



U.S. Coast Guard History Program

Pontchartrain, 1945



WPG/WHEC-70

Call sign: NRUU

Pontchartrain was named for Lake Pontchartrain, Louisiana.

Builder: Coast Guard Yard, Curtis Bay, MD

Commissioned: 28 July 1945

Decommissioned: 19 October 1973

Length: 254'oa; 245'bp

Navigation Draft: 17'3" max (1966)

Beam: 43'1" max

Displacement: 1,978 fl (1966); 1,342 light (1966)

Main Engines: 1 Westinghouse electric motor driven by a turbine.

SHP: 4,000 total (1945)

Performance, Maximum Sustained: 17.0 kts, 6,157-mi radius (1966)
Performance, Economic: 10.0 kts., 10,376-mi radius (1966)

Fuel Capacity: 141,755 gal (Oil, 95%)

Complement: 10 officers, 3 warrants, 130 men (1966)

Electronics:

Detection Radar: SPS-23, SPS-29, Mk 26, Mk 27 (1966)

Sonar: SQS-1 (1966)

Armament: 1 5"/38; Hedgehog; 2 Mk 32 ASW TT (*Winnebago*, 1966 – most units without TTs)

Class History—“The bow and the stern for each other yearn, and the lack of interval shows...”

Myths have long shadowed the design history of the 255-foot class. These cutters were to have been much larger ships, and two theories persist as to why they were shortened. The first is that these cutters were built to replace the ships given to Great Britain under lend lease, and Congress stipulated that the Coast Guard had to build these replacement cutters to the same size and character as those provided to the British. The second is that their length was determined by the maximum length that could pass through the locks of the Welland Canal from the Great Lakes to the St. Lawrence River. The Great Lakes shipbuilding industry brought pressure on Congress to ensure that it had the potential to bid on the contract. The first theory seems to be correct, but the second cannot be ruled out.

The Coast Guard had prepared a design for a 316-foot cutter that was to have been an austere 327. This design was cut down into the 255-foot ship. To accomplish this, everything was squeezed down and automated to a degree not before achieved in a turbo-electric-driven ship.

The machinery design of the 255s was compact and innovative, but overly complex. It had pilothouse control, variable-rate (10 to 1) burners, and automatic synchronizing between the turbo-generator and the motor. Westinghouse engineers developed a system of synchronization and a variable-frequency drive for main-propulsion auxiliary equipment, which kept the pumps and other items at about two-thirds the power required for constant-frequency operation. The combined boiler room/engine room was a break with tradition.

The turbo-alternators for ship-service power exhausted at 20 psi gauge pressure instead of into a condenser. This steam was used all over the ship before finally going to a condenser. Space, heating, galley, cooking, laundry, freshwater evaporation, fuel, and feed-water heating were all taken from the 20 psi backpressure line.

The 255-foot class was an ice-going design. Ice operations had been assigned to the Coast Guard early in the war, and almost all new construction was either ice-going or ice-breaking.

The hull was designed with constant flare at the waterline for ice-going. The structure was longitudinally framed with heavy web frames and an ice belt of heavy plating, and it had extra transverse framing above and below the design waterline. Enormous amounts of weight were removed through the use of electric welding. The 250-foot cutters' weights were used for estimating purposes. Tapered bulkhead stiffeners cut from 12" I-beams went from the main deck (4' depth of web) to the bottom (8" depth of web). As weight was cut out of the hull structure,

electronics and ordnance were increased, but at much greater heights. This top weight required ballasting the fuel tanks with seawater to maintain stability both for wind and damaged conditions.

The superstructure of the 255s was originally divided into two islands in order to accommodate an aircraft amidships, but this requirement was dropped before any of the units became operational. Construction of this class received a low priority, and none of the cutters served in the war. Following completion of the preliminary design by the Coast Guard, the work was assigned to George G. Sharp of New York to prepare the contract design.

The number of units – 13 of them – had an interesting origin. Three were to have been replacements for over-aged cutters, the *Ossipee*, *Tallapoosa*, and *Unalaga*; ten units were to be replacements for the 250-foot class transferred to Great Britain under lend-lease. For economy, all 13 units were built to the same design.

Cutter History:

Pontchartrain was originally named *Okeechobee*. She was stationed at Boston, MA, from 1 April 1946 to 17 October 1947 [there is conflicting data that indicates station at Boston until 23 August 1948!] and was used for law enforcement, ocean station, and search and rescue operations. She was subsequently decommissioned and stored at the Coast Guard Yard, Curtis Bay, MD, until 5 September 1948. She was re-commissioned and homeported at Norfolk, VA until 12 November 1949. From 12 November 1949 to 19 October 1973, she was stationed at Long Beach, CA. She was used for law enforcement, ocean station, and search and rescue operations in the Pacific.

On 4 May 1950, *Pontchartrain* assisted the disabled F/V *Eta* near Catalina Island. On 20 August 1955, she escorted the disabled American M/V *John C.* On 26 and 27 August 1955, she assisted the disabled F/V *Nina Ann*. On 16 October 1956, she rescued all on Pan American Clipper 943, which ditched only ½ mile from the cutter. On 20 November 1956, she assisted LSM-455 aground on San Clemente Island. On 26 August 1957, she assisted the disabled F/V *Modeoday* 2 miles north of North Point Pinos. On 22 November 1957, she assisted the disabled yacht *Gosling* at 33°59'N, 120°16'W.

