United States Department of the interior National Park Service

# National Register of Historic Places Continuation Sheet

Section number \_\_\_\_\_ Page \_\_\_\_\_

#### SUPPLEMENTARY LISTING RECORD

NRIS Reference Number:89001467Date Listed:05/29/90Falkner's Island LighthouseNew HavenCTProperty NameCountyState

Operating Lighthouses in Connecticut Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

05/29/90 Date of Action

#### 8. Statement of Significance: Level of Significance

All properties included in the multiple property nomination Operating Lighthouses in Connecticut were considered to meet the criteria within a statewide context.

#### 10. Geographical Data: Acreage

The acreage is 4.9; the island is legally described as Track 18. The Wildlife Refuge has been renamed under authority of P.L. 100-38 as the Stewart B. McKinney Wildlife Refuge.

This information has been confirmed with Walt Pfeiffer, NE Region, FWS, and John Herzan, National Register Coordinator, CTSHPO, by telephone.

DISTRIBUTION: National Register property file Nominating Authority (without attachment)

## NATIONAL REGISTER OF HISTORIC PLACES **INVENTORY -- NOMINATION FORM**

FOR FEDERAL PROPERTIES

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\_\_NOT FOR PUBLICATION

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### SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS **TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS**

## **1** NAME

HISTORIC Falkner's Island Lighthouse; Faulkner's Island Lighthouse

AND/OR COMMON Falkners Island Lighthouse; Falkner Island Lighthouse

# **2 LOCATION**

STREET & NUMBER

Long Island Sound, 5 miles south of Guilford

CITY, TOWN		CONGRESSIONAL DISTRICT	
	VICINITY OF		
STATE	CODE	COUNTY	CODE
<u>Connecticut</u>		New Haven	

## **2** CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESE	NTUSE
DISTRICT	XPUBLIC		AGRICULTURE	MUSEUM
BUILDING(S)	PRIVATE	XUNOCCUPIED	COMMERCIAL	PARK
_XSTRUCTURE	ВОТН	WORK IN PROGRESS	EDUCATIONAL	PRIVATE RESIDENCE
SITE	PUBLIC ACQUISITION	ACCESSIBLE	ENTERTAINMENT	RELIGIOUS
OBJECT	_IN PROCESS	YES: RESTRICTED	GOVERNMENT	SCIENTIFIC
	BEING CONSIDERED	${\tt X}$ yes unrestricted	_INDUSTRIAL	X TRANSPORTATION
		NO	MILITARY	OTHER

# 4 AGENCY

REGIONAL HEADQUARTERS: (If applicable)

U.S. Fish and Wildlife S	Service, Northeast	Region	
STREET & NUMBER		5	
One Gateway Center			
CITY TOWN			STATE
Newton Corner	VICINITY OF	Massachusetts	02158
5 LOCATION OF LEGAL COURTHOUSE REGISTRY OF DEEDS, ETC U.S. COA		trict, Legal Dep <sup>.</sup>	t., Governors Island
STREET & NUMBER			
CITY, TOWN			STATE
New York			New York 10004

## **6 REPRESENTATION IN EXISTING SURVEYS**

TITLE

see thematic form

DATE

\_\_FEDERAL \_\_STATE \_\_COUNTY \_\_LOCAL

DEPOSITORY FOR SURVEY RECORDS

CITY, TOWN

STATE

## 7 DESCRIPTION

CONDITION

\_\_EXCELLENT \_\_GOOD X\_FAIR \_\_DETERIORATED Xruins \_\_UNEXPOSED \_\_UNALTERED

LALTERED

CHECK ONE

CORIGINAL SITE

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Falkner Island Lighthouse (Light List #951), constructed in 1802, stands at the center of a long, narrow island five miles south of Guilford, Connecticut in Long Island Sound. It consists of an octagonal-plan masonry tower, presently painted white, surmounted by a sixteen-sided lantern. Other buildings remaining on the site include a masonry powerhouse, built for fog signal apparatus in 1903, a frame boathouse, and an observation shelter used by the naturalists who monitor the colonies of roseate and common terns which breed on the island. A riprap breakwater curves west and south from the shoreward side of the island to shelter the boatlanding and dock area. Of other buildings, only ruins remain: an old fog-signal house to the north of the lighttower; the 1871 keeper's dwelling adjacent to the tower on the south, which was destroyed by fire in 1976; and a nearby privy.

