NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name DONALD B

other names/site number Towboat DONALD B., ex STANDARD

2. Location

street & number 3106 Old A & P Road E ☐ not for publication

city, town Georgetown ☐ vicinity

state Ohio code OH county Butler code 015 zip code 45121

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
☒ private	☐ building(s)		buildings
☐ public-local	☐ district		sites
☐ public-State	☐ site	1	structures
☐ public-Federal	☒ structure		objects
	☐ object	1	Total

Name of related multiple property listing:

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ☐ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of certifying official — Date

State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

☐ entered in the National Register.
☐ See continuation sheet.

☐ determined eligible for the National Register. ☐ See continuation sheet.

☐ determined not eligible for the National Register.

☐ removed from the National Register.

☐ other, (explain:) _____

Signature of the Keeper — Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)

TRANSPORTATION—Water-related
INDUSTRY

Current Functions (enter categories from instructions)

TRANSPORTATION—Water-related

7. Description

Architectural Classification (enter categories from instructions)

N/A

Materials (enter categories from instructions)

foundation N/A
walls N/A
roof N/A
other N/A

Describe present and historic physical appearance.

Donald B, official no. 227005, is a riveted-steel, diesel-powered, sternwheel-propelled towboat. She is owned by Donald Brookbank of the Brookbank River Towing Company of Georgetown, Ohio. Donald B performs general towing services on the Ohio River.

Hull

Donald B was built of heavy steel plates, single riveted to steel angle frames. She measures 85 feet long, with an overall length, including sternwheel, of 98 feet. She is 18 feet wide and has a 3-foot, 6-inch depth of hold. The gross tonnage is 51 and the net tonnage is 44. [1] The hull has a scow-form bow, a flat bottom with no external keel, and a tucked-up run to the stern. Internally Donald B is divided into nine watertight compartments. Two hull compartments hold fuel for about a month's operation of the diesel engine. Another hull tank holds gasoline for the auxiliary engine which runs the air compressor. [2]

Like most steel vessels, Donald B was required by Coast Guard and insurance regulations to be replated when her hull plates grew thin. Donald B was replated at the Portsmouth Docking Corporation in Portsmouth, Ohio, in 1958. [3]

Towboats possess a specialized fitting not found on other river types. Their flat bows are usually fitted with heavily reinforced vertical stanchions called towing knees. Donald B has two towing knees across her bow. Both knees have stairs to aid crew in climbing to the decks of barges in the tow string. The squared, open foredeck extends aft to the wooden superstructure front. Hand-powered capstans are set to port and starboard on the foredeck, behind the towing knees. Access to the interior is through a large sliding door, on the centerline of the superstructure. Each side of the hull has a kevel and a double chalk forward, three kevels amidships, and a button aft. These are used to secure barges for towing and to moor.

[X] See continuation sheet

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

[X] nationally [ ] statewide [ ] locally

Applicable National Register Criteria [X] A [ ] B [X] C [ ] D

Criteria Considerations (Exceptions) [ ] A [ ] B [ ] C [ ] D [ ] E [ ] F [ ] G

Areas of Significance (enter categories from instructions)	Period of Significance	Significant Dates
Maritime History	1923-1937	1923
Transportation		
Engineering		
Industry		

Cultural Affiliation
N/A

Significant Person
N/A

Architect/Builder
Marietta Manufacturing Company

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

The sternwheel river towboat Donald B is a working vessel on the Ohio River. Towboats have been employed moving barges on all the navigable waters of the Western Rivers, and have been an important component of the American transportation system since the 1850s. Few examples of any paddlewheel propelled vessels remain in the United States. Three steam-powered sternwheel towboats exist in museums and about ten diesel powered sternwheel towboats have been converted for private recreational use but Donald B is the only known unchanged 1920s diesel sternwheel towboat left in the United States.

