# 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.

(Form 10-900a). Type all entries.				
1. Name of Property				
historic name Motor Torpedo Boa	at PT 617			
	Cock," Dragon L	adv		
			-	
2. Location				
street & number Battleship Cov	<i>r</i> e			not for publication
city, town Fall River				vicinity
	25 county	Bristol	code 005	zip code 02721
				•
3. Classification				
Ownership of Property	Category of Property	N	umber of Resor	urces within Property
private	building(s)	C	ontributing	Noncontributing
public-local	district			buildings
X public-State	site			sites
public-Federal	x structure		1	structures
	object		•	objects
	_ ·			Total
Name of related multiple property listing	:	N	umber of contri	buting resources previously
				onal Register0
4. State/Federal Agency Certificat	ion			
National Register of Historic Places a In my opinion, the property meets				
Signature of certifying official				Date
State or Federal agency and bureau				
In my opinion, the property meets	does not meet the	National Register ci	riteria. 🔲 See c	continuation sheet.
Signature of commenting or other official				Date
State or Federal agency and bureau				
5. National Park Service Certificat	ion	<del></del>		
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	<del></del>			<del></del>
National Register.				
rational Hogiston.				
removed from the National Register.				
other, (explain:)				
	<del></del>			
		Signature of the Keep	er	Date of Action

6. Function or Use			
Historic Functions (enter categories from instructions) Government (Naval)	Current Functions (enter categories from instructions) Museum		
7. Description			
Architectural Classification (enter categories from instructions)	Materials (enter categories from instructions)		
N/A	foundation N/A		
24/22	walls N/A		
	roof N/A		
	other <u>N/A</u>		

Describe present and historic physical appearance.

The Electric Boat Company (Elco), <u>PT-103</u> class, 80-foot motor torpedo boat <u>PT 617</u>, "Big Red Cock," is a museum vessel displayed at Battleship Cove in Fall River, Massachusetts. Displayed in a specially constructed building ("Newberry Hall") that protects the boat, <u>PT 617</u> rests on a steel frame set on a white gravel bed and is surrounded by a concrete walkway that leads to an elevated wooden platform on the starboard side; view ports in the starboard side of the hull provide visual access to the boat's interior. <u>PT 617</u> may be boarded only by museum staff, PT boat veterans, and their families.

#### PT 617 As Built

As built in 1945, PT 617 is a PT-103 class, 80-foot Elco motor torpedo boat. It is constructed with two layers of mahogany planking laid diagonally over laminated spruce, white oak, and mahogany frames, and reinforced with longitudinal battens, secondary transverse frames, and clamps. [1] "A layer of airplane fabric, impregnated with marine glue, was ironed on between the two layers of planking. The result was a light, strong hull, resilient enough to stand up in heavy seas." [2] Navy specifications called for a "hard chine stepless bottom... with lines formed with a view to minimizing stress on the hull .... The lines shall also be formed to insure easy manuevering of the boat and a small turning circle at full speed.... The sides shall flare outward from chine to gunwale." [3] Constructed to the standard dimensions of the Elco-type PT boat, 617 is 80 feet long, with a 20-foot beam and a 5.6-foot draft. When fully loaded PT 617 displaced 55 tons. [4]

Below decks, PT 617 is divided into several compartments. Farthest aft is the lazarette, used for stowing spare engine parts and 5 gallon cans of oil. Next is the engineroom, followed by the crew's day room, which holds two bunks. The boat's gas tanks are below the day room. Forward of the day room are two officers' cabins to port, separated by a head. In the same space, to starboard, are the wardroom, armory, and galley. Forward of these compartments are the crew's quarters, which also

## National Register of Historic Places Continuation Sheet

Section	number	7	Page	2
Section	number		Lage	

served as the crew's mess, with bunks, lockers, and table. Forward of the crew's quarters is a small compartment that serves as a passage to the crew's head and the forepeak. This passage was used to stow lifejackets and other gear. A ladder from the wardroom leads to the charthouse, which houses the radio room and radarscope. The ladder continues to the cockpit on deck. [5]