The octagonal foundation of the lighttower consists of uncoursed schist rubble, resting on grade, with a top layer dressed to form a platform for the hammered brownstone walls of the tower. Laid in courses of regular height, the walls taper from a diameter of sixteen feet, nine inches at the base to a diameter of nine feet, nine inches at the top. The tower measures thirty-six feet, eight inches in height. The bottom course of blocks measures four feet, six inches in depth, while the top course measures eighteen inches in depth. A brick corbel supports the lantern deck above.

Three west-facing windows, trimmed with brownstone lintels, mark the ground level and the two landings of a cast-iron spiral stair which rises in the center of the tower within a cylindrical brick lining wall. Laid in header bond, this brick inner wall insulates and stablilizes the tower and anchors the outside edge of the stair treads and a pipe handrail. Eight radiating brick walls, a single brick in thickness, form braces between the outer stone walls and the brick lining. Arched brick reveals connect the window openings and the south-facing entrance to the central stairwell. A hole in the shallow arched vault over the entrance way exposes an earlier arch above; the original door opening has been reduced in size as well. Within the segmentally-arched door opening is a steel door with welded hinges on a channel iron jamb, installed in 1976 to protect the lighttower from vandalism.

Architectural detailing on the Falkner Island lighttower is minimal. Window openings have flared brownstone lintels, but unlike New London Harbor Lighthouse, which was built during the previous year, here the

## NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

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Operating Lighthouses in the State of Connecticut

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The following properties have been recorded in the Historic American Engineering Record (HAER), Library of Congress, Washington, D.C.

- Tongue Point Lighthouse, surveyed October 1979.
- Stratford Point Lighthouse, surveyed March 1980.

The following property has been recorded in the Connecticut State Historic Resources Inventory, Buildings and Structures, Connecticut Historical Commission, 59 South Prospect Street, Hartford, Connecticut:

• New London Ledge Lighthouse, surveyed September 1980.

The following properties were listed as "eligible for inclusion in the National Register" in the Scope of Work for Historic Sites Survey, Inventory and Analysis of Aids to Navigation in the State of Connecticut, U.S. Coast Guard Third District, 1983:

- Falkner Island Light
- Lynde Point Light
- New London Ledge Light Station
- Penfield Reef Light
- Stratford Point Light
- Stratford Shoal Light

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Falkner Island Lighthouse

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lintels are flush with the walls. However, on both lighthouses the entrance opening is capped by a segmental arch formed by a projecting keystone with flanking, flush curved stone blocks. On the Falkner Island tower, extensive damage to the stone near the doorway obscures the spring of the arch.

The sixteen-sided cast-iron lantern, seven feet, six inches in diameter, contains thirty-two glass panes, arranged in two ranks within the top two-thirds of its side walls. Each pane measures eighteen by twentyfour inches; while similarly sized cast-iron panels form the lower third of each side and contain ventilator slots in every other panel. A conical, cast-iron roof of shallow pitch covers the lantern, and supports a spherical vent which is unique among Connecticut lighthouses. Resting on a beak molding above a small pointed dome, the vent is shaped like a covered pot with vertical slits below the rim, holding the top and bottom halves together. An arrow-shaped wind indicator shown in early photographs is now missing. Another unique feature of this lighthouse is an external cast-iron spiral stair which connects the lantern gallery with a north-facing door on the watchroom level below. There is no evidence that a watchroom gallery ever existed. The castfron lantern gallery is edged with an iron balustrade consisting of three flat-profile iron railings, which connect rectilinear iron stanchions. The iron stanchions are topped with brass spheres.

Within the watchroom a checkered tread cast-iron floor is supported by both the brick lining wall and a central cast-iron column. The column terminates within the watchroom as a newel decorated with vase turnings and molded bands of cast-iron. Watchroom walls are covered with rough plaster and whitewash. Mounted in the center of the lantern is an automated electrical lighting apparatus with a six-sided plastic lens, manufactured in Elizabeth, New Jersey. This lens replaced the fourth order fixed classical lens of six panels, made by Sautter and Co., Paris, which was removed to New Haven for safekeeping following fire and vandalism in 1976.

