

It would seem that these initial difficulties will discourage larger ocean-going ships from using the Seaway and thus the waterway should become primarily the domain of inland shipping. This would imply that the Seaway will be used by the large lakers, dominated by grain and ore carriers, between lake ports and the St. Lawrence River ports and most of the large ocean freighters will discharge and take on their cargoes at or below Montreal. It is doubtful whether a ship can be designed combining the seaworthiness of ocean vessels and some of the capacity features of lakers to serve equally well in both ocean and inland waters.

In postwar years direct trade through the Great Lakes to overseas countries has shown a steady increase and this trend will probably continue despite the disadvantages encountered by ocean ships. Before the opening of the Seaway there were 17 shipping lines operating regular ocean services on this route, although most of them were of an experimental nature. In 1959 at least 17 countries took part in direct trade either with Canada or the United States through the St. Lawrence Seaway. In the bulk trade, cargoes transported in vessels other than Canadian or American totalled over 4,000,000 net tons and, in general and mixed cargo trade, foreign ships carried nearly 2,400,000 net tons. Apart from grain, the freight included manufactured goods such as iron and steel products, automobiles, electrical goods, glass, chemicals and clay and earthenware products.

Port Facilities.—Efficient and economical water transportation depends to a large degree on port and harbour facilities, such as docks, wharves, grain elevators, warehouses, loading and unloading equipment, railway connections, drydock accommodations, etc. Port facilities in the Great Lakes prior to the opening of the Seaway were, on the whole, adequate for the then-existing traffic. But the opening of the Seaway is probably the most significant factor in the economic development of the lake ports and, as traffic will be increasing steadily in volume, every major city on the lakes will attempt to improve its port facilities through a publicly financed program. The principal task of the ports is to change from local, industrial and bulk commodity ports to international, commercial ports dealing with a wide variety of goods, a task that must be accomplished within the next decade. Also co-operation among the lake ports is required in such matters as channel dredging, service rulings, priorities on lockages to be accorded foreign ships, etc.

Great Lakes ports which formerly specialized in trans-shipping grain and other bulk cargoes between lakers and canallers have lost their importance. Direct through-traffic from the Lakehead to St. Lawrence ports has had adverse effects on grain elevator business in Kingston, Collingwood, Goderich, Midland and Owen Sound ports. On the other hand, since the opening of the Seaway all transit sheds, open berths and other facilities at Montreal have been used to capacity. That port has 131 berths for ocean ships and over 30 transit sheds; the storage capacity of the grain elevators is nearly 17,000,000 bu. and grain can be loaded at 28 berths. Plans are ready for a new elevator of 5,300,000-bu. capacity. Montreal, being a midway point between the mouth of the St. Lawrence River and the Great Lakes, has served as a terminus for both ocean and Great Lakes navigation.

Toronto harbour facilities have been extended by a new modern terminal and a 50-ton lift; dredging operations to permit the docking of deep-sea vessels and lakers have been completed. With growing business, it is planned to provide additional terminals, to construct an outer harbour and to install heavy lift equipment in the port. Grain elevators have a capacity of 4,000,000 bu.

It may be that increasing volume of business will develop Hamilton as an important inland port. Dredging is being carried out to provide 27-foot Seaway depth to selected wharves and to make Hamilton a deep-draft harbour. More extensive port facilities are being provided in terms of warehouses, berthing facilities, etc.

Windsor is also an important international port with a strong industrial background. No work is necessary to open this harbour to deep-draft ships since there is enough depth from Amherstburg Canal up the Detroit River to Lake St. Clair. Grain elevators here have a capacity of 1,250,000 bu. In Sarnia the main problem is to provide adequate facilities for larger vessels. The docking facilities require extension and plans are ready