PT 617 is powered by three Packard 4M-2500 Marine engines specially designed for PT boat use. The 4M-2500 "is a liquid cooled, supercharged, 12 cylinder...engine operating on a 4 stroke cycle. It is normally furnished as a complete marine power plant with a direct connected reverse gear in which is embodied a double cone type clutch and positive forward drive." [6] The engines each drove a single screw to develop a maximum horsepower of 4,050. The boat carried 3,000 gallons (9 tons) of high octane (100) aviation fuel in the tanks that gave it a maximum cruising radius of 500 miles. The maximum speed of the boat was rated at 40 knots, though most PTs, hampered by difficult maintenance and fouled hulls, often operated below 30 The engines were equipped with mufflers that exhausted into the water to permit a quiet approach on enemy vessels or positions.

PT boats were designed as fast attack craft that provided a platform primarily for torpedoes but also for other weapons. Typical of late World War II Elcos, 617 was capable of mounting Mark XIII torpedoes, short range weapons that ran at 45 knots and carried a 600-lb. warhead. PT 617 also represents the late war development of the PT as a heavily armed gunboat, carrying a 37MM rapid-fire and two 20MM machine guns at the bow, two twin .50 caliber machine gun mounts on both sides of the cockpit, and a 40MM gun at the stern. The weapons were employed for antiaircraft defense and for shooting up Japanese barges, transports, and other small craft, as well as beach positions. The 40MM "was the best antibarge gun the boats ever had, and eventually became standard on all boats. It was accurate, automatic, and sufficiently powerful to blast holes in the heaviest armored barge." [7] PT 617 also carried two depth charge racks at the stern, each carrying one charge of 300 lbs. of TNT per can, should a PT "cross the path of a submerging submarine." [8] The depth charges were also used against pursuing destroyers. Also aft was an Elco smoke generator, a

## National Register of Historic Places Continuation Sheet

Section number _	7	Page	_ 3
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steel bottle filled with titanium tetrachloride which formed fog when mixed with moisture in the air, used to mask the boat with a smoke screen. [9] Two Mark 50 rocket launchers and a 60MM mortar were also installed on the Elco boats in 1945. [10] Small arms were also carried. Each crewmember was issued a .45 caliber pistol, and the boat carried a BAR, U.S. Rifles, Cal. .30, Model 1903, Thompson submachine guns, 3-inch rockets, and grenades.

#### Present Appearance and Condition of PT-617

When found by the museum, <u>PT 617</u> was a stripped hulk employed as a diving barge in Florida. Fully restored to wartime appearance and condition, <u>PT 617</u> was repaired with in-kind replacement of wood and other materials and equipment. The restoration included the installation of authentic engines and equipment, including most of the armament. <u>617</u> mounts 4 torpedo tubes, two depth charge racks, one 37MM at the bow, a single 20MM, the two twin .50 caliber machine guns, a single 40MM and a smoke generator aft. The .50 caliber mounts and the 40MM have tubular guards installed; these prevented the gunners from firing into their own boat. [11] Also on deck is the radar mast, which connects to the radar equipment in the charthouse.

The interior spaces on <u>PT</u> 617 were carefully restored and furnished. The original bulkheads, wardroom benches, crew's quarters lockers, and heads were retained. The vessel appears combat ready and is fully outfitted. The boat is painted in a camouflage scheme found in the Southwest Pacific and the Philippines during the war; the grey hull gives way to a mottled blue-green superstructure that blended with the jungle shores of the islands. Meticulously restored and well-maintained, <u>PT</u> 617 possesses remarkable integrity as befits the boat's role as sole survivor of the predominant type of the PT class of warship.

#### NOTES

United States Navy, <u>Motor Torpedo Boat Manual</u>. Washington, D.C.: Navy Department, February 1845. p. 367.

## National Register of Historic Places Continuation Sheet

Section number \_\_7 Page \_\_4

2
Robert J. Bulkley, Jr., <u>At Close Quarters: PT Boats in the United States Navy</u> (Washington, DC: Naval History Division, 1962), p. 33.