Donald B was built in 1923 as Standard, by Marietta Manufacturing Company, of Point Pleasant, West Virginia. She was the first vessel on the Ohio River owned by Standard Oil Of Ohio. Standard initiated gasoline barge service to distribution points on the Ohio River. This allowed economical automobile transportation in areas not reached by distribution points fed by railroads. The river distribution system was a sucess and Standard was eventually joined by a fleet of ten other towboats and more than fifty barges. [1] Standard was sold in 1940 to Ray Brookbank of Georgetown, Ohio, who renamed her Donald B for his oldest son. The boat remains in the same service and is now run by the man she is named for. Donald B has spent her entire career in general barge towing on the Ohio River and its tributaries and has been maintained in operating condition requiring only minor modifications over time.

The preceding statement of significance is based on the more detailed statements that follow.

[X] See continuation sheet

9. Major Bibliographical References

☒ See continuation sheet

Previous documentation on file (NPS):
- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
- ☐ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey # _____
- ☐ recorded by Historic American Engineering Record # _____

Primary location of additional data:
- ☐ State historic preservation office
- ☐ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Specify repository: _____

10. Geographical Data

Acreage of property _____

UTM References

	Zone	Easting	Northing
A	17	244320	4297245
B			
C			
D			

☐ See continuation sheet

Verbal Boundary Description

All that area encompassed within the extreme length, beam, and draft of the vessel.

☐ See continuation sheet

Boundary Justification

The boundary incorporates the entire area of the vessel.

☐ See continuation sheet

11. Form Prepared By

name/title Kevin J. Foster/Historian
organization National Park Service (418) date July 10, 1989
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★U.S.GPO:1988-0-223-918

Superstructure

The superstructure of Donald B consists of two decks: the main, on which the propulsion machinery, kitchen and crew bunkroom are located, and the second deck above the engine, which supports the pilothouse and a small room for the captain. Donald B was built with the main deck open only at the bow and narrow walkways on the guards around the hull. This deck was closed in cold weather by three sliding wooden doors, one forward and one each to the port and starboard sides. Smaller panel doors, with screen doors outside, also lead to the interior. Framing for the second deck is built of steel. Stanchions, decks, and bulkheads of the upper deck are built of wood reinforced with lightweight steel.

Engine Room

The engine room occupies the entire width of the superstructure forward on the main deck and contains the engine, auxiliary machinery, and engine controls. The original gasoline engine was replaced about 1925 with a 100-horsepower Fairbanks-Morse diesel engine. That engine was replaced with the present engine in 1939 after it threw a rod. The present engine is a four-cylinder Fairbanks-Morse compression ignition engine which develops 160 horsepower. Old diesel engines were robustly built and were designed to run at low revolutions per minute. Low rpm diesels simplify engine operation, but require the engine to be stopped before reversing. [4]

All engine room controls are located forward of the engine, and in the pilothouse. The engine is controlled either from the pilothouse or from the engine room.

Kitchen and Bunkroom

The crew are housed in a bunkroom between the engine room and the stern room. The bunkroom is cooled by opening small ventilating windows in the clerestory skylight just under the ceiling. It is heated by a coal stove and by the heat radiating from the engine room.

Stern Room

The principle feature of the aftermost compartment of the superstructure is the large engine shaft and the transmission gears. The shaft passes aft through the center of the kitchen and bunkrooms to the transmission. A sheet steel cover over the shaft divides the compartments between the engine and stern rooms. The transmission

converts the engine's motion to a drive shaft that passes out of the superstructure on the starboard side. A large gear wheel on the drive shaft powers the sprocket chain, which turns a second gear wheel on the paddle shaft aft.

Steering is controlled from the pilothouse, but much of the multiple rudder system is located in the transmission room. The traditional Western Rivers rudder control system is used aboard Donald B. It uses cables from the pilothouse wheel to move the central tiller arm at the rear of the boat. This central tiller arm is yoked to two other rudders for additional control in maneuvering.

