

65-71 VLR 12/4/02
NR 0123/03

CAPE CHARLES LIGHT STATION

1. Name of Property

historic name: Cape Charles Light Station DHC FILE # 65-71

other names/site number:

2. Location

street & number: N/A not for publication: N/A


city or town: Kiptopoke vicinity X

state: Virginia code: VA county: Northampton code: 131

zip code: N/A

3. State/Federal Agency Certification

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


Captain, U. S. Coast Guard, ACTING
Chief, Office of Civil Engineering
Signature of certifying official

2/22/2002
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

5/2/03
Date

State or Federal agency and bureau

CAPE CHARLES LIGHT STATION

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

=====

1. Name of Property

=====

historic name: Cape Charles Light Station

other names/site number:

=====

2. Location

=====

street & number: N/A

not for publication: N/A

city or town: Kiptopoke

vicinity X

state: Virginia code: VA

county: Northampton code: 131

zip code: N/A

=====

3. State/Federal Agency Certification

=====

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

Captain, U. S. Coast Guard,
Chief, Office of Civil Engineering

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

CAPE CHARLES LIGHT STATION

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

4. National Park Service Certification

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 _____

National Register

_____ removed from the National Register _____

_____ other (explain): _____

Signature of Keeper

Date of Action

5. Classification

Ownership of Property (Check as many boxes as apply)

private

public-local

public-State

public-Federal

Category of Property (Check only one box)

building(s)

district

site

structure

object

Number of Resources within Property

Contributing Noncontributing

2 buildings

 sites

1 3 structures

 objects

3 3 Total

Number of contributing resources previously listed in the National Register 0

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

CAPE CHARLES LIGHT STATION

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

=====
6. Function or Use
=====

Historic Functions (Enter categories from instructions)

Cat: transportation Sub: water-related

Current Functions (Enter categories from instructions)

Cat: transportation Sub: water-related

=====
7. Description
=====

Architectural Classification (Enter categories from instructions): No Style

Materials--Tower (Enter categories from instructions):

- foundation: Concrete: concrete piers
roof: Metal
walls:
other: Metal: cast-iron skeleton with central cylinder

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

The Cape Charles Light Station was established in 1828 on the south shore of Smith Island at the northern entrance to Chesapeake Bay. The only access to the island is by boat. The current octagonal pyramidal exoskeleton cast-iron tower was built in 1894 and continues as an active aid to navigation. The station was automated in 1963. The first and second assistant keepers' homes were removed sometime in the late 1950's/early 1960's, and the 1895 frame Victorian 2 1/2-story keepers quarters, along with the wood privy and wood storage shed, were destroyed by a fire of undetermined cause in July 2000. However, other utility buildings, including a brick oil house and brick generator building, are still present, though no longer owned by the U.S. Coast Guard. The original first-order lens has been removed.

Site Description

The Cape Charles Light Station is positioned on Smith Island on the southern tip of the Delmarva peninsula where it marks the east side of the entrance to the Chesapeake Bay. The lighthouse and associated structures are located approximately in the center of the island; 400 yards to the east is the Atlantic Ocean and approximately 300 yards to west is Magothy Bay. Between the lighthouse and the ocean, are the remains of three World War II submarine observation towers. The site is defined by a series of concrete posts that once supported a board fence that encompassed the light station. Approximately 30 yards to the east of the lighthouse, are the brick workshop and brick oil house.

CAPE CHARLES LIGHT STATION**Page 4**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Existing Structures¹

Tower (1894)(contributing)

The tower foundation consists of a central pier and eight perimeter concrete piers, each 10 feet thick. The cast-iron skeleton consists of seven series of columns, sockets, struts, and tension rods, tied together in the form of an octagonal pyramid. The columns in the first or ground series are 13 inches in diameter; each series decreases in diameter by an inch so that the top or seventh series is only 7 inches in diameter. The struts similarly decrease in dimension from 8 inches in diameter to 5 inches, and the tension rods from 3 inches in diameter to 1 inch. A central, round, cast-iron plate, 9-foot-diameter cylinder houses the spiral staircase that provides access to the lantern. An elevator for hauling supplies up and down the tower is located in the center of the cylinder with a counterbalance hung outside from a pulley and chain attached to the top of the third series struts. This counterbalance and pulley mechanism has been removed. The central stair cylinder and skeletal tower are surmounted by the service room, the watch room with the main gallery, and the lantern and the lantern gallery. The lantern is topped with a conical roof with a ventilator globe and lightning aerial terminal.