The brick powerhouse, measuring twenty-eight by twenty feet, contains a hipped roof edged in wide gutters. The gutters collect rainwater which is directed through downspouts to two cisterns below grade. Original sash and doors are missing, and some window openings are blocked. Supports for the typhon horns, installed in 1932, stand outside the

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Falkner Island Lighthouse

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south wall, while cement oil drum racks remain on the west side of the building. When built in 1903, the powerhouse housed two steam-powered fog signals. Presently, the structure serves as living quarters for the staff of naturalists conducting research on the nesting colony of terns. A wood framed boathouse with a gabled roof stands at the inshore end of the wharf in the boat landing area, probably a replacement for an earlier boathouse of similar construction. The frame bird blind at the north end of the island is of recent construction. Ruins of the older fog signal house lie north of the lighttower. The site of an earlier boathouse, an early fog bell tower, a workshop/barn, an oil shed, a coal bin and a privy, all shown on an 1890 survey, and not readily visible. **United States Department of the Interior** National Park Service

# National Register of Historic Places Continuation Sheet

Section number \_\_\_\_7 Page Amendment

Falkner Island Lighthouse Long Island Sound off Guilford, CT

Description (continued):

In 1989, Falkner Island Lighthouse was re-photographed and examined in the field in order to bring the National Register documentation fully up to date. Following are the features or characteristics of the lighthouse that differ from its condition and appearance as described in the National Register Inventory/Nomination form prepared in 1985.

To power the revolving lens, two photovoltaic panels, each about 2' x 3', have been installed on the south side of the gallery railing. The solar cells charge three batteries in the interior of the lantern.

The stucco coating on the powerhouse has cracked, revealing what appear to be walls not of brick, but of structural terra cotta tiles.

Clarifications:

The exterior spiral stairway from the watch level to the gallery is not cast iron; it is welded up from steel flat stock and appears to be 20th-century in origin.

Falkner Island Lighthouse continues to retain the requisite degree of integrity for National Register eligibility.

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Falkner Island Lighthouse

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wood stairs and scuttle, the glass panes were re-puttied, and the lantern and lantern deck were painted black with a white cornice.

The original lantern was replaced in 1840. Within the old lantern, the lighting apparatus had consisted of twelve lamps with reflectors and eight lenses, placed around two circular tables. For a cost of \$2,842.00 in 1840, J.W.P. Lewis agreed to fit up the new lantern with nine lamps and sixteen inch reflectors.

Perhaps the present lantern was installed between 1870 and 1872. In 1870, Congress passed an appropriation for rebuilding the keeper's dwelling, and for installing an iron stair in the lighttower at Falkner Island. As the iron stair is supported by the brick lining wall within the lighttower, the brick wall was probably installed in 1870 as well. An inspection of Falkner Island made during 1873 records a fourth order Fresnel fixed lens made by Sautter & Co., Paris, installed in a lantern with dimensions matching those of the one in place on the lighttower in 1985.

Falkner Island is significant as the site chosen in 1865 and in 1902 for tests of different kinds of fog-signal apparatus, one of the most important fields of technological experimentation for New England coastal navigation. In 1865, Joseph Henry, head of the Smithsonian Institution and Chairman of the Lighthouse Board, spent some of his vacation setting up bells, steam whistles, reflectors, hot-air engines etc. on Falkner Island, and during four days of observation he and fellow scientists cruised Long Island Sound, recording the distance at In 1879 the fogbell on which the various devices could be heard. Falkner Island was replaced by a first-class steam fog whistle, installed in a large, gable-roofed shed to the north of the lighttower. In 1902 a first-class compressed air siren, in duplicate, was installed in a new masonry engine house, which still stands south of the light tower. The siren was powered by two 16 and 1/2 horsepower oil engines. In September of that year trials were made as to the comparative range of sound penetration of whistles, the compressed air siren and diaphone. In 1934 a Leslie typhon in duplicate was installed in the engine house.

The one-and-one-half-story, frame keeper's dwelling erected in 1801 contained six rooms. The structure was enlarged in 1837. A three-story

# **8** SIGNIFICANCE

PERIOD	АР	EAS OF SIGNIFICANCE CH	IECK AND JUSTIFY BELOW	
PREHISTORIC	ARCHEOLOGY PREHISTORIC	COMMUNITY PLANNING	LANDSCAPE ARCHITECTURE	RELIGION
1400-1499	ARCHEOLOGY HISTORIC	CONSERVATION	LAW	SCIENCE
1500-1599	AGRICULTURE	ECONOMICS	LITERATURE	SCULPTURE
1600-1699	ARCHITECTURE	EDUCATION	MILITARY	_SOCIAL HUMANITARIAN
_1700-1799	ART	X ENGINEERING	MUSIC	THEATER
X 1800 1899	COMMERCE	_EXPLORATION/SETTLEMENT	PHILOSOPHY	TRANSPORTATION
1900	COMMUNICATIONS	INDUSTRY	_ POLITICS/GOVERNMENT	-OTHER (SPECIEV)
		_INVENTION		