The paddlewheel propeller is constructed of steel and wood. It is suspended over the stern and propels the boat. It is 11 feet, 6-inches in diameter, and 12 feet wide. Three flanges, holding ten arms each, are evenly spaced along the paddleshaft. Steel circles and blocking hold the arms rigidly in place. Each arm and flange assembly forms a segment of the paddlewheel. The ends of the arms on each segment are attached to the paddle bucket planks which push the boat. [5]

Second Deck

The deck over the engines in diesel sternwheel towboats was usually too small to build cabins for the crew. Donald B had only a pilothouse on the second deck when built. A small cabin for the captain and his wife was built aft of the pilothouse in 1987. This cabin is of very light, temporary construction. The narrow exhaust stack is just aft of the cabin. Aft of the stack, a flat-topped monitor roof, called a Texas deck, extends from forward of amidships to just ahead of the stern. Clerestory windows in the vertical edges of the Texas skylight helped ventilate the superstructure. The addition of a skylight made construction more expensive and the boat did not recieve one until about 1930. [6] A steel splash guard at the after end of the deck protects the roof from spray thrown up by the sternwheel.

Pilothouse

The pilothouse is built of wood, with large sliding windows all around. The pilothouse was raised about two feet in 1958 to allow the steersman 360-degree visibility. The pilothouse roof is flat with a very slight crown.

The main feature of the pilothouse interior is the large wooden boat's wheel at the forward side, half hidden by the floor. This wheel steers the boat by means of cables which run down to the stern. A foot brake

in the pilothouse floor uses leather pads to stop and hold the wheel at the desired rudder angle. Donald B is one of very few surviving towboats to employ this method of steering, which Mark Twain would have found familiar. Power steering gear was developed around 1900 and rapidly supplanted cable and wheel mechanisms, which were prone to breakage. The rudder cables run from the pilothouse to the stern, and turn the central rudder by means of a long tiller arm. The other two rudders are yoked to move with the center rudder.

The pilothouse is surrounded by sliding windows which can be moved out of the way for clearer visibility. The front face is also fitted with chest boards which protect the steersman from some of the rain and wind. A rusty shotgun hangs in leather straps over the stern window. The boat owner states it has been there "as long as I can remember." A carbon-arc searchlight, and the navigation side lights are mounted atop the pilothouse.

Rig and Fittings

Like other towboats that pass under low bridges, Donald B does not step masts. She does possess a flagstaff at the stern bulkhead, called a verge, which is unstepped when necessary.
Engine exhaust travels up from the engine in the center and out of the boat through a thin, short stack just aft of the second-deck cabin.

Steel pipe boat davits are fitted to port for a yawl boat. Traditional Western Rivers lifeboards are hung in frames at the bow and stern on each side of the boat. The lifeboards are painted red and white.

Notes

1
Merchant Vessels of the United States (Washington, D.C.: Government Printing Office, 1952) p. 141.

2
Government and Public Affairs Department, "Sohio on the Ohio" The Sohioan (Cleveland, Ohio: Standard oil of Ohio, April, 1930) pp. 5-6.

3
Dan Owen, Ed., Inland River Record (St. Louis: The Waterways Journal, 1985) p. 96.

4
Ibid, and "Sohio on the Ohio" pp. 5-6, also telephone interview with Donald Brookbank, owner of the boat, June 12, 1989.

5
"Sohio on the Ohio" p. 5, and Alan L. Bates, The Western Rivers Steamboat Cyclopoedium (Leonia, New Jersey: Hustle Press, 1968) pp. 92-93.

6
From photos in "Sohio on the Ohio" p. 8, and J.T. Bird, "Seeing Beautiful Ohio from Towboat "Standard," The Sohioan (Cleveland, Ohio: Standard Oil of Ohio, September, 1938) p. 6.

The Development of Western Rivers Watercraft

The Western Rivers system, composed of the Mississippi, Ohio, Missouri, and other tributary rivers, carried most of the immigrants and freight that settled the Midwest. Starting in the late 1700s, most settlers traveled from the east coast overland to Pittsburgh, Wheeling, or Redstone, and then down the Ohio River to points west. [2] Only a small number traveled north from New Orleans and southern regions using the Mississippi and other rivers flowing from the North.