The first-order lantern has 16 sides made of iron with a cast-iron roof, iron ventilator ball, and copper lightning conductor spindle. The original first-order classic Fresnel lens was taken out and given to the Mariners' Museum, Newport News, Virginia, when the light was automated in 1963. It is a rotating bull's-eye lens with four consecutive bull's-eye panels presenting four flashes, followed by a one-barrel lens panel and then five consecutive bull's-eyes panels presenting five flashes, followed by seven barrel-type panels. There are a total of 17 panels each with a 17° of arc. The central panels have 19 elements, except for the dark sector panels that have only 17 elements; there are 18 prisms in each panel above the central panels, and 7 prisms in the panels below each central panel. The lens is stamped "F. BARBIER & CIE. Paris, France 1893." On another panel is marked "BF" over a line with "99" under it. The lens used to float on 300 pounds of mercury. The lens is in very good shape except for some chips in the upper prism panels, reputed to be damage caused when a flock of geese crashed through the lantern panes during a storm. This lens was replaced in 1963 by a DCB-24 (24-inch double drum rotating optic) made by Carlisle & Finch, number 49268. This unit is no longer in operation, replaced by a rotating, 190mm, six-panel acrylic lens.

¹ This narrative is derived from a condition assessment report and significance evaluation on Cape Charles Light Station prepared by Ralph Eshelman, U.S. Lighthouse Society, and architects at the National Park Service's Historic Preservation Training Center in 1995/1996. This report is on file at the National Maritime Initiative office, National Register, History, and Education Programs, National Park Service, Washington, D.C. . Also, the description and associated photographs were reviewed in October 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, D.C.

CAPE CHARLES LIGHT STATION**Page 5**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Brick oil house (1895) (contributing)

The brick oil house, a windowless structure, is located just west of the brick workshop and between the now-demolished dwellings of the first and second assistant keepers at the easterly end of the station enclosure. The exterior is in good condition. It features a brick foundation with walls thicker at base; brick walls, painted white at one time; a gabled slate roof with wood cornice, evidence of gutters (hangers, ghost line); a ventilation system built into wall structure; and granite blocks with original door hardware (pintle hinges) intact. The interior is also in good condition. It features a brick herringbone pattern floor and brick walls painted white. The wooden ceiling is a tongue and groove and is stained with evidence of water leaks. Other features include a central ventilating shaft in roof, a modern steel door in the historic opening, and a granite sill with step to the concrete landing. In early 1995, it was used as sleeping quarters by a hunt club that owned the property.

Brick workshop (circa 1895) (contributing)

Just east of the oil house, this structure is called a workshop on an 1893 site plan; it may also have been used as a generator building. In early 1995, it too was used as sleeping quarters by a hunt club that owned the property. This building has a brick foundation with a structural brick masonry wall system. Features of the exterior include: evidence of paint on exterior walls, a gabled slate roof with a wood cornice, rear gabled end chimney, evidence of gutters (hangers, paint ghost), hand-carved stone splash blocks at base of gutters, two exterior windows-six-over-six, double-hung wood sash (poor condition), aluminum storm sash (poor condition), historic wood window frame (intact, weathered, needs paint), remnants of shutter hardware, pink granite sill with ribbed tool marks, jack arch header, wooden windows and doors in critical condition (need repair or water will destroy structure), masonry and roof in good condition, entry door (historic door in very poor condition, covered with plywood), original door frame (weathered, one jamb missing), original door hardware (critical, very poor condition), and two pink granite steps leading up to a concrete landing. Interior features include: a wood tongue-and-groove wood strip ceiling painted white; plaster on brick walls with some spalling paint and plaster failure at base of walls; fireplace with mantle shelf at rear wall, open, allows water, birds, etc., to interior; built-in cupboards which may be original and are in very good condition (one on either side of fireplace); red-painted floor of 3 1/2-inch tongue-and-groove strips. The interior is generally in good condition, but there is evidence of accelerated deterioration based on water damage to masonry, walls, and windows. There are no obvious leaks in the roof.

Fences and walkways

Concrete fence posts with braces still define portions of the fence line; concrete walkways are still evident connecting buildings according to pattern of use.

Other structures (noncontributing)

Three steel frame towers used as observation platforms during WW II stand just to the southeast of the light tower. These are non-contributing resources.

Previously Existing Structures²

1828 tower

A 60-foot brick tower was built in 1828 and was destroyed during the Civil War. Its foundation has since eroded into the sea.