SPECIFIC DATES built 1802; removed 1870-71 BUILDER/ARCHITECT UNKNOWN

#### STATEMENT OF SIGNIFICANCE

Falkner Island Lighthouse, established in 1802, is the second oldest of twelve lighthouses in Connecticut still under Coast Guard jurisdiction, and the only one in the thematic group which has an island setting. Falkner Island is significant as a later typical example of the masonry lighttower design codified by the Treasury Department during the first half of the nineteenth century (Criterion C); as the site of early foghorn experiments carried out by Joseph Henry, head of the Smithsonian Institution and Chairman of the Lighthouse Board; and for its role as a part of the on-going federal coastal aids to navigation program, dating from a time when federal financing first made possible the marking of hazards between the population centers. The external spiral stair connecting the watchroom and the lantern deck at Falkner Island appears to be a unique feature in the Third Coast Guard District.

Falkner Island Lighthouse was built during the second decade of national control over lighthouse design, financed with a Congressional appropriation of six thousand dollars allotted from duties collected on imported goods. Governor Trumbull of Connecticut ceded the land to the U.S. on July 23, 1801, after the island had been purchased from Medad Stone by the federal government on May 12 of the same year for \$325.00.

The name of the builder of Falkner Island Lighthouse is unknown at present, but the design of the structure follows a pattern which was prescribed in many early nineteenth century advertisements for lighthouse construction proposals. These ads were placed in newspapers by the U.S. Treasury Department, the federal agency responsible for building and maintaining aids to navigation at that time. Falkners Island Lighthouse was built as a tapering octagonal tower faced with hammered or edged brownstone, laid in courses, and lined with "rough stone." The walls vary in thickness from four feet, six inches at the bottom to eighteen inches at the top. The original interior stairs of wood led upwards to a scuttle or hatch in a deck. Wood stairs were replaced with iron in 1871. The roof on which the iron lantern rested was sheathed in sheet copper.

In 1837, Warren Gates of Waterford, Connecticut, and John and David Bishop of New London, Connecticut, contracted to repair the lighttower and enlarge the keeper's dwelling. They pointed the mortar of the lighttower walls, painted the exterior of the walls with Portland cement, and applied whitewash inside and cut. Repairs were made to the

# 9 MAJOR BIBLIOGRAPHICAL REFERENCES

see continuation sheet

UTM REFERENCES	PERTY <u>ca. 5 acres</u> see location	map	
A L L L L L L L L L L L L L L L L L L L		B ZONE EAS D	STING NORTHING
	see site plan		
LIST ALL STATES AN	ND COUNTIES FOR PROPER	TIES OVERLAPPING S	STATE OR COUNTY BOUNDARIES
<sub>STATE</sub> see thematic	: form <sub>CODE</sub>	COUNTY	CODE
STATE	CODE	COUNTY	CODE
Iohn Milner Associat STREET & NUMBER 309 North Matlack St CITY OR TOWN			October 22, 1985 TELEPHONE (215) 436-9000 STATE
Vest Chester			Pennsylvania 19380
	L OF NOMINA TI	<b>N</b>	
CERTIFICATION ST	ATE HISTORIC PRESERVAT		n/
ST/ n compliance with Executive C Historic Preservation Officer ha evaluate its significance. The ev	ATE HISTORIC PRESERVAT YES NO Order 11593, I hereby nomin as been allowed 90 days in valuated level of significance	TION OFFICER RECOM	ATE HISTORIC PRESERVATION OFFICER SIGNATURE National Register, certifying that the State Immination to the State Review Board and to
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Falkner Island Lighthouse

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frame dwelling with eight rooms replaced the original keeper's house in 1871, remaining in use on Falkner Island for over one hundred years until it was destroyed by fire in March, 1976. The personnel were removed from the island thereafter. That same year the tower was sandblasted, repointed and painted; the lower windows of the tower were bricked in, a steel door and iron jamb were installed, and the Fresnel lens and pedestal were removed to New Haven for safekeeping.

The 1902 fog signal engine house south of the lighttower, and a frame boathouse at the boat landing area on the western shore, are the only other light station structures which remain standing on the island. In addition, a frame observation post stands some distance north of the tower, used by researchers who are studying two species of terns, common and roseate, which have established nesting colonies on Falkner Island.

In July, 1985, the island was transferred to the U.S. Fish and Wildlife Service by the Coast Guard, as part of the Connecticut Coastal National Wildlife Refuge which was established by Congress in October, 1984. The Coast Guard retains responsibility for maintaining the light tower, the dock, and the rest of the navigational facilities.