To reach the new lands of the West, Europeans adapted boat types already in use by Native Americans and on the East Coast. Explorers used birch bark canoes, and settlers used larger dugouts to open the West to settlement. As more people moved west, boats with greater capacity were needed, which called for new boat types. A form of enlarged dugout, called a pirogue, was developed first. Pirogues were more capacious than dugouts and were themselves adapted into more useful forms. The first adaptation changed the method of construction by taking the well-formed hull shape of the pirogue and replacing the hewn multiple-log construction with European plank-on-frame construction. [3]

Plank-on-frame construction was also used for another boat type called the bateau. Bateaus were adapted for frontier use on the eastern seaboard in the early 1700s and were later built for use on the Western Rivers. When more traditional European construction practice was followed with these vessels, they resembled ship's boats, but with more substantial timbers. When the best features of pirogues and bateaus were combined, they were given a hull shape that provided little resistance to the water, an external keel to help in steering, and sufficient cargo capacity to pay their way. This new type was called a keelboat. [4]

Keelboats were the most developed form of watercraft on the river and were used for rapid transportation of passengers and high value freight. Keelboats were usually 40 to 80 feet long and 7 to 10 feet wide. They possessed a well-modelled form, and could be propelled about 15 miles a day, either by oars at the bow or by poles pushed by the crew walking along a footway at each side. A single steersman stood atop a block at the stern to guide the keelboat using a long steering oar. Some keelboats sailing an advertised route on a regular schedule, came to be known as packets, the deep-water term for vessels in such service. [5]

Cheaper transportation was afforded by barges and flatboats. Flatboats were box-shaped variants of the scow hull form used as ferries on shallow Eastern rivers. Flatboats were the cheapest form of transportation on the rivers. Intended to travel only one way and then be broken up for lumber, flatboats were built, loaded with household goods, and sailed by the settlers themselves. [6]

Barges occupied the middle range of watercraft between keelboats and flatboats. Though similar in construction to keelboats, early barges were built wider, more robustly, and drew more water. Barges, with their deeper draft, transported heavy freight on the deeper rivers. [7]

Development of the Western Rivers Steamboat

Robert Fulton built the steamboat New Orleans at Pittsburgh, Pennsylvania, in 1811, and started a revolution which changed the pattern of commerce on the rivers. She proceeded down the Ohio and Mississippi rivers to her namesake city attracting publicity and attention along the way. Steamboats would provide convenient, inexpensive transportation and greatly facilitate the opening of the continent to settlement.

New Orleans, and the boats which were built on her pattern, were powered versions of canal boats. Their long, narrow, deep hulls were better suited to deep eastern rivers than the shallow Mississippi, but were needed to support heavy steam machinery. Another form of boat and engine was required for Western Rivers operation, following a different line of development from Fulton's. A number of unique design problems had to be overcome before steamboats could be a success on the Western Rivers. [8]

To navigate on the shallow rivers of the West, steamboat hulls and machinery had to be made as light as possible. Machinery weight problems were solved first. A lightweight, high-pressure engine was employed to propel the small boat Comet in 1813. The power plant was further refined in 1816 by Henry Shreve, who put the boilers on deck and designed a new type of engine to distribute machinery weight over a large area of the hull. Shreve's new engine design used a direct-acting, horizontal, high-pressure engine to drive the paddlewheel propeller. The second design problem was overcome through the years. Eventually, lightweight hull construction gradually replaced earlier robust "canal boat" construction as a broad, shallow-draft, hull form, using a truss-rod system rather than heavy wooden beams, developed over time.

To succeed in business, these lightly built boats had to carry a large amount of freight and many passengers. In answer to this requirement, sponsons were built over each side of the hull to extend the deck area. Superstructures were also extended several decks above the boiler deck to support passenger cabins.

All of the essential elements of the Western Rivers steamboat were present by 1825. Broad, shallow-draft vessels with boilers and engines on deck, sidewheels or sternwheels for propulsion, and cabins built on lightweight decks above the freight and machinery-laden main deck soon appeared on every tributary of the Mississippi. The ease and economy of this service caused the value of goods reaching New Orleans to double every ten years from 1820 to 1860. [9]

One feature of cardinal concern in the development of Western Rivers steamboats was safety. Early boats were particularly susceptible to boiler explosions, fires, and sinkings caused by hitting snags. Extraordinary dangers included being damaged in floods, tornadoes, and ice gorges. The lifetime of a steamboat in the 1840s and 1850s was estimated to be below five years. This situation changed very slowly.