3 <u>Ibid</u>., p. 57.

United States Navy, Division of Naval Intelligence, <u>ONI 222-US</u> (Standard reference manual on United States men-of-war) Confidential release of 1 September 1945, p. 135. Hereafter cited as <u>ONI 222-US</u>

"Contract Plan, Motor Torpedo Boat, PT 565-624," Navy
Department, Bureau of Ships, No. PT 565, S0101H, 408117, ALT.0,
February 15, 1944. Original plans on file, Battleship Cove,
Fall River, Massachusetts.

Packard Motor Company, Operating Manual, Packard Marine Engine 4M-2500, Types W8 Through W17 (Detroit: Packard Motor Company, Inc., 1944), p. 101. Also see J.G. Vincent, Development of the Packard Marine Engine During World War II (September 1938-April 1945) (Detroit: Packard Motor Car Co., 1945) p. 10.

7
Bulkley, op.cit., p. 35.

8 <u>Ibid</u>., p. 38.

Robert Ferrell, <u>The United States Mosquito Fleet</u> (Memphis: PT Boat Museum and Library, 1977) pp. 23-24.

10 ONI 222-US

11 Mark Newton, Description of <u>PT 617</u>, (1988), manuscript on file, Battleship Cove.

8. Statement of Significance			
Certifying official has considered the	significance of this pro	pperty in relation to other properties:  statewide locally	
Applicable National Register Criteria	XA DB X	NHL CRITERIA 1,4	
Criteria Considerations (Exceptions)	□A □B □C	D DE DF G	
Areas of Significance (enter categorie Architecture (Naval) Military	s from instructions)	Period of Significance 1945 1945	Significant Dates 1945 1945
NHL VIII-B: World War II: the Pacific	The War in	Cultural Affiliation N/A	
Significant Person N/A	·	Architect/Builder Electric Boat Co., Bayonn	e, New Jersey

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

Though an early 20th century development of the Royal Navy, the motor torpedo boat gained international fame following its adaption and use by the United States Navy during the Second World War. The PT boats were highly effective craft built in large numbers to interdict enemy supply lines and harass shore installations and landings on the various islands and atolls of the South Pacific. PT boats were credited with sinking numerous enemy ships, shooting up landing barges, rescuing downed flyers, landing partisans, and attacking remote outposts on isolated islands. PT boats and their daring crews early captured public attention and admiration, helping shoot down attacking planes at Pearl Harbor and providing the means of Douglas MacArthur's escape from Corregidor. The PTs were involved in nearly every Pacific campaign, even extending their operations into the Aleutians, the English Channel, and the Mediterranean theaters of war. The PT boats were vital partners in the United States victory over Japan. PT boats gained additional fame after the war following the successful political career of John F. Kennedy, skipper of the famous Elco PT 109.

Early in the war, the United States Navy standardized the design and construction of the PT boat. During the war two basic and distinctly different types of PT boat were built for combat use—the predominant PT, the 80-foot "Elco" boat and the 78-foot "Higgins" boat. Most of these vessels were destroyed at war's end or were sold abroad; today only four World War II PT boats

9. Major Bibliographical References	
PLEASE SEE FOOTNOTES IN TEXT.	
	See continuation sheet
Previous documentation on file (NPS):  preliminary determination of individual listing (36 CFR 67)	Primary location of additional data:
has been requested previously listed in the National Register	State historic preservation office Other State agency
previously determined eligible by the National Register	Federal agency
designated a National Historic Landmark recorded by Historic American Buildings	Local government University
Survey #	X Other Specify repository:
Record #	PT Boats, Inc., Memphis, TN
10. Geographical Data	
Acreage of property <u>.1 acre</u>	
UTM References  A 1 9 3 2 0 1 8 0 4 9 1 9 0 2 0  Zone Easting Northing  C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B
	See continuation sheet
Verbal Boundary Description	
All that area encompassed within the extreme length, be the entire area of $\underline{PI}$ 617 as she rests in her dry berth	am, and draft of the vessel, incorporating
	See continuation sheet
Boundary Justification	
The boundary incorporates the entire area of the vesse	1.
	See continuation sheet
11. Form Prepared By	
name/title James P. Delgado, Maritime Historian	
organization National Park Service (418)	date _June 28, 1989
street & number P.O. Box 37127 city or town Washington	telephone <u>(202) 343-9528</u> state <u>D.C.</u> zip code <u>20013-7127</u>
city or town Washington	state zip code <u>20013-7127</u>

