

Marine Transportation Administration. An additional unit, the Marine Emergency Office, also reports to the Deputy Administrator.

The Aids and Waterways Branch has two divisions — Marine Aids and Waterways Development. Marine Aids Division is responsible for planning, policy development and program administration related to a national system of marine aids to navigation and traffic control, and for research and development in these two areas. These responsibilities include the installation, operation and maintenance of electronic navigation systems such as Decca, Loran A and Loran C. They also include the development of port entry systems which involve radar surveillance, traffic control and conventional floating and shore-based aids to navigation. The Division develops standards and guidelines for the operation and maintenance of over 20,000 marine aids to navigation consisting of lightstations, buoys, fog signals and shore-based unattended lights. It carries out research and development related to new atomic and solar power sources as well as on conventional battery and hydro sources. The Marine Aids Division is responsible for administering the Navigable Waters Protection Act. The Waterways Development Division is responsible for developing national plans, policies and programs to improve commercial navigable waterways and for related research, including hydraulic model studies carried out in co-operation with other government agencies.

The Marine Safety Branch has three divisions — Steamship Inspection, Nautical Services and Air Cushion Vehicles. The Branch is responsible for administering the parts of the Canada Shipping Act related to operating Canadian ships and ships within Canadian waters; it is charged with the registering of shipping, licensing ships, certifying ships' officers and engaging and discharging ships' crews. Other responsibilities include safety inspection of ships, handling of dangerous cargoes, investigating marine accidents and administering regulations regarding oil pollution in Canadian waterways.

The Marine Safety Branch protects the interests of the owners of wrecked ships and their cargoes and the interests of the Crown in unclaimed wrecks. It has responsibilities for policy formulation in such matters as the coastal trade, the limitation of liability of ship, wharf and canal owners and the rights and liabilities in disputes between ship owners and cargo owners, stevedores' liens and salvage claims.

The Canadian Coast Guard is responsible for the over-all direction of the Canadian Coast Guard fleet which consists of more than 80 active ships including heavy, medium and light ice-breakers, an ice-breaker-cable repair ship and two weather-oceanographic ships which alternate in manning Pacific Weather Station "Papa", 900 miles west of Victoria, BC.

The fleet services thousands of lightstations, shore lights, buoys and other navigation aids along Canada's coasts and inland waterways. During the Ministry of Transport's Arctic re-supply operations each summer, Coast Guard ships work in conjunction with chartered commercial vessels to move approximately 500 tons of cargo to five or six northern ports. In the winter the ice-breakers aid commercial shipping in the Gulf of St. Lawrence from Cabot Strait to the Quebec north shore and break ice jams to prevent flooding along the St. Lawrence River, particularly between Trois-Rivières and Montreal.

In addition, Coast Guard ships patrol the St. Lawrence Ship Channel to ensure that it is maintained at its advertised depth; carry out most marine search and rescue operations; and assist other departments doing oceanographic and hydrographic research or investigating Arctic developments. Often a Coast Guard ship is the operational base for the scientific research team.

The Marine Pilotage Branch was established as a separate entity in February 1972 to provide advice on pilotage matters, and is responsible for establishing national technical standards and conducting research required to ensure that these standards are maintained. It is also responsible for prescribing standards for health, uniform financial reporting procedures, procedures for hearings held by Pilotage Authorities, and recommending the establishment of compulsory pilotage areas where an Authority fails to do so and it is considered to be in the public interest.

The Pilotage Act, which came into force February 1, 1972, established the Atlantic Pilotage Authority, Laurentian Pilotage Authority, Great Lakes Pilotage Authority and Pacific Pilotage Authority. Their objectives are to establish, operate, maintain and administer, in the interest of safety, an efficient pilotage service within their respective regions.

The Marine Telecommunications and Electronics Branch is responsible for operating a communications and electronics engineering service in support of Marine Services ships and