



## Woodrush, 1944

WAGL / WLB-407  
180-C Class



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A family of monocotyledonous plants in the order Juncales characterized by an inflorescence of diverse sorts, vascular bundles with abaxial phloem, and cells without silica bodies (*Iuzula acuminata*).

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Builder: Zenith Dredge Co., Duluth, MN

Keel Laid: 4 February 1944

Launched: 28 April 1944

Commissioned: 22 September 1944

Decommissioned: 2 March 2001, sold to Republic of Ghana

Cost: \$ 926,156

Length: 180'

Beam: 37'

Draft: 12' 6"

Displacement: 1025 tons

Propulsion: 2 Cooper-Bessemer Diesel Engines; 1,200 SHP; single propeller

Performance:

Max: 13.5 knots, 10,000-mile range (1962)

Economic: 10.5 knots, 13,000-mile range (1962)

Fluid Capacities (in gallons):

Diesel Oil: 43,000

Potable Water: 12,500

Deck Gear: 20-ton boom w/ electric hoist

Anchors:

Armament:

Small Boats:

Complement: 47 (1962)

Electronics:

Radar: SL-1

Sonar: QCU

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### **Class History:**

When the US Coast Guard absorbed the Bureau of Lighthouses on 1 July 1939, *Juniper*, a 177-foot all welded steel buoy tender, was under construction and plans for a successor were on the drawing board. Plans initiated by the Bureau of Lighthouses called for the construction of several identical buoy tenders to replace existing coastal buoy tenders. The preliminary designs generated by the Bureau were for a vessel similar to *Juniper*. When the Aids to Navigation (ATON) system transferred to Coast Guard control, USCG planners reviewed the preliminary plans for the new class of buoy tenders and modified them to meet the service's multi-mission role. To be an effective part of the Coast Guard, the new buoy tenders needed to be multi-purpose platforms. They had to be capable

of conducting Search and Rescue (SAR) and Law Enforcement (LE) missions, as well as their primary mission tending ATON. On 20 January 1941 the US Coast Guard contracted Marine Iron and Shipbuilding Company of Duluth , Minnesota to build the design based on *Juniper* and modified to meet the service's requirements. On 31 March 1941 Marine Iron and Shipbuilding laid the keel for the first vessel of the new buoy tender class. The new vessel measured 180 feet overall and had a beam of 37 feet at the extreme. She had a displacement of 935 tons and drew 12 feet. The new design was similar to *Juniper* in appearance but did exhibit some important differences. Gone was the turtle back forecastle. A notched forefoot, ice-belt at the waterline, and reinforced bow gave the vessel icebreaking capabilities. Extending the superstructure to the ship's sides increased interior volume above the main deck. A single propeller, turned by an electric motor powered by twin diesel generators, replaced the twin-screw arrangement. The 30,000-gallon fuel capacity gave the new design a range of 12,000 miles at a 12-knot cruising speed; at 8.3 knots the cruising range increased to 17,000 miles. Finer lines at the bow and stern increased the new tender's sea keeping ability in rough weather; an increase in draft also promoted seaworthiness. Numerous minor alterations increased the vessel's utility as a SAR platform while deck-mounted guns and depth charge racks supported military duties. Marine Iron and Shipbuilding launched the prototype vessel on 25 November 1941, even as three more took shape. Preparations also went forward to begin a fifth vessel. By the time they commissioned the first 180, *Cactus*, on 1 September 1942 twelve vessels were under construction at the Marine Iron shipyard and at the Zenith Dredge Company shipyard, also in Duluth . The initial designation for the new buoy tenders was WAGL, which was a US Navy designation denoting an auxiliary vessel, lighthouse tender. The designation changed from WAGL to WLB in 1965. A few of the 180s have been designated as other types of vessels over the years; three became WMECs (medium endurance cutters), one of those, *Evergreen*, was a WAGO (oceanographic research vessel) before it became a WMEC. *Gentian* was a WMEC for a time and was then designated a WIX (Training Cutter) in 1999. Though designations have changed over time, each vessel's hull number has remained the same since commissioning.

#### DIFFERENCES WITHIN THE 180' CLASS

Six "B" or *Mesquite* class tenders followed the initial production run of thirteen vessels in the "A" or *Cactus*-class. The first *Mesquite*-class tender hit the water on 14 November 1942. Marine Iron and Shipbuilding built all except one of the *Mesquite*-class. The USCG built the lone exception, *Ironwood*, at the service's shipyard in Curtis Bay, Maryland. Twenty *Iris* or "C" class vessels followed the *Mesquite*-class tenders. The first launch of an *Iris* class vessel took place on 18 June 1943, and the final addition to the class slipped off the ways on 18 May 1944. Differences among the three classes were minimal. Their basic dimensions, length and beam were the same and draft varied based on loading. All were built of welded steel along the same framing pattern and with very

