

## *Blackthorn, 1944*

WAGL/WLB-391



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Builder: Marine Iron & Shipbuilding Corporation, Duluth, Minnesota

Length: 180'

Beam: 37'

Draft: 12'

Displacement: 935 tons

Cost: \$876,403.00

Commissioned: 27 March 1944

Decommissioned: N/A, sank on 28 January 1980 after a collision in the mouth of Tampa Bay, Florida

Disposition: Raised and then sunk as an artificial reef.

Machinery: 1 electric motor connected to 2 Westinghouse generators driven by 2 Cooper-Bessemer diesel engines.

Performance & Endurance:

Max: 13.0 knots  
Cruising: 12.0 knots, 12,000 mile range  
Economic: 8.3 knots, 17,000 mile range

Deck Gear: 20 ton boom capacity with electrically powered hoist

Complement: 6 officers, 74 men (1945)

Armament: 1 x 3"/50 caliber single mount; 4 x 20 millimeter/80 caliber; 2 x depth-charge tracks; 2 mousetrap launchers (1944).

Electronics: SL-1 surface search radar, WEA-2 sonar (1945);

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### **Class History:**

When the US Coast Guard acquired 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 manilla 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.

## A GREAT DESIGN

The 180-foot buoy-tending cutters built for the US Coast Guard during the early 1940s are remarkable in terms of their longevity. Except the US Coast Guard's *Storis*, no other military vessels on active duty today served in World War II. The 180s longevity is not a case of superior construction, though they were undoubtedly built quite solidly. The service performed by the class for over sixty years is a function of their design. The 180s were extremely versatile and perfectly suited for their multifaceted role. They could break ice, replace a buoy, and save a sinking ship all in the course of a day's work. Moreover, they could complete these missions within sight of their homeport or steam across thousands of miles of ocean to complete an assigned task. They did not become outmoded until computers, satellites, and automation changed the way ships are built and equipped. The US Coast Guard spent time and money keeping the 180s in service long beyond their projected life span because that remained the best option. These ships that fought U-boats in World War II have spent millions of hours since making the world's waterways a safer place for science, commerce, and recreation. This was possible due to the design's versatility and reliability. Obsolescence crept up on the 180s very slowly, producing a tenure unmatched in twentieth-century American maritime history. The 180-foot buoy tenders proved to be extremely versatile vessels during their long careers. Though all spent some portion of their time afloat servicing buoys, they served in many other pursuits as well. Many of these alternate activities revolved around the vessel's intended secondary missions, search and rescue, law enforcement, and icebreaking. Often, however, the tenders carried out missions never envisioned by their designers, ranging from transporting rare tropical fish to landing scientific parties on drifting icebergs. This plethora of pursuits when combined with the wide geographic distribution of the 180s makes it difficult to describe a typical or generic career for a 180. The oceangoing buoy tenders built for the US Coast Guard in the early 1940s served around the world and fulfilled the service's requirement for a true multi-mission capable platform.

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### Cutter History:

CGC *Blackthorn* (WAGL/WLB-391) was built by Marine Iron and Ship Building Corporation Duluth, Minnesota. She was 1 of 39 units of the 180-foot tenders built, the largest class of tenders, to that time, constructed by the Coast Guard. *Blackthorn* was laid down 21 May 1943, launched 20 July 1943, and commissioned 27 March 1944. The principal job of a buoy tender was to service aids to navigation. As with all Coast Guard craft, buoy tenders are often diverted to other missions--a fact reflected in *Blackthorn's* career. During the first few months in service, *Blackthorn* was used for ice breaking on the Great Lakes. In mid-1944 she was reassigned to San Pedro California, transiting via the St. Lawrence River and the Panama Canal.