1864 tower

Approximately three-quarters of a mile due east and about a quarter of a mile north along the present shoreline, a 150-foot-tall brick tower was completed in 1864. A 1925 photograph shows that at least two keepers quarters existed, one 2 1/2-story and another 1 1/2-story structure. A lifesaving station was located on the grounds as well as several outbuildings. Based on photographic evidence, all the larger buildings appeared to have been clapboard sided with brick chimneys. Some outbuildings were board-and-batten. A portion of a brick structure, possibly the tower, is still visible in the surf zone. Eroded red brick can be found along this stretch of beach today--probably from the 1864 tower and the piers and chimneys of the other brick building which once stood near this spot, now just offshore. One tan fired brick embossed with "SPECIAL FURNACE" was also seen. This tower fell in 1927; its foundation was apparently visible awash along the shore as late as 1963.⁴

Principal keeper's quarters (1895)

This structure was a very good example of the American Shingle Style of architecture. Located approximately 90 feet west of the tower, the house had a brick foundation. The first story exterior was brick, and the second story was wood frame covered with wood shingle. The cross-gabled roof structure was covered with slate. It once had shutters for the nine-over-two double-hung windows. The gable end on the north side had exposed framing with a louver centered in the opening. A wrap around screened porch was a prominent feature of the north facade. It was built upon a ventilated brick foundation with wood frame posts, floor construction, and ceiling boards, and it also had a slate roof. Prior to the 2000 fire, the windows and doors of the house were boarded, and the interior was still in good condition with much of the original architectural furnishings and woodwork intact. There was a brick-and-concrete 5,000-gallon cistern on the west side.

² Much of this information was obtained from photographs and "Description of Charles Light Station, March 1938," copies of which are in the Cape Charles Light Station inventory file at the National Maritime Initiative office, National Park Service, Washington, D.C.

⁴ Owen Easley, "Cape Charles Lighthouse Goes Automatic" (no date or source); and Mary Jeanne Ainsely, "Baylight: Welcome Warning," *Virginia Maritime* (September 1986), p. 14-16.

CAPE CHARLES LIGHT STATION**Page 7**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

First assistant keeper's quarters (1895)

This structure stood east of the oil house and about 90 feet southwest of the 1894 tower. The first level was built of brick; shingles covered the framed second level. There were nine rooms. A privy was located behind the house on the south side and what was probably a summer kitchen beyond that.

Second assistant keeper's quarters (1895)

This structure stood just south of the oil house and 90 feet east of the 1894 tower. The first level was built of brick; shingles covered the framed second level. There were nine rooms. A privy was located behind the house on the south side and what was probably a summer kitchen beyond that.

Coal house/storage shed (1895)

A wood frame structure was located just south of the principal keeper's quarters. Coal lying around the structure indicated its use as a coal storage shed. This building had a brick foundation and a wood frame structure with 3- by 8-inch floor joists and 2- by 4-inch wall studs, all very good construction. The exterior was covered with coved shiplap siding with corner boards and water table. It had a gable roof with a galvanized metal sheet covering and a small cross gable at the front door. The exterior had evidence of paint. The primary exterior door was at the front cross gable and was the historic four-panel style. The windows were five four-over-four double-hung wood sash. The interior wood tongue-and-groove floor was painted, with water damage near the doors. There was no ceiling, exposing the underside of the roof structure. An original two-stair stoop led up to door, and the concrete sidewalks are in place.

Privy (1895)

A two-hole privy was located just south of the coal house/storage shed. This building was of simple wood frame construction on a concrete slab. It had two exterior windows, one louvered door and a wood roof framing system with a wood shingle roof. It was later used as a paint locker.

Other structures

A 1 1/2-story stable located approximately 400 feet northwest of the tower was later used as a storehouse. This might be the storehouse located on a 1924 plate that shows an "old storehouse" located about 400 feet due north of the tower. There were nine privies indicated in 1938. At one point, a tram was built from the wharf toward the tower, where it divided into two tracks leading to either side, presumably leading to an oil house. The tram was used until sometime before it was sold as iron scrap in 1901. Near the former wharf landing was a "USCG Station Dwelling, Garage & Storehouse, Oil House, and Privy." These date from 1929 or shortly after. The cement piles for their foundations are still extant. A 1928 photograph shows a pier extending out past the bar with a structure built at the end, possibly a storehouse. By 1956, only the pier was extant; the assistant keeper's dwelling had been removed, but the Coast Guard dwelling by the shore was still present, as were the remains of a marine railway built parallel to and just north of

CAPE CHARLES LIGHT STATION

the pier. A "lookout tower" located at the station, fell on September 18, 1935, but it is not known when it was built.

