



U.S. Coast Guard Historian's Office

Preserving Our History For Future Generations

Smith Point Light Station's National Register of Historic Places Nomination

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1. Name of Property

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historic name: Smith Point Light Station

other names/site number:

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2. Location

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street & number: N/A not for publication: N/A

city or town: Smith Point vicinity X

state: Virginia code: VA county: Northumberland code: 133

zip code: N/A

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3. State/Federal Agency Certification

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As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this nomination and request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets the National Register Criteria. I



U.S. Coast Guard Historian's Office

Preserving Our History For Future Generations

recommend that this property be considered significant locally. (___ See continuation sheet for additional comments.)

Captain, U. S. Coast Guard,

Chief, Office of Civil Engineering 2/22/02

Signature of certifying official Date

Department of Transportation, U.S. Coast Guard

State or Federal agency and bureau

In my opinion, the property ____ meets ____ does not meet the National Register criteria. (___ See continuation sheet for additional comments.)

Signature of commenting or other official Date

State or Federal agency and bureau

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4. National Park Service Certification

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I, hereby certify that this property is:

___ entered in the National Register _____

___ See continuation sheet.

___ determined eligible for the _____

National Register

___ See continuation sheet.



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___ determined not eligible for the _____

National Register

___ removed from the National Register _____

___ other (explain): _____

Signature of Keeper Date of Action

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5. Classification

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Ownership of Property (Check as many boxes as apply)

___ private

___ public-local

___ public-State

X public-Federal

Category of Property (Check only one box)

___ building(s)

___ district

___ site

X structure

___ object

Number of Resources within Property



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Contributing Noncontributing

_____ buildings

_____ sites

1 _____ structures

_____ objects

1 0 Total

Number of contributing resources previously listed in the National Register 0

Name of related multiple property listing: Light Stations of the United States

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6. Function or Use

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Historic Functions (Enter categories from instructions)

Cat: Transportation Sub: Water-related

Current Functions (Enter categories from instructions)

Cat: Transportation Sub: Water-related

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7. Description

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Architectural Classification (Enter categories from instructions): No Style

Materials (Enter categories from instructions):

foundation: wood caisson with cast iron cylinder



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roof: metal

walls: brick

other:

Narrative Description (Describe the historic and current condition of the property.)¹

Description Summary

The Smith Point Light Station consists of a wooden caisson supporting a cast-iron foundation cylinder, filled with concrete, 30 feet in diameter and 44 feet, 9 inches, in height, surmounted by an octagonal two-story brick dwelling, with a one-story square tower rising 30 feet above the top of the cylinder. On this tower rests the lantern. The cylinder is painted brown and the brick quarters and tower painted white, with the iron lantern painted black. As a caisson-type lighthouse, it is an integral station, i.e., the keeper's quarters, fuel storage areas, and lantern are part of the same structure. Smith Point Lighthouse was built from the same plan as Wolf Trap Lighthouse. The Smith Point Lighthouse lies in about 20 feet of water, on the west side of the Chesapeake Bay, about two-and-one-half miles east-southeast of Smith Point, Northumberland County, Virginia, on the south side of the mouth of the Potomac River. Owned and managed by the U.S. Coast Guard in District 5, access to the station is via boat.

General Description

Foundation

The cast-iron cylinder, 30 feet in diameter, 44 feet, 9 inches high, is attached to a 32-foot square wooden caisson sunk 12 feet into the bottom. The plates forming the cylinder are 6 feet, 3 inches tall, and bolted together into seven horizontal bands or courses with the flanges of the plates turned inward to give the exterior a uniform smooth surface. The upper or top band flares outward like a trumpet providing support and additional deck space for the lower gallery deck. The cylinder is filled with concrete except where the cellar is formed. There are four porthole-type openings in the upper plate tier to provide light into the cellar area. The cylinder is painted a dark red/brown

Cellar

The lower level or cellar is located in the upper portion of the foundation cylinder, accessed by a wooden stairwell located off the foyer. Below this level the cylinder is solid except for a cistern. There are four portholes located in the upper cast-iron-plate



U.S. Coast Guard Historian's Office

Preserving Our History For Future Generations

course of the foundation cylinder. These once provided light into the cellar areas except for the oil and coal room. All these openings have been covered.

