

The William A. Irvin

One of the major casualties of the Great Depression on the Great Lakes was shipbuilding. Between 1930 and 1938, not one bulk freighter was launched at Detroit, Lorain, Cleveland or Buffalo. Steel companies didn't have the money to invest in new vessels for their bulk fleets. U.S. Steel lost money in 1932, 1933, 1934 and 1938 and made barely over \$1 million in profits in 1935.¹ There simply wasn't money for capital investment during the darkest days of the Great Depression.



Commonly recognized as the flagship of the Pittsburgh Fleet during her first 10 years, the William A. Irvin was in her third year of service during this passage through the Soo Locks in 1940. (SS William A. Irvin Museum Collection, Duluth Entertainment & Convention Center, Photo by Institute for Great Lakes Research, Bowling Green University)

As profit forecasts improved later in the decade, U.S. Steel decided to upgrade its increasingly aging Pittsburgh Steamship Company fleet. In early 1937, Pittsburgh Steamship solicited bids for four new vessels. The new ships were to be named the *William A. Irvin*, *Governor Miller*, *John Hulst* and *Ralph H. Watson*.² The American Shipbuilding Company in Lorain, Ohio, and Great Lakes Engineering Works in Detroit won contracts to build two of the vessels apiece. The price averaged just over \$1.3 million for each of the new bulk freighters. At 611 feet, the four vessels would be among the largest on the Great Lakes.³ With 14,000 tons of iron ore carrying capacity, the four new vessels would give Pittsburgh Steamship an added per trip capacity of 56,000 tons.

The first of the four vessels launched was the *Irvin*, which slid down the ways at Lorain on November 21, 1937. The new boat was named for William A. Irvin, a 30-year veteran of the industry who had succeeded James Farrell as United States Steel Corporation president in 1932.⁴ Irvin's wife Gertrude cracked the customary bottle of champagne over her husband's namesake, and the *Irvin* rolled gently into the slip. She spent the winter in Lorain getting

outfitted and set out on her maiden voyage on June 25, 1938.⁵

With her rakish lines and high bow, the *Irvin* was the epitome of what Great Lakes bulk freighters would look like for the next 40 years.⁶ But it was what was below the waterline that set the *Irvin* and her sisters apart from almost anything afloat in 1938. The marine engineers who had designed the four vessels had specified a new kind of power plant. Instead of the triple expansion steam engine that had reigned supreme on the Lakes since the turn of the 20th century, the *Irvin* and her mates sported Delaval cross-compound steam turbine engines. The turbines, which had been pioneered in the steamers *Carl D. Bradley* and the *T.W. Robinson* the decade before, were an outgrowth of advances in electric power generation. Blades in a turbine were spun by the steam from the boilers, and the turbine blades, in turn, were connected to gears which turned the propeller shaft.⁷

The *Irvin* also pioneered another simpler, but no less elegant, solution to an age-old problem of Great Lakes shipping. Running the length of the holds in the *Irvin* and her sisters were tunnels on each side of the vessel. It was the first time that a vessel had ever boasted tunnels inside the hull, and it was greeted with hallelujahs by Great Lakes' mariners everywhere. Now, sailors could go from the stern to the forecastle and vice versa, no matter what the weather. It was a design element that would be incorporated in every vessel built after 1938.⁸

The *Irvin* sailed the Great Lakes for 40 years, the first 10 as the unofficial flagship of the Pittsburgh Steamship fleet.⁹ Hers was an uneventful career. She never figured in any great maritime dramas, and rode out the worst that the Upper Lakes could throw at her in the way of weather.¹⁰ Year in and year out, from April to December, she hauled iron ore down from Lake Superior to Lake Erie. All told, she hauled 1,115 cargoes of iron ore, an estimated 15 million tons.¹¹

U.S. Steel retired the *Irvin* in 1978. As far as longevity went, she was a relative youngster, but she and her sisters were too small to convert to self-unloaders.¹² The *Irvin's* likely destination was the scrap yard, but she returned to Duluth one last time to be renovated and restored as a museum ship in 1986.¹³ Today, she rests in a slip a stone's throw from the Duluth Aerial Lift Bridge she so often passed under during her long and fruitful career.

¹ Warren, [Big Steel](#), p.363

² Miller, [Tin Stackers](#), pp.138-139.

³ *William A. Irvin Specifications and History*, www.home.earthlink.net/~holocek/Irvin/spec.html The *Irvin* and her sisters were actually 3 inches short of 611 feet. Each of the 1938-class vessels had a beam of 60 feet and a depth of just over 32 feet. The *Carl D. Bradley*, which had been launched in 1927 to carry limestone for the Bradley Transportation subsidiary of U.S. Steel, was the largest bulk vessel on the Lakes at 640 feet.

⁴ Warren, [Big Steel](#), p.148. *Irvin* had been president of U.S. Steel's American Sheet and Tinplate subsidiary

throughout the 1920s and had joined the parent company as a vice president in 1931.

⁵ *William A. Irvin* Specifications and History

⁶ Miller, [Tin Stackers](#), p.140. The bow appeared higher because the forward superstructure had an extra deck for guest cabins.

⁷ *Ibid.*, p.140. The *Bradley's* turbines differed in that they drove a generator to produce electricity to power electric motors.

⁸ Thompson, [Queen of the Lakes](#), pp.138-139. In a storm or heavy weather, it was frequently suicide to venture out on deck. Sailors trapped at the bow during a storm often couldn't get back aft to the stern. That meant they didn't eat until the storm subsided, because the galley was in the stern.

⁹ William A. Irvin FAQ, www.home.earthlink.net/~holocek/Irvin/spec.html The flagship designation simply meant that she often carried passengers, usually customers and other guests of U.S. Steel executives.

¹⁰ She did set one longtime Great Lakes record, unloading 13,856 tons of ore with Hulett Unloaders in two hours, 55 minutes on August 27, 1940. *William A. Irvin* Specifications and History

¹¹ William A. Irvin FAQ. She also hauled 155 loads of limestone, 18 loads of coal and four loads of slag.

¹² *Ibid.* Saltwater vessels have a much shorter life span than vessels of the Great Lakes fleet. Salt corrodes the hull and hastens the demise of the vessel. Some cement haulers on the Lower Lakes are close to 100 years old.

¹³ Water Transportation: William A. Irvin (freighter), www.nrhp.mnhs.org/property_overview.cfm?propertyID=6 The *Irvin* was listed on the National Register of Historic Places in 1989.