.....	S.E. of Nova Scotia.
		Saint Paul.....	Cabot Strait.
		<b>LIFE-SAVING STATIONS.</b>	
		Grindstone.....	Gulf of St. Lawrence.
		Bird Rocks.....	Gulf of St. Lawrence.
		Little Wood Island.....	Bay of Fundy.
		Gannet Rock.....	Bay of Fundy.

For footnotes see end of table, p. 718.