Government intervention forced builders and operators of steamboats to become more conscious of safety considerations in a way that commercial motivations could not. In 1838, Congress responded to the need for increased safety aboard steamboats by passing an act requiring the inspection of steamboats. In 1851, after six steamboat disasters took more than 700 lives Congress tightened these safety regulations. The Steamboat Inspection Act of 1852 set standards for both boats and operators, and created a system of Federal inspection to oversee them. [10]

As time progressed, steamboat designs diversified to meet the needs of various trades and routes. Various features advantageous to particular trades or routes were accentuated in vessels built for them. Passenger vessels required high speed and high-class accommodations. Ferries called for wide stable hulls. Package freighters required dependable engines and robust construction because of carring heavy cargo on deck and in barges alongside. In some services speed became paramount, even surpassing safety concerns. Faster vessels required fine lines, powerful engines, and multiple boilers to supply plenty of steam. [11]

Shallow tributary rivers such as the Missouri and the upper regions of other rivers required boats with exceptionally shoal draft. Bertrand,

sunk in 1865 on the Missouri River, drew only 18 inches when light. To travel such shallow waters steamboat operators had to sacrifice all unnecessary weight and be satisfied with minimal superstructures. [12]

By 1880, riverboat technology had advanced considerably. Several distinct types of steamboats had been developed for work on the Western Rivers. Passengers were carried on riverboats of any kind from time to time but several types were particularly adapted for passenger service. The most elaborate of these were saloon or palace steamers providing luxury passenger transportation in elegant cabins. Such boats usually ran on schedule, and often carried mail to designated ports. These services duplicated those of ocean-going packet companies; the boats performing the service were aptly termed packets. [13]

Other passenger vessels were adapted for short day excursions carrying groups and charters to nearby scenic areas and for cruises to nowhere. These excursion boats were usually large sidewheelers operating from large port towns. The principal requirements of excursion boats were large open decks, dance floors, and orchestra or band stands. Smaller boats without these features also made occasional trips on the rivers "tramping" for charters. [14]

The Development of Towboats

More mundane sisters to the packets operated carrying passengers and cargo, wherever it could be found. Such non-scheduled steamboats often pushed one or more barges to increase cargo capacity or to decrease draft in periods of low water. Coal was carried in barges alongside packets from the 1840s and later salt, hay, iron ore, and grain were carried. A few boats specialized in pushing huge log rafts downstream to lumber mills. By 1850, a system of moving barges and log rafts lashed alongside and ahead of the towboat was developed which allowed greater control than towing on a hawser. [15] This type of service favored sternwheel propelled boats over sidewheelers and promoted other improvements as well. Towboats became a distinct type by 1860. [15]

Barges also developed in size, construction, and soon were built in standard sizes. Early barges were of two general types. The more common type was a long narrow scow hull, built of planks and used on one-way trips downriver carrying coal. This type was generally developed from the flatboat, and like it, was broken up and sold for lumber when the cargo was disposed of. The other type of barge was used for voyages both up- and downstream. These vessels, called model barges for their finely modeled ends, were usually greatly enlarged

versions of the barges of the 1820s. Barges of all kinds were carrying more than 19 million tons of freight per year by 1889.

Towboats were designed as floating engines to propel barges. Only the barge need be detained while loading or unloading cargo, and not the expensive towboat. Barges towed on a hawser are hard to control in narrow river channels. Barges lashed alongside and ahead of a towboat are easier to control. To ease tying off to a string of barges nearly all towboats have, straight sides and ends with large towing bitts and kevels. On the Lower Mississippi, strings of up to 60 barges were pushed on occasion. Today 15 barges is the more usual number on the upper rivers, because the limited size of river locks requires breaking tows into several pieces. On smaller rivers towboats could only handle one or two barges. [16]

New propulsion methods and new engines were introduced on the rivers as they were in other parts of the country. Compression ignition or diesel engines were first used about 1910 for smaller sternwheel towboats, but did not gain ascendancy until the late 1930s, when diesel-powered propeller boats appeared. The introduction of screw propellers to the rivers came late because of their vulnerability to damage and the greater depth of water required for efficient operation. Competition from newer diesel-powered screw-propelled towboats, with lower crew requirements, made continued operation of steam towboats uneconomical during the late 1940s. Some steam powered screw propeller towboats were built but were either later converted to diesel power or retired. Sternwheel boats were considered to be more efficient for smaller horsepower engines and shallow water than screw propeller boats, and a few diesel sternwheelers stayed on the rivers after steam sternwheelers disappeared.