Vaulted masonry, which spring from rolled iron beams spanning the outer walls, support the first-level floor. The lower level has been partitioned with masonry walls. A wooden door leads to a coal storage room off the main room. Next to it is an iron door leading to what probably served as the oil room. A smaller third room probably served as storage and has a wooden door. All the doors have arched tops to fit the door aperture and all appear to be original. The door frames are made of cast iron. Below the cellar level, at least one water cistern is built into the concrete pour. The floor of the cellar is cement.

Dwelling

The two-story brick dwelling is octagonal in shape. A kitchen, pantry, and sitting room are located on the first level and two bedrooms on the second level. The gallery deck is a concrete slab which overlays the cylinder fill. The gallery balustrade surrounds the perimeter of the slab. The privy, located on the north side overhangs the lower gallery deck and is supported by cast-iron brackets attached to the foundation cylinder. The privy is made of iron, semi-octagonal in shape (that is only five of the eight sides make up the structure, the door makes up the sixth truncated side of the structure), with a pyramid roof surmounted by a ventilation spike. A small round porthole-type window is located on each face of the privy to the right and left of the privy door opening; the door is missing. A small metal overhang protects the door entrance. A pair of davits and landing ladders were located on the southeast and northwest side; but only the ladders are intact. The winch wheel for the davit set on the southeast side is intact and only the pedestal for the winch on the northwest side remains.

The dwelling has a decorative lower single and upper double molded brick masonry belt course between the first and second level. At the top of the second level there is a decorative molded brick cornice consisting of a lower three-course corbel band and upper three-course corbel band. The roof of the dwelling is a very shallow pyramid standing seam sheet metal roof with two decorative brick chimneys protruding above it.

Fenestration on the first level consists of an entrance door on the south side which opens directly into the tower stairwell. The southwest, northwest, and northeast faces have no fenestration. The southeast, and east faces have one window, and the west and north face has two windows. On the second level there is a single window on the north, east, south and west face. Each window has a stone sill and lintel and the door, a stone lintel. All the windows are four-over-four double-hung wood sash.

The original wooden entrance door on the south-southwest side has been replaced with a solid non-paneled wood door. The threshold is cast iron. All the original doors on the



U.S. Coast Guard Historian's Office

Preserving Our History For Future Generations

first level have been removed except for the cellar door and the door immediately facing the entrance door from the foyer. The original, or close to original, hardware to these doors is intact. All of the window openings are covered with acrylic sheets fitted with brown aluminum louvered vents.

The original wall and ceiling covering was 2-inch-wide tongue-and-groove vertical paneling painted white. This has been largely removed on the first level except under and along the stairwell. It has been replaced with plywood with batten strips. The floors have been covered with tile. The interior brick wall is exposed in some places. The original tongue-and-groove paneling is largely intact on the second level. Only two four-paneled doors remain. Plywood closets have been added to some rooms. The stairwell banister is original except for the section from the watch room to the lantern which has been replaced with unacceptable and inappropriate 2-by-4 treated lumber. The ceiling, walls, and floors of the watch room appear to be original.

Tower

The one-story tower contains the watch room which has two windows. The window over the door or south face is a two-over-two double-hung wooden sash window while the other opening has a four-pane single wooden horizontal sash. These windows have stone sills and lintels. The cornice of the tower is made from a single lower corbel brick course followed by an upper band of corbel brick three courses high. There is a nine-step iron ladder from the watch room to the lantern. The tower supports the lantern.

Lantern

The lantern is a hexagonal cast-iron lantern with a pyramid roof surmounted by a ventilation ball. The lantern astragals are bronze. The lantern is surrounded by a lantern gallery deck, square in shape, with a gallery rail made up of three rails and balustrades as is the lower gallery rail. The lantern deck is not original, nor is the double aluminum access door from the lantern to the lantern deck. The lantern and gallery rail is painted black. A computer communication antenna is located off the balustrade on the south side.

Lens

The original lens was an 1897 fourth-order Fresnel lens which was replaced with the present DCB 24. A black canvas blind is attached to the DCB behind the light to retard false flashes caused by reflection. The entire western half of the lantern storm panes are covered with red acrylic panels which serve as a red sector. There is a backup acrylic lens mounted on the roof of the lantern.