## National Register of Historic Places Continuation Sheet

Section	number	8	Page	2
CACHOII				

are known to survive in the United States. Three are "Higgins" boats, of which one,  $\underline{PT}$  796, is a restored vessel designated as a National Historic Landmark. The other is  $\underline{PT}$  617, the sole surviving "Elco," which, as restored and with original wartime issue equipment and armament, alone represents the nation's most heavily used, highly favored, and combat tested PT boat type in World War II.

The preceding statement of significance is based on the more detailed discussion that follows.

The Role of the PT Boat in the Second World War

The concept of small attack craft commenced with the use of spar mounted torpedoes carried by steam launches during the American Civil War, and by the 1880s, fast steam powered craft were developed that carried automobile torpedoes and served to attack They proved so dangerous that another, larger capital ships. type of vessel, the torpedo boat destroyer, was designed to combat them. These vessels were the prototypes of the modern destroyer. The invention of the internal combustion engine and its refinement led to increased interest in small, fast attack British experiments led to the development of small, fast attack craft to challenge the line of battle as early as 1905, but the United States took little interest in the motor torpedo The Royal Navy successfully used motor torpedo boats in World War I, and sank the Russian cruiser Oleg by MTB in the brief post-war struggle in the Baltic against the Bolsheviks. Yet, as historian William Breuer noted, curiously enough Prohibition and rum-running sparked initial American interest in the PT boat. "Rum runners...brought a few British versions of the PT boat into the United States and were using them to smuggle liquor from Canada.... In military fashion, the smugglers carried out experiments to improve...performance...including the addition of more powerful engines. They developed operational procedures --such as stalking along the coast at night--that would be put in practice years later at Guadalcanal, New Guinea, New Britain, the Philippines, and elsewhere in the Pacific." [1] Yet while the United States Navy avoided development of PT boats between the two world wars, it was involved in the development of fast boats, and "when the PT's time came, the U.S. Navy had much of the technological base needed for its design." [2]

## National Register of Historic Places Continuation Sheet

Section number	8	Page	3
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Following the repeal of Prohibition, American naval officers took a more serious view of the PT boat. In 1937, President Franklin D. Roosevelt, former assistant secretary of the Navy, successfully lobbied Congress for a \$15 million appropriation for PT boat development. The work began at a slow pace, and when war commenced in Europe in 1939, only eight boats being built to British plans were under construction. The first operational boat was not delivered to the Navy until June 17, 1940, and soon a small number of the new craft were shipped out to the Pacific. Four PTs went to the Philippines while others were readied for shipment. Tests of various boats and designs included open sea "Plywood Derbies" that ran craft submitted by Fisher Boat Works, the Electric Boat Company (Elco), the Miami Shipbuilding Company, Higgins Industries, and the Philadelphia Navy Yard through rugged full speed tests. These tests narrowed the field to a modified Higgins design and an Elco design for American combat vessels. [3]

PT boat parameters were set in the fall of 1941. The Navy insisted on wooden craft longer than 75 feet but no greater than 82 feet in length, powered by three Packard engines equipped with mufflers to mask their approach, capable of making 40 knots. Initial contracts for construction of the standard boats were awarded to two firms, Higgins and Huckins, but following the entry of the United States into the Second World War, Elco was awarded a contract for 36 boats and was the first company to put the new boats in service. Huckins built only 18 boats, none of which were placed in combat. For the remainder of the war, PT boats were built either by Higgins or Elco. [4] The Elco boats were preferred by the Navy, being "the most economical...its range exceeding that of the Huckins by 75 nautical miles and the Higgins by 150. Both the Higgins and Huckins showed materially larger silhouettes.... The Elco also had a much better internal arrangement; watertight doors in the bulkheads provided access throughout." [5] The two types of PTs were also distinctly different in their deck arrangement, and to a certain extent, The need for a large number of PTs and the existing contracts from both companies, cinched the Navy's decision to continue with both types, though the numbers produced indicate the preference for the Elco. Of the 511 PTs built during the war for the U.S. Navy, 296 were Elcos as compared to 146 Higgins boats. [6] The numbers of PTs actually assigned to combat also reflects this; 218 Elcos versus 135 Higgins. [7]

