

### 16.—Commercial Traffic through the Panama Canal, Years Ended June 30, 1949-58

NOTE.—Figures from 1915 are given in the corresponding table of previous Year Books beginning with the 1938 edition.

Year	Atlantic to Pacific		Pacific to Atlantic		Totals	
	Vessels	Cargo Tonnage	Vessels	Cargo Tonnage	Vessels	Cargo Tonnage
	No.	long tons	No.	long tons	No.	long tons
1949.....	2,387	9,899,088	2,406	15,406,070	4,793	25,305,158
1950.....	2,689	9,483,863	2,759	19,388,430	5,448	28,872,293
1951.....	2,784	11,132,472	2,809	18,940,550	5,593	30,073,022
1952.....	3,184	15,128,995	3,340	18,481,514	6,524	33,610,509
1953.....	3,674	17,329,066	3,736	18,766,283	7,410	36,095,349
1954.....	3,852	18,377,724	3,932	20,717,343	7,784	39,095,067
1955.....	4,002	18,419,006	3,995	22,227,295	7,997	40,646,301
1956.....	4,133	21,286,036	4,076	23,833,006	8,209	45,119,042
1957.....	4,495	25,429,843	4,084	24,272,357	8,579	49,702,200
1958.....	4,599	22,843,301	4,588	25,281,508	9,187	48,124,809

### Subsection 4.—Marine Services of the Federal Government

The services covered in this Subsection deal with aids to navigation, including the maintenance of the St. Lawrence River Ship Channel, steamship inspection, pilotage service, sea-faring personnel and the operations of the Canadian National (West Indies) Steamships Limited.

**Aids to Navigation.**—Included under aids to navigation are the lighthouses and the whole system of marine danger signals on the East and West Coasts of Canada, on Hudson Bay and Strait, the St. Lawrence River and Gulf, the Mackenzie River and Arctic passages, the inland rivers and lakes, and at the entrances to harbours—a very extensive system designed to provide safe navigation in all Canadian waters. In addition, a pilotage service is maintained in waters where navigation is difficult; this service is described at p. 822. A further aid to safe navigation is found in the chains of radio signal and direction-finding stations described under Radio Services in Chapter XIX, pp. 859-860. Lists of aids to navigation, with the exception of very minor ones, are published by the Department of Transport.

### 17.—Marine Danger Signals Maintained in Canada, Years Ended Mar. 31, 1957 and 1958

NOTE.—In addition to the aids to navigation listed, approximately 9,300 unlighted buoys, balises, dolphins and beacons are maintained. Lists of marine danger signals maintained from 1929 are given in the corresponding table of previous Year Books beginning with the 1941 edition.

Type of Signal	1957	1958	Type of Signal	1957	1958
	No.	No.		No.	No.
Lights.....	3,082	3,162	Hand fog horns.....	122	125
Lightships.....	4	4	Hand fog bells.....	12	12
Light-keepers.....	1,014	924	Lighted and combination lighted whistling and bell buoys.....	1,020	932
Fog whistles.....	18	21	Whistling buoys.....	33	31
Sirens.....	4	4	Bell buoys.....	113	112
Diaphones.....	246	247	Fog guns and bombs.....	7	6
Fog bells.....	47	49	Fog alarm stations only.....	17	17