=====
8. Statement of Significance
=====

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.
- 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: 1894-1952

Significant Dates: 1894, 1939

CAPE CHARLES LIGHT STATION**Page 9**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

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.)⁵

The Cape Charles 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 tower at Cape Charles is exceptionally significant in being the only onshore first-order cast-iron skeletal-type lighthouse tower in the United States. Other first-order lights exist on skeletal towers on offshore pile foundations and on onshore skeletal towers built of steel.⁶ At 191 feet, Cape Charles is the tallest skeletal tower, and the second tallest tower of any construction type in the country.

History

Cape Charles was a busy seaport in the early 19th century. With the advent of the railroad, it became an important juncture for cargo bound for Norfolk and passengers to be ferried between trains. As a seacoast light, Cape Charles used a first-order lens to light the approach to the Cape from the Atlantic. Until 1939, a civilian keeper and two assistants manned the lighthouse. The keepers and their families lived in the keeper's quarters built within 100 feet of the light tower. After 1939, when the Coast Guard took over the station, the personnel served four days on the island and then had a two-day break. Their families lived off the island.⁷

First Cape Charles Lighthouse, 1828

Congress appropriated \$10,000 on May 18, 1826, for a lighthouse at Cape Charles. The first Cape Charles Lighthouse was a 55-foot-tall brick tower built between 1827 and 1828 at a cost of \$7,398.82. It was inadequate for its coastal location with visibility only 12 miles under the best of conditions. The Lighthouse Board stated in its 1851 *Annual Report* that the Cape Charles Lighthouse was "very inferior" and "requiring the earliest attention of the lighthouse department" and furthermore it "should be increased to a first order one." During 1855, the tower and keeper's dwelling were "thoroughly repaired" and a new "revolving machine" for the lighthouse lens replaced the existing machine that was in "very bad order."⁸

⁵ Much of this narrative is derived from a section of a condition assessment report on Cape Charles Light Station prepared by Ralph Eshelman through a cooperative agreement with the U.S. Lighthouse Society in 1995/1996. This report is on file at the National Maritime Initiative office, National Register, History, and Education Programs, National Park Service, Washington, D.C.

⁶ Based on a search for skeletal lighthouses in the National Maritime Initiative's computerized light station inventory, May 1998.

⁷ Linda Turbyville, *Bay Beacons* (Annapolis, Maryland: Eastwind Publishing, 1995), pp. 127-128.

⁸ Lighthouse Board, *Annual Report, 1851 and 1855* (Washington, D.C.: Government Printing Office).

CAPE CHARLES LIGHT STATION**Page 10**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Second Cape Charles Lighthouse, 1864

Congress appropriated \$35,000 on August 18, 1856, for "rebuilding the Cape Charles Lighthouse upon a proper site and fitting it with proper illuminating apparatus." A new 150-foot-tall brick tower was begun in 1857 about one mile and a quarter southwest of the 1828 tower. \$34,998.17 of the appropriation had been expended between 1858 and 1859 with an additional appropriation of \$10,200 on June 20, 1860, for a keeper's quarters. Only about \$1,890 of this amount was spent. Construction on the tower was very slow and had progressed to only 83 feet in height by August 1862 when a Confederate "party of guerrillas...completely destroyed" the first 1828 lighthouse tower and pilfered construction materials at the new site. Congress authorized an additional \$20,000 on March 14, 1864; the tower was completed on May 7, 1864, and outfitted with a first-order lens. A detachment of "competent military guard" was stationed at the lighthouse to protect it till the end of the Civil War. The "tram-road" used in the construction of the lighthouse was "taken up and the material shipped to Baltimore."⁹

In 1874, a crack in the tower just under the lantern gallery was repaired by fastening the lantern gallery, made of iron, to the stone brackets of the tower by bolts on the outside. The crack was supposed to be the result of a "heavy gale of wind." In 1878, it was noted "the sea has recently encroached on the site of the lighthouse, but not enough to cause any apprehension of danger." Stakes were placed 50 feet apart between the lighthouse and the sea to mark any further encroachment.