### National Register of Historic Places Continuation Sheet

Section	number	88	Page	4
COULT	110111001			

PT boats gained fame when Gen. Douglas MacArthur escaped from Corregidor on PT 41, running through enemy-infested waters some 600 miles to Mindanao. The exploits of the PT boat squadron in the Philippines included forays into Manila harbor to attack Japanese shipping, MacArthur's escape, and desperate holding actions against the rapidly advancing Japanese. These exploits accomplished in spite of sabotage, lack of supplies and equipment to properly maintain or repair the boats, were made famous along with their commander, Lt. John D. Bulkeley, when the news was released to the American public. The wartime publication of They Were Expendable, and the film of the same name, starring John Wayne, which recounted the exploits, indelibly etched the PT boat in the American consciousness. [8]

As the war spread through the islands of the South Pacific, farflung Japanese garrisons depended upon a lifeline of supplies, ammunition, and replacements brought thousands of miles by sea. Nicknamed the "Tokyo Express," Japanese shipping to the Solomons was attacked by American submarines and PT boats, which for the most part were effective interdiction until the United States fleet recovered from the war's opening blows. In the Pacific for the early part of the war the Pacific fleet's battleships lay on the bottom of Pearl Harbor and the four nonexpendable carriers were carefully husbanded. The PT boats, with increasing success, began to interdict Japanese supply lines, multiplying as more 12boat squadrons were commissioned and sent into action. One of these Elcos was PT 109, commanded by then future President John F. Kennedy and attached to Squadron 5. More than 212 boats, most of them Elcos, were built and sent into combat during the Second World War. American PT boats were used in combat alongside British MTBs and MGBs in the English Channel, including action off Normandy on D-Day, and in the Mediterranean. In the Pacific, however, they gained their greatest fame.

PTs were effectively used in the Solomons, New Guinea, and the Philippines. Armed with torpedoes to sink enemy ships, PTs were also equipped with machine guns, small arms, and rifles to attack smaller Japanese surface vessels, particularly troop transport barges running between the islands. The PTs made deadly gunboats, particularly when 40MM antiaircraft guns were turned on the lightly armored barges and shore installations. Because of their speed and small size, PTs also landed parties of scouts,

### National Register of Historic Places Continuation Sheet

Section	number	8	Page	5
JOULUII			, ago	

supplies for partisans, and made rescues of downed fliers, even under the guns of Japanese ships and troops, and scouted for approaching enemy vessels. The most famous PT scouting expedition flushed out an attacking Japanese task force, scoring torpedo hits as the Japanese ran into the guns of the American fleet at the Battle of Surigao Strait in October 1944. [9] Used hard and aggressively, the PT boats sustained a high casualty rate; some 300 PT boaters were killed in action.

The daring exploits of the PT boats and their crews were consistently reported in the press throughout the war years. After the war, several PT boaters' successful careers again spotlighted the boats, but it was the election of John F. Kennedy as President of the United States that once again catapulted the PT boat into the national consciousness. Kennedy's heroic efforts to save his crew when PT 109 was cut in half in the Central Solomons by the Japanese destroyer Amagiri on August 2, 1943, were memorialized by book and motion picture. [10] PT 796, painted as the lost 109 (even though 796 was a Higgins and not an Elco, as was 109), was towed down Pennsylvania Avenue during Kennedy's inaugural parade, and the President was joined by his former crew as well as the crew from PT 157, the boat that rescued Kennedy and his men from behind Japanese lines.