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Falkner Island Lighthouse

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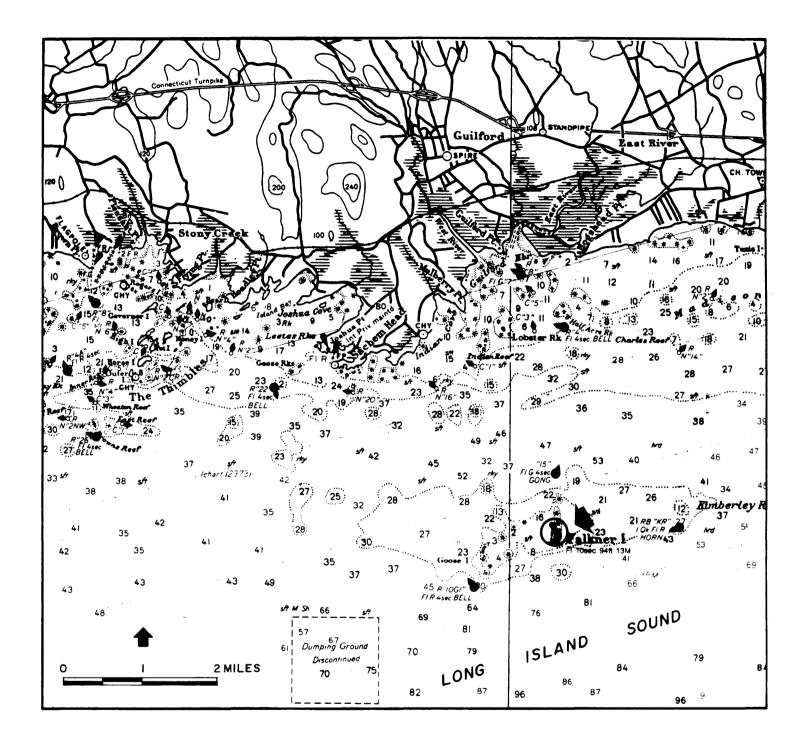
- <u>Civil Engineering Drawings</u>, microfilm, U.S. Coast Guard Academy Library, Reel #3.
- <u>Contract for Repairing Light House, Keeper's House and Wharf at</u> <u>Faulkner's Island Ct.</u>, July 20, 1837; National Archives Records Group 217, Contracts for Lighthouses: Connecticut.
- <u>Inspection of Falkners Island Lighthouse</u>, 1873, 1935, National Archives Record Group 26, Descriptive List of Light Stations.
- Helander, Joel, <u>Oxpasture to Summer Colony: The Story of Sachem's Head</u> <u>in Guilford, Connecticut</u> (privately published, 1976).
- Steiner, Bernard C., <u>A History of the...Town of Guilford, Connecticut</u>, (Balimore: The Freidenwald Co., 1897).
- Survey and correspondence, March to June, 1976, in Falkner's Island file at Legal Department, Governor's Island.
- <u>U.S. Lighthouse Board, Annual Report of the Lighthouse Board</u>, 1865, 1867-1872, 1876, 1879, 1881, 1883-1889, 1892, 1895-96, 1899, 1901-1903, 1907, 1909.

**United States Department of the Interior** National Park Service

# National Register of Historic Places Continuation Sheet

Photographs Amendment Section number \_\_\_\_\_ Page \_\_\_\_\_ Falkner Island Lighthouse Long Island Sound off Guilford, CT

All photographs: 1. FALKNER ISLAND LIGHTHOUSE 2. Long Island Sound off Guilford, CT 3. Photo Credit: HRC, Hartford, CT 4. May 1989 5. Negative filed with Connecticut Historical Commission, Hartford, CT Dock, boathouse, lighthouse, and powerhouse, camera facing northeast Photograph 1 of 8 Lighthouse, camera facing northeast Photograph 2 of 8 Lighthouse, camera facing southeast Photograph 3 of 8 Powerhouse, camera facing south Photograph 4 of 8 View through vault in brick lining at the entry, camera facing north and overhead Photograph 5 of 8 View of spiral staircase from entry, camera facing north Photograph 6 of 8 Interior of lantern, camera facing southwest Photograph 7 of 8 Detail of ventilator, camera facing north Photograph 8 of 8



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SITE LOCATION

FALKNER ISLAND LIGHTHOUSE New Haven County, Connecticut

NOAA Nautical Chart Number 12354 Long Island Sound - Eastern Part

26th Ed. February 4, 1984 1:80,000

Longitude: 72° 39' 15" Latitude: 41° 12' 42"

