

economic growth or changes in traffic patterns resulting from new industries, trends to new types of ships and new developments in cargo handling. Specialized deep-water terminals for bulk commodities, particularly coal and oil, are also provided when needed under long-term full cost recovery agreements with individual shippers. These often complement related development programs sponsored by the Department of Regional Economic Expansion.

**Rates and charges.** The Ministry establishes and collects fees from users of port facilities, and all rates assessed by ports under federal jurisdiction are subject to Ministry approval. Harbour dues, cargo rates, wharfage, berthage and other charges on goods and vessels are subject to some regional and local variation and are designed to recover a reasonable share of the annual federal investment in Canada's harbours through the Department of Public Works as well as the Ministry of Transport and its component agencies.

**Private facilities.** In addition to public facilities, there are extensive wharf and associated cargo handling facilities owned by private companies, particularly specialized facilities for handling coal, iron ore, petroleum, grain and pulpwood. At Sept Îles, Que. the Iron Ore Company of Canada owns and operates extensive facilities to load pelletized iron ore onto ocean-going and Seaway vessels. Port Cartier harbour was constructed by mining interests in the early 1960s and through large diversified investments of private capital has also become one of Canada's leading export grain terminals. At Port Hawkesbury, NS, Gulf Oil Canada Limited operates a terminal to unload tankers of about 350,000 tons deadweight or larger; in Quebec City Canadian Pacific operates a container terminal at Wolfe's Cove; and at Port Alfred, Que. and Kitimat, BC the Aluminum Company of Canada Limited operates multi-purpose terminals to service their smelter operations. There are also many industry owned and operated marine facilities on the Great Lakes and other interior waterways required for Canadian and international movements of ores, coal, petroleum products, limestone and other bulk materials.

**Administrative developments.** The National Ports Council, an advisory body to the Marine Transportation Administration, met in March and October 1973 to discuss the views of federal and provincial governments, the National Harbours Board and the harbour commissions with respect to a form of administration for the major ports of Canada which would provide a large measure of local responsibility. Studies of submissions are continuing and a report is expected to be ready for Cabinet consideration in 1975.

**Shipping.** The continuing trend to the use of larger ships has resulted in increased investment in ports to provide for facilities farther from shore, channel dredging, larger turning basins and more complex systems of aids to navigation and traffic control. Also, environmental considerations often require expensive terminal construction.

Deep-water oil terminals capable of handling tankers of 350,000 tons deadweight and larger, drawing 90 ft of water or more, operate at Port Hawkesbury, NS in the Strait of Canso, Mispic Point, NB near Saint John and at Come By Chance, Nfld. New proposals under intensive study include other sites on the Strait of Canso, Lorneville, NB and on the lower St. Lawrence River. New facilities at Sept Îles, Que. can load ore carriers up to 250,000 tons.

Increasing use of containers brings significant changes in cargo routing and handling. Saint John, Halifax, Quebec, Montreal, Toronto, Vancouver and New Westminster have major container terminals. Both CP Rail and Canadian National operate fast container trains between these ports and inland centres in Canada and the United States.

Container ships travel at speeds up to 33 knots and port turnaround time is critical to the economics of operating them. Port facilities have to be more efficient and specialize; they include special ramps for roll-on roll-off vessels; large container cranes which can handle 20 or more 15-ton containers in an hour; special container packing facilities; large open storage areas for containers, automobiles, lumber and bulk products like coal; and rail and truck loading and unloading facilities. Increasing container storage space rather than handling or ship movement has become the critical factor.

#### 15.4.3 The St. Lawrence Seaway

Events leading up to the beginning of the St. Lawrence Seaway project and the progress made during the years of its construction are covered in earlier editions of the *Canada Year Book*. The 1956 edition (pp 821-829) gives detailed information on Great Lakes-St. Lawrence