Unfortunately, while the PT boats did much to win the war in the Pacific and inspired a number of offshoots, including Japanese "Shinyo" suicide craft, and the hydrofoil missile ships and numerous inshore patrol craft used by many navies in the 1980s, most of the boats did not survive the war's end. Battered, many badly damaged, and too expensive to take home, most PTs were stripped, hauled ashore at Samar in the Philippines, doused with gasoline, and burned. Only a handful of PT boats, and none that saw combat, survived into the 1980s. A stencilled notation on all PT boats bluntly stated, "Do Not Return to the U.S.," and thus no PT that saw wartime service ever returned home.

#### History and Career of PT 617

PT 617, an Elco boat, was built at Bayonne, New Jersey, in 1945. Laid down on March 29, 1945, the boat was launched July 28 of the same year and completed on September 21 when, nicknamed "Big Red Cock," it was placed in service on September 21, 1945, as part of

### National Register of Historic Places Continuation Sheet

Section number	3 Page	6
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Motor Torpedo Boat Squadron (Ron) 42. Squadron 42 was the only squadron commissioned after the cessation of hostilities. [11] Assigned to the Pacific fleet, it never reached the Pacific. 617 and her crew, were sent on a War Bond drive by the Navy, journeying as far as Florida before decommissioning. placed out of service on January 28, 1946, and was subsequently sold by the Navy on October 23, 1947. Named Dragon Lady after Milton Caniff's sultry cartoon character of the same name in the comic strip, "Terry and the Pirates," the boat remained in private hands for nearly four decades. PT 617, the only surviving Elco PT, was found in Florida by PT Boats, Inc., where the boat was being used as a diving platform. Brought to Melville, Rhode Island, which had served as the major PT training base during the war, PT 617 was meticulously restored and was moved to Battleship Cove at Fall River, Massachusetts, on June 25, 1985, site of the PT Boat Museum and location of the only other restored PT Boat, the Higgins-built PT 796, designated an NHL in 1986. [8] The two PTs are displayed there, survivors and representatives of the two types of an expendable yet vital craft that assisted America's victory in the Pacific.

#### NOTES

- 1
  William Breuer, <u>Devil Boats: The PT War Against Japan</u> (New York: Berkely Publishing Group, 1988) p. 3.
- Norman Friedman, <u>U.S. Small Combatants</u>, <u>Including PT-Boats</u>, <u>Subchasers</u>, <u>and the Brown Water Navy: <u>An Illustrated Design History</u> (Annapolis: Naval Institute Press, 1987) p. 97.</u>
- Breuer, p. 3 and Robert J. Bulkley Jr., <u>At Close Quarters: PT Boats in the United States Navy</u> (Washington, DC: Naval History Division, 1962) pp. 47-50.
- 4 Bulkley, pp. 56-58.

## National Register of Historic Places Continuation Sheet

Section number \_\_\_8 Page \_7

- 5 Friedman, <u>U.S. Small Combatants</u>, p. 141.
- Robert Ferrell, <u>The United States Mosquito Fleet</u> (Memphis: PT Boat Museum and Library, 1977), p. 44.
- 7 Friedman, <u>Op. cit.</u>, p. 157.
- 8 W.L. White, <u>They Were Expendable</u> (New York: Harcourt, Brace and Co., 1942)
- 9
  Breuer, <u>Devil</u> <u>Boats</u>, pp. 174-182.
- 10
  <u>Ibid.</u>, pp. 102-106, and Robert J. Donovan, <u>PT 109: John F.</u>
  <u>Kennedy in World War II</u>. (New York: McGraw-Hill Book Co., 1961)
- 11
  Bulkley, <u>At Close Quarters</u>, p. 482, Friedman, <u>U.S. Small</u>
  <u>Combatants</u>, p. 500, and Ferrell, <u>Mosquito Fleet</u>, p. 56.
- Mark Newton, Description of PT 617 (1988), manuscript, Battleship Cove, p. 2, and <u>Battleship Massachusetts Newsletter</u>, Vol. 13, No. 2 (December 1985) p. 3.