By 1883, the sea had encroached upon the station at an average of 30 feet per year and now was only about 300 feet from the tower. The Board asked for \$15,000 to build one or more jetties to protect the site. Congress appropriated \$10,000 on August 7, 1884, for "jetties of stone resting upon heavy timber mattresses to prevent too rapid sinking into the sand." But by 1885, another 75 feet of beach had eroded. In the same year, another \$30,000 was requested to purchase additional land for the construction of three large jetties. Congress appropriated \$20,000 on August 4, 1886. Proposals for providing temporary protection by the placement of riprap stone were rejected as too expensive; no bids were received for building a concrete wall supported by a pile foundation. So, in the same year, about 120 feet of brush mattresses were completed and partially loaded with stone along the shore, and about 80 feet of one jetty was finished, extending from the shore to the low water mark. The mattresses were 6 feet high consisting of upper and lower "grillage" and 8 intermediate courses of "brush bundles." The jetty mattresses were about 40 feet wide at the bottom, and the seawall mattresses about 20 feet wide.¹⁰

But erosion continued and in 1889, just when additional work was being done to extend the jetty, about 75 feet of it was washed away in a heavy northeastern gale, and the south end of the protection wall was undermined. The tower and two keeper's quarters were surrounded by water. It was apparent that erosion control was too expensive; therefore, it was decided more economical to relocate the station. Meanwhile, four jetties were constructed at right angles to the shore as a temporary shore erosion control measure. Construction of the jetties began in

⁹ Lighthouse Board, *Annual Report, 1857, 1858, 1859, 1860, 1863, 1864, and 1865.*

¹⁰ Lighthouse Board, *Annual Report, 1878, p. 34; 1883, p. 48; 1884, p. 47; 1885, p. 47; 1886, p. 47; 1887, p. 45; 1888, p. 80; and plan entitled A Jetty and Wall for the Protection of Cape Charles L. St. Virginia 1886,* National Archives plan number 5-16C-56, copy in National Maritime Initiative office.

CAPE CHARLES LIGHT STATION**Page 11**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

February 1890. The jetties were built by driving wooden piles 15 feet into the sand in two parallel rows about 5 feet apart, each row of piles tied together along the top by timber stringers bolted in place. The space between the piles was then filled with riprap stone. This work was completed in January 1891 after a temporary landing wharf had been washed away three times and one vessel chartered to carry stone was wrecked and another badly damaged.¹¹

In 1889, the Lighthouse Board's *Annual Report* noted that extensive repairs were needed to the tower, dwelling, and fences. In 1892, the tower was painted with a 25-foot-wide red band about 60 feet above the tower base to make the tower more distinguishable to mariners navigating during daylight. Later, the lantern and watch room portion of the tower were painted black and the remainder of the tower painted white.¹²

Third Cape Charles Lighthouse, 1894

Congress appropriated \$150,000 on August 30, 1890, for a new lighthouse. Test borings were made in 1891 at the designated site, approximately three-quarters of mile nearly due west from the 1864 tower. Ten acres of land were acquired on August 4, 1892, by condemnation (one of the land owners died the previous year leaving a minor as one of his heirs). Five commissioners appointed by the United States District Court in Norfolk, Virginia, met at the site on July 12, 1892, to condemn the site and save the long delay otherwise necessary to settle the title.

Originally, it was recommended that the new Cape Charles Lighthouse should be built of the same design as the Cape Henry Lighthouse 1881 tower. However, the Lighthouse Board selected a tower similar to the Waackaack Range Lighthouse, New Jersey, in order to "prevent any chance of its being mistaken by mariners for that [Cape Henry] lighthouse." The contract for the 191-foot-tall, steel, pyramidal skeletal tower was signed in June 1893 and completed on December 21, 1894. The station was commissioned on August 15, 1895, with a first-order Fresnel lens of 1,200,000 candlepower visible 20 miles at sea. The characteristic of the light was 4 quick flashes, each lasting about 1 1/2 seconds, followed by an eclipse of 2 3/4 seconds, followed by 5 quick successive flashes at intervals of about 1 1/2 seconds, and then an eclipse of 16 seconds.

Framing for the dwellings and privies was begun at the Baltimore Lighthouse Depot. The stable and woodsheds were erected first at the site and used as quarters for the construction crew during completion of the station. A wharf was built, and a road was graded from it to the station site. The wharf was 1,345 feet in length with a receiving pier 43 by 60 feet. A tramway was built from the pier head to the lighthouse site. The foundation for the skeletal cast-iron-plate lighthouse was built by first placing a 21-foot-diameter caisson, built of 3/8-inch boiler iron at the site and excavating the sand from within the caisson so it sunk under its own weight to a

¹¹ Lighthouse Board, *Annual Report, 1889*, p. 29, 88; *1890*; and *1891*.