*Blackthorn* operated out of San Pedro, servicing aids to navigation until December 1949. Other duties included salvaging a naval helicopter on 17 November 1948 and assisting distressed craft on 4 July 1949 and 19 October 1949. In early 1950, *Blackthorn* was reassigned to Mobile Alabama and transited via the Panama Canal. She serviced aids to navigation there until July 1976. While assigned to Mobile,

*Blackthorn* searched for survivors of *Esso Greensboro*, which had collided with *Esso Suez* on 22 April 1951; assisted distressed merchantmen *Ocean Pride* on 27 July 1951, *Kerry Mac* on 2 October 1951, *Mission Carmel* on 27 June 1952, and *Beatrice* on 16 April 1954. She also assisted *Miss Cain Joy* on 25 July 1959. On 27-28 August 1952, *Blackthorn* assisted in the search for survivors of a B-17 crash and on 18-25 February 1953, she searched for survivors of National Airlines Flight 470. Between May and June 1953 *Blackthorn* recovered the wreckage of the National Airlines plane and in April 1954 she salvaged an Air Force plane. On 8 May 1956 *Blackthorn* searched for two missing naval PGF aircraft. In October 1957 she assisted her sister ship *Iris* after she had beached herself after being holed. *Blackthorn* was reassigned to Galveston, Texas in 1976.

Buoy tenders have traditionally had long careers. Many serving more than 45 years. Aside from routine maintenance, *Blackthorn* was modernized throughout her career. In 1968 she received air conditioning improvements in her heating and ventilation, and a new 100kw generator. *Blackthorn* received an "Austere Renovation" in 1972. Crew berthing, heads, and the dispensary were renewed plus a new lounge and Pollution Abatement System were added. From 15 October 1979 through late January 1980 *Blackthorn* was overhauled in Tampa, Florida.

Having just completed her overhaul, *Blackthorn* was outward bound from Tampa Bay on the night of 28 January 1980. Meanwhile the tanker *Capricorn* was standing into the bay. The captain, LCDR George Sepel was on the bridge, but ENS John Ryan had the conn. Having been overtaken by the Russian passenger ship *Kazakhstan*, *Blackthorn* continued almost in mid-channel. The brightly lit passenger vessel obscured the ability of the crews of *Blackthorn* and *Capricorn* to see each other. *Capricorn* began to turn left, but this would not allow the ships to pass port-to-port. Unable to make radio contact with the tender, *Capricorn's* pilot blew two short whistle blasts to have the ships pass starboard-to-starboard. With the officer of the deck confused in regard to the standard operating procedure, *Blackthorn's* captain issued orders for evasive action.

Though the ships collided, damage did not seem to be extensive. The problem, however, was that *Capricorn's* anchor was ready for letting go. It became imbedded in the tender's hull and ripped open the port side. Just seconds after the slack in the anchor chain became taut, *Blackthorn* capsized. Six off-duty personnel who had mustered when they heard the collision alarm were trapped in the dark. Several crew members who had just reported aboard tried to escape and in the process trapped themselves in the engine room. Though 27 crewmen survived the collision, 23 perished.

In the end the primary responsibility for the collision was placed with LCDR Sepel as he had permitted an inexperienced junior officer to conn the ship in an unfamiliar waterway with heavy traffic.

The *Blackthorn* was salvaged for the investigation and was then taken out into the Gulf of Mexico and sunk as an artificial reef.

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**Crew of USCGC *Blackthorn* Lost in the Line of Duty  
28 January 1980**

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CWO Jack J. Roberts

EM2 Thomas R. Faulkner

SS1 Subrino Avila

SS3 Donald R. Frank

MK1 Bruce Lafond

QM3 Richard W. Gauld

MK1 Danny R. Maxcy

DC3 Lawrence D. Frye

SA Charles D. Hall

EM3 Edward F. Sindelar

ET1 Jerome F. Ressler

SNGM Randolph B. Barnaby

ENS Frank J. Sarna

FA Michael K. Luke

SA William R. Flores

SA Warren R. Brewer

MKC Luther D. Stidhem

SA Glen E. Harrison

MK2 Richard D. Boone

SA John E. Prosko

QM2 Gary W. Crumly

SA George Rovolis, Jr.

DC2 Daniel M. Estrada

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Images:



Original caption, top photo: "BLACKTHORN 1"; 15 September 1943; Photo No. 554; bottom photo: "USCGC BLACKTHORN, commissioning"; 27 March 1944, Photo No. 884; photographer not listed for either.



No caption/date/photo number; photographer not listed.



No caption/photo number; photo dated 30 September 1946; photographer not listed.



No caption/photo number; photo dated 1947; photographer not listed.