U.S. Coast Guard Historian's Office

Preserving Our History For Future Generations

Previously Existing Resources

The 1802, 1807, and 1828 terrestrial sites of the first three Smith Point Lighthouses have all been eroded into the water. The site of the 1868 screwpile lighthouse is underwater near the location of present caisson.

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8. Statement of Significance

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Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

A Property is associated with events that have made a significant contribution to the broad patterns of our history.

B Property is associated with the lives of persons significant in our past.

C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and

distinguishable entity whose components lack individual distinction.

D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

A owned by a religious institution or used for religious purposes.

B removed from its original location.

C a birthplace or a grave.

D a cemetery.

E a reconstructed building, object, or structure.

F a commemorative property.



U.S. Coast Guard Historian's Office

Preserving Our History For Future Generations

___ G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance (Enter categories from instructions):

Maritime History

Transportation

Architecture

Period of Significance: 1897-1952

Significant Dates: 1897

Significant Person (Complete if Criterion B is marked above): N/A

Cultural Affiliation: N/A

Known Design Source: none

Architect/Builder: U.S. Lighthouse Board

Narrative Statement of Significance (Explain the significance of the property.)

The Smith Point Light Station is significant for its association with federal governmental efforts to provide an integrated system of navigational aids and to provide for safe maritime transportation in the Chesapeake Bay, a major transportation corridor for commercial traffic from the early 19th through 20th centuries. The lighthouse embodies a distinctive design and method of caisson construction that typified lighthouse construction on the Chesapeake Bay during the second half of the nineteenth century. Of the eleven pneumatic caisson lighthouses built in the United States, seven were built in the Chesapeake Bay: three built in the Virginia portion of the Bay (Wolf Trap Lighthouse, 1894, Smith Point Lighthouse, 1897, and Thimble Shoal Lighthouse, 1914) and four in the Maryland portion of the Bay (Solomons Lump Lighthouse, 1895, Hooper Island Lighthouse, 1902, Point No Point Lighthouse, 1905, and Baltimore Lighthouse, 1908).² Smith Point has been protected by no less than five lighthouses and two lightships during its history from 1802 to the present -- reflecting the importance of the site as well as the changing technology of lighthouse construction over time. The property has previously been determined eligible by the Virginia State Historic Preservation Officer.³

History



U.S. Coast Guard Historian's Office

Preserving Our History For Future Generations

Congress authorized \$9,999 for the construction of a lighthouse on Smith Point on March 3, 1801:

That, as soon as a cession shall be made by the State of Virginia to the United States of the Jurisdiction over the land proper for the purpose, the Secretary of the Treasury be, and he is hereby, authorized to provide, by contract, to be approved by the President of the United States, for building a light-house on Smith's Point, the State aforesaid and to furnish the same with all necessary supplies; and also to agree for the salaries or wages of the persons who may be appointed by the president for the superintendence and care of the same, and that the President be authorized to make the said appointments.⁴

A light was first exhibited at Smith Point in 1802. Because the structure was built too close to an eroding bluff it was rebuilt further inland in 1807. The lighthouse was again moved inland in 1828. To assist mariners in identifying the offshore shoal, a light vessel was stationed three miles off the point in 1821 until destroyed by Confederates in 1861. It was replaced in 1862 by a 203-ton brig. The onshore lighthouse was discontinued in 1859. In 1868 an offshore screwpile lighthouse replaced the light vessel. In 1893 the screwpile lighthouse was damaged by ice. In 1895 severe ice conditions severed the keeper's cottage and lantern from the screwpile foundation and carried it away. A lightship was again stationed at the shoal until 1897 when the present pneumatic caisson lighthouse was built.⁵

The pneumatic caisson lighthouse was approved in 1896 to mark the shoals off Smith Point. The same plans as those used for Wolf Trap Lighthouse, built in 1894, were used. The plans and specifications of the metal work were completed in December. In 1897,

The first bids received for the erection of this light-house were rejected. The second set were opened on July 30, and the lowest bid was accepted. A contract was made August 18, 1896, providing for the completion and delivery of the work within a year. The first shipment of materials for the wooden caisson was received at Baltimore on September 24 and 25, 1896, and its construction at one of the city docks was commenced. On November 17, 1896, it was successfully launched, and during March it was completed to towing trim with two sections of the cast-iron cylinder and air shaft carried up to a height of 18 feet from the roof of the air chamber. No effort was made to hurry the work, as it would have been hazardous to attempt to tow the caisson and superimposed cylinder plates down the bay before the arrival of settled weather.