similar internal and external layouts. All three classes could steam 8,000 miles at 13 knots, 12,000 miles at 12 knots, and 17,000 miles at 8.3 knots; though the “B” and “C” class vessels had engines with 20 percent more power than the “A” class. The “A” class vessels could carry the most fuel with a tank capacity of 30,000 gallons. The “C” class carried 29,335 gallons and the “B” class about 700 gallons less. The layout of the Commanding Officer’s cabin and the radio room was slightly different in the “A” class vessels. The bridge wing door on the “B” and “C” vessels opened to the side while the doors on the “A” vessels opened forward. The cargo holds as originally laid out in the “C” were larger, by a nominal amount, than those in the other vessels. To hoist buoys and cargo, the “A” vessels carried an A-frame structure that straddled the superstructure and supported the cargo boom. The other two classes were fitted with power vang that attached to the bridge wings and manipulated the cargo boom. The “A” vessels were originally fitted with manila line as part of the cargo handling system while the second and third generation vessels used wire rope. From the outside, other than the A-frame used in the first production run, the three classes were almost indistinguishable. Over the years their internal differences and variation in equipment were minimized by successive overhauls and improvements. Moreover, it does not appear that any one of the three classes was superior to the other two in the eyes of the US Coast Guard administration or the men who manned the buoy tender fleet. Tenders from each of the three classes remained in use past the turn of the 21<sup>st</sup> century. It usually took from two to four months between the time shipyard workers laid a keel and the day the vessel slipped off the ways. Once launched, however, the tenders were far from ready for service. The practice was to build the superstructure, finish the interior, and complete the machinery installation while the vessel was floating. Hence, on launch day the tenders were little more than finished hulls. As the shipyard workers neared the end of the building process, the Coast Guard would begin assigning officers and men to the vessels. Once each vessel was complete and ready to enter active service, the US Coast Guard commissioned her as part of the fleet. Often the commissioning ceremonies took place after the tender had departed from Duluth and arrived at an initial duty station. For the 180s as a whole, it took an average period of 308 days to go from the beginning of construction to commissioning. Divided according to sub-class, the elapsed time from keel laying to commissioning averaged 360 days for the *Cactus*-class; 323 days for the *Mesquite*-class; and 269 days for the *Iris*-class. The building process averaged 192,018 man-hours of labor per vessel. In keeping with the Lighthouse Service practice of naming tenders after foliage, all of the 180s were named after trees, shrubs, or flowers.

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### **Cutter History:**

*Woodrush*, a 180-foot *Iris* or *C*-class tender, was built in Duluth, Minnesota by Zenith Dredge Company. Her keel was laid on 4 February 1944, and she was

launched on 28 April 1944. She was commissioned at Duluth, Minnesota on 22 September 1944 under the command of LCDR F. D. Hagaman.

She was assigned on 22 September 1944 to general aids-to-navigation (ATON) and ice breaking duties, with a homeport of Duluth, Minnesota. She remained in this district until 31 July 1978. During this time she not only attended to her duties, but also had many other missions, including responding to the ore freighter *Edmund Fitzgerald*, which went down in a storm in 1975.

On 31 July 1978, she was sent to Curtis Bay, Maryland for a major renovation, which lasted until March 1980.

On 3 June 1980 she was transferred to Sitka, Alaska to replace the CGC *Clover*, where she was home ported for the rest of her career. Her duties in Alaska included ATON, ice breaking, and SAR operations. One memorable example of her SAR duties involved the *Prinsendam*, a cruise ship. In 1980 she rescued the passengers and crew of the *Prinsendam*, off Graham Island, British Columbia, after she caught fire.

In 1989, she was one of the first ships to respond to the *Exxon Valdez* oil spill in Prince William Sound. In August 1993 another cruise ship, M/V *Yorktown Clipper*, needed assistance after running aground.

After her varied career, on 2 March 2001, she was decommissioned and sold to the Republic of Ghana, to serve in the Ghanaian Navy.

Researched and written by Ms. Melissa M. Ashmore.



No caption; 1961; Photo No. 102661; photographer unknown



Original caption: "WOODRUSH: Sturgeon Bay Ship Building & Dry Dock Co. Sturgeon Bay, Wis."; 22 September 1961; Photo No. 102661-01; Photo by Herb Reynolds Photographs, Sturgeon Bay, Wisconsin.



No caption/date; Photo No. 3-30C; photographer unknown.



No caption/date/photo number; photographer unknown.



Original caption: "Solid Gold! WOODRUSH returns to port after the final battle problem for REFTRA 92 earning a 5th consecutive clean sweep!"; 1992; no photo number; photographer unknown.

**Sources:**

Cutter History File. USCG Historian's Office, USCG HQ, Washington, D.C.

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