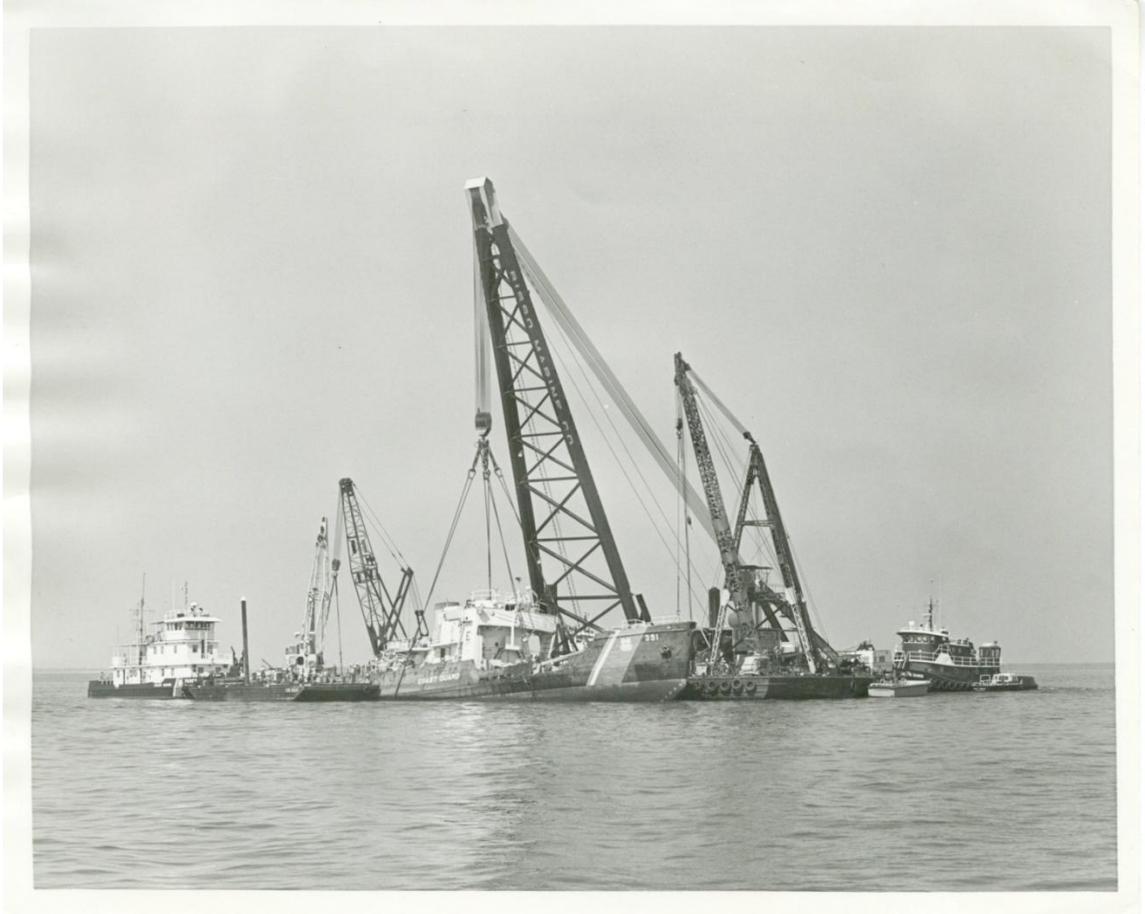
Original caption: USCGC Blackthorn N.O.L.A." ; photo dated 20 October 1953; Photo No. 2168  
photo by "Higgins."



No official caption; photo dated 16 October 1972; Photo No. CCGD8 10167207; photographer not listed.



No caption/date/photo number; photographer not listed.



Original caption: "USCGC BLACKTHORN RAISED (Clearwater FL) – The Coast Guard buoy tender BLACKTHORN is raised from the waters of Tampa Bay following its collision with the tanker CAPRICORN. Assisting in the salvage operations of the BLACKTHORN were crewmembers from the USCGC VISE, U.S. Navy divers, USCGC WHITE SUMAC and various civilian salvage contractors."; photo dated 10 July 1980; no photo number; Photo Release POC PA1 Lance Jones, USCG."



No caption; photo dated 28 January 1989; Photo No. 7356-7; photographer not listed.



No caption; photo dated February 1981; no photo number; photo by AE3 M. W. Spetz.

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**Sources:**

Cutter History File, U.S. Coast Guard Historian's Office

Scheina, Robert. U.S. Coast Guard Cutters & Craft, 1946-1990. Annapolis, MD: Naval Institute Press, 1990.