...In addition to the 13 inches of concrete in the cylinder at starting, 3 feet had been deposited en route. The structure was grounded in its proper position on the afternoon of April 17, and about 150 tons of riprap stone were promptly placed around it to prevent scour. The cylinder, with the exception of the center compartment for the pneumatic



U.S. Coast Guard Historian's Office

Preserving Our History For Future Generations

apparatus, was then filled with concrete to the top of the bulkhead. Within a few hours after grounding the structure had settled about 2 feet and was deflected 4? from the perpendicular. On April 19, 200 tons more of stone were deposited around it. On April 21 the concrete filling reached the top of the second row of plates. Work was continued until April 25, when the fourth course of cylinder plates was in position and about half of the fifth course had been finished, and the concrete put in to within 6 inches of the top course of plates. It was then suspended until the air machinery, boiler, etc., could be gotten in readiness for commencing the sinking of the caisson. These preparations were completed on May 8, and the forcing of the structure into the shoal was rapidly carried forward until May 22, when it had reached the required depth, 15 feet 5 inches. In penetrating the last 3 feet of sand sulfuretted hydrogen gas was encountered, which seriously affected the eyes of the workmen and caused some delay. The pneumatic machinery was then removed, and the air shaft and the working chamber in the wooden caisson were filled with concrete. The work was completed on May 27, 1897, after which date nothing further was done until eight plates in the sixth course of the cylinder, which had been broken by the motion of the contractor's steamer moored along-side during the progress of the work could be replaced by new ones.⁶

The brickwork was finished on July 12, the copper roof and lantern gallery on July 13, the woodwork on July 23, the flashing and plumbing on July 27, 1897, and all the painting, hard oiling, etc., by August 5, when the lighthouse was accepted. During July 1, 1897, some 475 tons of granite riprap were deposited around the structure to prevent scour by the currents. The fourth-order lens flashed white every 30 seconds, with a red sector covering the shoals of Smith Point. A fog bell operated by clockwork, installed in December 1897, sounded a double and single blow alternately at intervals of 20 seconds during thick or foggy weather. New model fourth-order lamps were supplied in 1899.⁷

In September 1901 the cracked fog bell was replaced by a perfect one. In November the recast bell was placed in position, the reed box and tongue of the trumpet signal were adjusted, an equalizer air tank was introduced, and the audibility of the signal was tested. In April a fog horn replaced the one blown away on February 5, 1901.⁸ The fog bell and striker located in the watch room were kept as a standby after a diaphonic fog signal was installed in 1936 on the east side of the watch room. It took 10 minutes for the compressor for the signal to start and in the interim the bell was used. The station had three boats - 22-foot and 18-foot skiff and a 22-foot motorboat. Also by this date the station had been outfitted with radio equipment.⁹

The Smith Point Lighthouse was automated in 1971. A submarine electric cable was run approximately three miles offshore to the station.¹⁰ In the 1980s, the electric cable needed replacing and the Coast Guard considered deactivating the station but public demand convinced them to replace the cable in 1988. Major repair work was performed



U.S. Coast Guard Historian's Office

Preserving Our History For Future Generations

in 1991, including remortaring all the brickwork, repainting inside and out, portions of gallery deck rail replaced, sealant applied to the roof, windows replaced with acrylic ventilation panels, the outhouse refurbished and the fog horn removed.¹¹

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9. Major Bibliographical References

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"Automation Arrives for Light Aids," Virginia Pilot, November 8, 1971.

Bradner, Lawrence H. The Plum Beach Light: The Birth, Life, and Death of a lighthouse, 1988.

Clifford, Candace. 1994 Inventory of Historic Light Stations. Department of Interior, National Park Service, History Division, Washington, D.C., 1994.

de Gast, Robert. The Lighthouses of the Chesapeake. The Johns Hopkins University Press, Baltimore and London, 1973.