Advances in technology have been met by advances in operating methods. Powerful modern towboats push large tows of barges bound for different destinations. Tows are kept underway while various services are performed to make operation as efficient as possible. Fuel, groceries, and other boat stores are carried out to towboats by fast launches. Small "shifting service" towboats meet large tows underway, bringing barges to add to the tow and removing barges bound for separate destinations. The "shifting" service often is performed in conjunction with "fleeting" services. Barges are kept in holding areas, similar to railroad yards or parking lots, called fleets. Another towboat will tow the dropped barges on to their destination. Underway services substantially reduce the costly in-port time of large towboats. Other advances in operating techniques include radio dispatching and

communications, computerized records, and "fully integrated tows" of matched barges to reduce water resistance.

Standard Oil of Ohio

Petroleum was found in western Virginia in the early years of the 19th century. Wells sunk seeking water were abandoned because they produced oil instead. By 1850, oil was found useful as an illuminant and as medicine. In 1855 it was found to be an excellent lubricant. Flowing oil was discovered along the Kanawah River near Titusville, Pennsylvania, in 1859 and many wells were drilled. Uses had been found for the stuff and several hundred wells were drilled within five years. [17]

Oil was transported in wooden barrels at first. Horse drawn wagons carried the barrels to navigable waterways where they were loaded aboard a huge fleet of flatboats for transportation down river to Pittsburgh. About one in ten flatboats was sunk on the trip downriver. Steamboats towed intact flatboats back up the river to carry another load. Many different firms engaged in the trade and a few grew wealthy. [18]

A cheaper alternative to the wagon and flatboat appeared when pipe lines were built to carry oil directly from wells to railroad terminals. The Standard Oil Company, formed in 1865 to transport and refine petroleum, used railroads to transport oil to their refineries. They were so successful that the flatboat and steamboat oil trade was taken over by railroads. By 1882, Standard controlled 90 % of the oil business in America. This monopoly was challenged in a number of anti-trust suits that finally divided the company in 1911. The oldest division of the company became Standard Oil Company of Ohio (SOHIO). The Company continued to grow and diversify, using railroads and pipelines as the principal means of moving crude oil and refined petroleum products. [19]

SOHIO attempted a new product distribution method in the early 1920s. Gasoline had been distributed by railroad tank cars and horse drawn wagons but many river towns did not have access to railroads and gasoline distributors. SOHIO solved the distribution problem by using the Ohio River. The company built a central Ohio River terminal at Marietta, Ohio and six distribution terminals at towns along the Ohio that were not served by railroad. The company was very successful in utilizing the rivers to supply products to distributers and soon added other towboats and petroleum barges to their fleet to supply other areas. In the mid-1930s the company also began shipping oil north from

new fields in the south via the Western Rivers. By the late 1930s, SOHIO had eleven towboats and more than fifty barges in operation on the Western Rivers. During the Second World War the enlarged SOHIO river fleet carried desperately needed crude and refined oil to make up for seagoing tanker losses and shortages of railroad tank cars. After the war, changing transportation patterns caused the large wartime fleet to drop to three towboats by 1950. A modest fleet is owned and leased by the company in 1989. [20]

Construction and Career of Donald B

In 1923, the Standard Oil Company of Ohio ordered a sternwheel towboat from the yard of the Marietta Manufacturing Company at Point Pleasant, West Virginia. This vessel inaugurated gasoline and oil distribution service on the Ohio River. The new towboat was named Standard. Her maiden voyage was made on June 25, 1923.