On 25 February 1958, she assisted the disabled yacht *Intrepid*. From 11 to 21 August 1958, she served on a reserve training cruise. She patrolled the Ensenada Bay Race on 10 May 1959. On 10 July 1959, she assisted F/V *Carolyn Dee* at 33°N, 120°W. On 13 and 14 July 1959, she assisted M/V *Mamie*. On 17 August 1960, she patrolled the Acapulco Yacht Race. From 20 August to 3 September 1960, she served on a reserve training cruise. On 19 October 1960, she rescued three from the ketch *Alpha* at 30°21'N, 117°56'W. On 22 January 1961, she medevaced a patient from USNS *Richfield*. On 30 April 1963, the *Pontchartrain* assisted the disabled F/V *Gaga* 10 miles east of San Nicolas Island. She was assigned to Coast Guard Squadron Three, Vietnam, from 31 March to 2 July 1970.

Photographs:

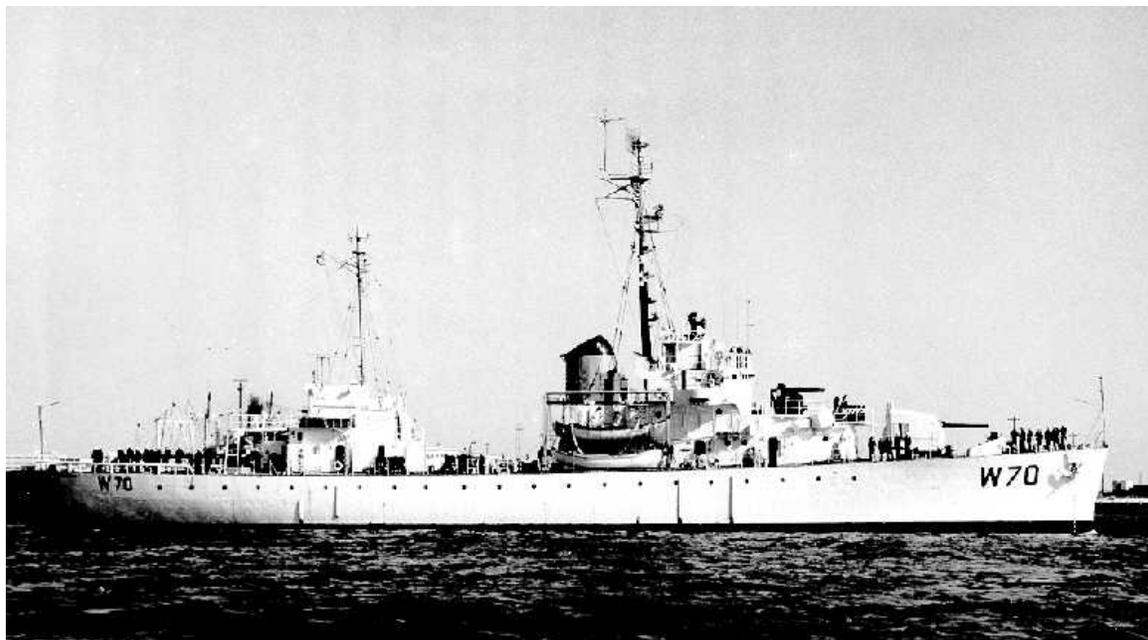


"USCGC Pontchartrain on her first underway trial;" 3 August 1945; Photo No. 853; photo by Davis.

These cutters were designed to carry out a variety of duties that included escort of convoys, hence the heavy anti-submarine and anti-aircraft weaponry. Although they were designed primarily as warships, they never saw combat during World War II. One historian noted that their appearance was "tubby," leading to machinery design that "was compact and innovative, but overly complex. . . Many demands were placed on this design and, as a result, these cutters were uncomfortable sea boats." The majority of their armament was removed shortly after the end of World War II but due to their built in adaptability as multi-mission cutters, most remained in service until the mid-1970's



Ponchartrain, 4 September 1945, no caption.



Pontchartrain, 9 September 1959. Release #5874. Caption states: "USCGC PONTCHARTRAIN (WPG-70) One of U.S. Coast Guard's 255-ft. 'Lake Class' Cutters (named for lakes), the USCGC PONTCHARTRAIN displaces 1,913 tons, has a single screw propulsion delivering 4,000 h.p., allowing a speed of 17.5 knots. Built in 1945 at the U.S. Coast Guard Yard, Curtis Bay, Md., the

cutter is based at Long Beach, Calif. In addition to search and rescue duties, the cutter performs weather patrol and plane guard duty on ocean stations in the Pacific."

Sources

Robert L. Scheina, *U.S. Coast Guard Cutters & Craft of World War II* (Annapolis: Naval Institute Press, 1981), pp. 1-3.

Robert L. Scheina, *U.S. Coast Guard Cutters & Craft, 1946-1990* (Annapolis: Naval Institute Press, 1990), pp. 18-26.

255' Cutter Sailors' Page, hosted by 255' cutter historian Doak Walker, RMC, USCG (Ret.):
255wpg.11.net.com/

Cutter File, Coast Guard Historian's Office.

Ship's Characteristics Card.