Holland, F. Ross, Jr. Maryland Lighthouses of the Chesapeake Bay. Maryland Historical Trust Press and Friends of St. Clement's Island Museum, Inc., 1997.

Turbyville, Linda. Bay Beacons: Lighthouses of the Chesapeake Bay. Eastwind Publishing: Annapolis, Maryland, 1995.

"Termites," Evening Sun, 28, April 1970.

U.S. Lighthouse Board. Annual Reports, 1853-1915. Department of Commerce and Labor, 1853-1916.

Previous documentation on file (NPS)

___ preliminary determination of individual listing (36 CFR 67) has been requested.

___ previously listed in the National Register

previously determined eligible by the National Register

___ designated a National Historic Landmark



U.S. Coast Guard Historian's Office

Preserving Our History For Future Generations

___ recorded by Historic American Buildings Survey # _____

___ recorded by Historic American Engineering Record # _____

Primary Location of Additional Data

X State Historic Preservation Office

___ Other State agency

X Federal agency

___ Local government

___ University

___ Other

Name of repository: National Archives; National Maritime Initiative, National Park Service; U.S. Coast Guard Headquarters, Historian's Office, Washington, D.C.

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10. Geographical Data

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Acreage of Property: Less than one acre

USGS Quadrangle: Smith Point, VA-MD

UTM References: Zone Easting Northing

18 3752935 395865

Boundary Description:

The boundary is coterminous with the outer circumference of the structure at its widest diameter.

Boundary Justification:



U.S. Coast Guard Historian's Office

Preserving Our History For Future Generations

The boundary completely encompasses the light structure.

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11. Form Prepared By

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name/title: Ralph E. Eshelman, Maritime Historian; Edited and revised by Jennifer Perunko, NCSHPO Consultant, National Maritime Initiative, National Park Service

organization: U.S. Lighthouse Society (under a cooperative partnership with the National Park Service National Maritime Initiative)

date: September 8, 1997

street & number: National Park Service (2280), NRHE, 1849 C St., NW

city or town: Washington state: DC zip code: 20240

telephone: 410-326-4877 or 202-354-2243

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Property Owner

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(Complete this item at the request of the SHPO or FPO.)

name: U.S. Coast Guard, Fifth District

street & number: 431 Crawford Street

city or town: Portsmouth state: VA zip code: 23705-5004

telephone: (757) 398-6351

Notes:



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1 The following description and associated photographs were reviewed in August 2002 by a US Coast Guard Aid to Navigation team responsible for the property. A document verifying that the description and associated photographs reflect the current condition of the property is on file with the Office of Civil Engineering, US Coast Guard Headquarters, Washington, DC.

2 U.S. Lighthouse Service 1915 (Washington D.C., Government Printing Office 1916), p. 28; Lawrence H. Bradner, *The Plum Beach Light: The Birth, Life, and Death of a lighthouse* (1988), p. 169; Clifford p. 165 and 173 indicates Alpena Lighthouse and Fourteen Foot Shoal Lighthouse are also pneumatic, but this is apparently incorrect. Bradner gives a date of 1902 for Point No Point Lighthouse while de Gast p. 63 and Clifford p. 130 give a date of 1905.

3 Letter dated Sept. 24, 1993 from James Christian Hill, Commonwealth of Virginia Department of Historic Resources in National Maritime Initiative inventory file for Smith Point Light.

4 Statements of Appropriations, &c. March 4, 1789, to June 30, 1882 (U.S. Government Printing Office: Washington, D.C.), 1886.

5 Robert de Gast, *The Lighthouses of the Chesapeake* (Johns Hopkins University Press: Baltimore, Maryland, 1973), p. 43.

6 Lighthouse Board Annual Report, 1897, Department of Commerce and Labor, 1897.

7 Lighthouse Board Annual Reports, 1898, 1899, Department of Commerce and Labor, 1898, 1899.

8 Lighthouse Board Annual Report, 1901, Department of Commerce and Labor, 1901.

9 Turbyville, p. 95.

10 Turbyville, p. 95; and "Automation Arrives for Light Aids," *Virginia Pilot*, November 8, 1971.

11 Turbyville, p. 95.

NPS Form 10-900 USDI/NPS NRHP Registration Form (Rev. 8-86) OMB No. 1024-0018