Standard delivered bulk oil products, primarily ethyl and Red Crown gasoline to distribution terminals on the Ohio River. Her registered home port was Cincinnati, but Standard carried oil products from Standard's Ohio River Plant at Marietta, Ohio, to bulk plants at New Matamoras, Clarington, Belpre, Long Bottom, Middleport, and McConnelsville. Products were distributed from those six plants by horse-drawn oil tank wagons. The service was successful and Standard was soon joined by other towboats. [21]

Standard was built with a 60-horsepower horizontal gasoline engine. It drove the sternwheel using a sliding belt and chain drive. The boat thus used a SOHIO company product as fuel. When the company added a second barge to the first, more power was needed than a gas engine could supply and the simplicity of using gasoline had to be abandoned. In 1930 the gasoline engine was replaced with a four-cylinder Fairbanks-Morse compression-ignition (diesel) engine developing 100-horsepower. The drive was converted at the same time to the shaft, differential, and chain that now powers the boat.

A specially fitted steel barge was built to work with Standard while proving the river distribution network. Barge No. One was 96 feet long and 18 feet wide. Petroleum barges had not yet been perfected, and at first this barge utilized an ordinary scow-form hull with a number of cylindrical tanks, with expansion trunks atop, partially submerged in the hull. These tanks closely resembled a string of railroad tank cars set lengthways into the middle of the barge. The tanks carried 23,000 gallons of gasoline and 4,800 gallons of refined oil. The full potential for carrying bulk fuel was realized in 1929 when the

cylindrical tanks were removed from the barge, the hull subdivided into compartments, and the entire hull interior used for fuel cargo. About 100,000 gallons could be carried in the hull tanks. As demand increased, another slightly longer barge was built to operate with the first. [22]

Standard continued to serve the Ohio River route into the late 1930s carrying gasoline and oil to distribution points on the river banks. She also performed emergency work of other kinds when needed. During the disastrous floods of 1937, Standard carried relief supplies and personnel under the Corps of Engineers orders. She carried doctors, nurses, medicine, and other supplies to isolated Ohio towns from January 26 until released February 2. [23]

The 100-hp engine threw a rod through the side of the boat in 1939 at Maysville, Kentucky, and a fire lightly scorched much of the port side superstructure. SOHIO replaced the damaged Standard with a larger, more powerful towboat and sold Standard to towboatman Ray Brookbank. He renamed Standard the Donald B for his young son. Repairs to the port superstructure and a new 160-hp. Fairbanks-Morse diesel engine allowed the boat to resume operation. Brookbank used Donald B for general towing on the Ohio River and for fleeting operations near Georgetown, Ohio. When Ray Brookbank died in 1965, title to the towboat went to his son Donald, namesake of the boat. Donald B continues to work for Brookbank River Towing, Inc. in 1989. [24]

The towboat Donald B plays a humble but important part in the cultural, technological, and historical heritage of the Western Rivers, where her type was the intermediate stage between steam sternwheelers and Diesel propeller boats. As Standard, the boat inaugurated an important new trade for the towing industry, carrying refined oil products to distribution points. Donald B is also of great importance as one of three known intact examples of her type, which played an important part in the technological progress of America's inland transportation, and was used on all the waters of the Western Rivers.

Notes

1
Government and Public Affairs Department, "Sohio on the Ohio" The Sohioan (Cleveland, Ohio: Standard Oil of Ohio, April, 1930) pp. 4-7, and "Captain George Gordon and Lester Flight Head Field Operations of Expanded Fleet" The Sohioan (Cleveland, Ohio: Standard Oil of Ohio, December, 1942) pp. 2-4.

2
Francis S. Philbrick, The Rise of the West: 1754-1860 (New York: Harper & Row, Publishers, 1965) pp. 312-315.

3
Leland D. Baldwin, The Keelboat Age on Western Waters (Pittsburgh, Pennsylvania: University of Pittsburgh Press, 1980) p. 41.

4
Baldwin, op. cit., pp. 42-44 and pp. 50- 51.

5
Ibid., pp. 175-177.

6
Philbrick, op. cit., pp. 313-314.

7
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