

fired with coal and had a stoking capacity of 18,500 lbs. per hour. It was estimated that the new steamers would be able to achieve an increase in operating efficiency of 40 to 50 per cent over other lake ore carriers.

Once all of the design parameters had been set down, the Pittsburgh Steamship Company awarded a design and construction contract to the Great Lakes Engineering Works, of Ecorse, Michigan. In May of 1941, the American Ship Building Company was given a sub-contract to build two of the new vessels. Since Great Lakes Engineering had the primary contract, AmShip had to pay a fee for the use of the plans. It should be noted that, at the time, the Pittsburgh Steamship Company had a policy of awarding shipbuilding contracts to these two major shipyards on an alternating basis. Hence, when the next vessels to be built for the fleet were constructed (the CLARKE class of 1952), American Ship Building had the primary contract, while Great Lakes Engineering had to pay a consideration for the use of the plans to build the one of three hulls which it was awarded.

By late 1941, construction was well under way at the G.L.E.W. yard at Ecorse and at the AmShip facility at Lorain, Ohio. There were, however, problems in the nature of a shortage of steel, as well as labour unrest at AmShip, and these factors combined to cause delays in the construction of the steamers. Another difficulty related to the welding of the steel plates. As originally designed, the vessels did not have strapping along the edge of the spar deck but, shortly after the first of the steamers (LEON FRASER) was delivered and placed in commission, it was discovered that cracks had developed across the deck through the deck stringers. It was determined that the cause of the problem was the Union-Melt welding machine which had been used, as it could not develop an even weld. As a result, the subsequent ships of the class were finished with hand welding in this area. Even so, cracks continued to be found, and it was then decided to use 1-3/4 inch engine steel as strapping along the gunwale area, with a rivetted connection to the hull plating.

Saturday, February 28th, 1942, was a festive occasion as the first of the new vessels was launched into the River Rouge at Ecorse, Michigan. The importance of the new class of carrier for the iron ore trade was, perhaps, best indicated by an article which appeared in the "Detroit Free Press" on March 1st, 1942.

"639 Foot Vessel to Aid Nation's War Production"

"As gracefully as a ship half her size, the 639 foot ore carrier LEON FRASER, largest ever built on the Great Lakes, dropped into her slip at the Great Lakes Engineering Works at Ecorse Saturday in what veteran navigators described as a perfect launching.

"The giant carrier started sliding down the ways at 12:20 p.m., half an hour after a crew of 1,000 workmen had started driving out the blocks beneath her.

"Mrs. Leon Fraser, wife of the president of the First National Bank of New York, for whom the ship was named, shattered a bottle of champagne on the prow as the boat started to slide.

"As an indication of the FRASER's importance to the nation's war effort, it is capable of carrying 18,600 long tons of ore, enough to produce the steel sufficient for the construction of eight destroyers.

"Fraser himself attended the launching. In addition to his banking affiliation, he is a member of the board of directors and of the finance committee of the United States Steel Corp.

"Others who stood on the launching platform included A. H. Ferbert, president of the Pittsburgh Steamship Company, F. G. Morley, president of the Great Lakes Engineering Works, Irvin L. Clymer, president of the Bradley Transportation Co. (a U.S. Steel affiliate - Ed.), and their wives."

LEON FRASER, built as G.L.E.W. Hull Number 287, was enrolled at Duluth, Minnesota, under official number U.S.241856. (Over the years, the port of registry of FRASER and her sisterships would be changed to New York and then, eventually, back to Duluth.) After the customary fitout and sea trials, she