¹² Lighthouse Board, *Annual Report, 1869; 1874*, p. 43; *1878*, p. 34; *1886*, p. 47; *1887; 1888*, p. 80; *1889*, pp. 29, 88; and *1892*; and T. N. Miller, "National Register of Historic Places Inventory - Nomination Form" (June 13, 1973); Robert de Gast, *The Lighthouses of the Chesapeake* (Johns Hopkins University Press, 1993), p. 143; F. Ross Holland, Jr., *Great American Lighthouses* (Washington, D.C.: Preservation Press, 1994), p. 162; F. Ross Holland, *America's Lighthouses: An Illustrated History* (New York: Dover Publications Inc., 1988), p. 122; and Cape Charles photograph PL424, Mariner's Museum, Newport News, Virginia, copy in Cape Charles Light file, National Maritime Initiative Office, National Park Service, Washington, D.C.

CAPE CHARLES LIGHT STATION**Page 12**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

depth of 10 feet. The pit was kept free of water by use of a Knowles pump. Inside the central foundation, a Portland cement pier was formed and poured. This process was repeated for the 7 perimeter piers. Upon these piers, the central tubular stair cylinder and skeletal supports were constructed.

Three storehouses, two assistant keeper and one keeper dwellings, workshop, oil house, stable, four woodsheds, and a fence surrounding the grounds were constructed in 1894 and 1895. Bermuda grass was planted. A telephone line was installed between the station and Cape Charles City, Virginia. Mosquitoes were so numerous and annoying that it was impractical for the men to work during part of the summer.¹³

In 1929, the station was described as consisting of three dwellings: an oil house, two storehouses, and the lighthouse, all valued at \$136,200 plus another \$1,000 for the ten-acre property. In the same year, the Bureau of Lighthouses granted the Coast Guard nearly one acre next to the wharf. The light characteristic in 1938 was a flashing white, signaling '45' every minute, or 4 flashes followed by a 6-second eclipse, followed by 5 flashes, followed by 32 seconds of eclipse. The station had a 22-foot motorboat with a forward cabin outfitted with a six-horsepower engine. There was no boathouse.¹⁴ The station was automated in 1963, and the first-order Fresnel lens disassembled; it is now exhibited at the Mariner's Museum in Newport News, Virginia. An automated aero beacon of 1.2 million candlepower, serviced by an electrical line from the mainland, replaced the classic lens. When the electric cable was broken, a solar-powered rotating, 190mm six-panel acrylic lens was installed.

After automation, the Coast Guard sold the principal keeper's house, oil house, and generator building to a hunting club. Taken over by The Nature Conservancy in April 1995, the keeper's house, coal shed and privy were destroyed by fire in 2000; however, the two small brick buildings remain.

9. Major Bibliographical References

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

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

Holland, F. Ross, Jr., *America's Lighthouses* (New York: Dover Publications, Inc., 1988).

Holland, F. Ross, Jr., *Great American Lighthouses* (Washington, D.C.: Preservation Press).

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

¹³ Lighthouse Board, *Annual Report, 1890, 1891, 1892*, p. 91; *1893, 1894*, pp. 91-92; and *1895*.

¹⁴ "Description of Cape Charles Light Station, March 1938."

CAPE CHARLES LIGHT STATION

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

National Park Service, "Condition Assessment and Significance Evaluation for Cape Charles Light Station," prepared by the Historic Preservation Training Center for the U.S. Coast Guard, 1995.

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

U.S. Lighthouse Board, *Annual Reports*, 1851-1902.

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
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____

Primary Location of Additional Data

- State Historic Preservation Office
- Other State agency
- 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.

=====
10. Geographical Data
=====

Acreage of Property: 10 acres (9.187 acres owned by The Nature conservancy and 0.813 owned by the US Coast Guard)

USGS Quadrangle: Fishermans Island, VA

UTM References:	Zone	Easting	Northing
	18	419462	4108675

Verbal Boundary Description:

As per deed dated November 12, 1892 "beginning at a post "A" set in the ground on the high water line of Magothy Bay, thence running south 32 degrees east 1089 feet to a post "B", bearing north 75 degrees 40 minutes west from Cape Charles Light House town, thence north 58 degrees east 400 feet to a post "C", thence north 32 degrees west 1089 feet to a post "D", and thence along the shore of said Bay to the point beginning -- containing 10 acres more or less."

Boundary Justification:

CAPE CHARLES LIGHT STATION**Page 14**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

While the property has changed configuration over the years because of parceling of portions of the station to the Coast Guard and later to private owners, the parcel as described in 1892 encompasses the entire light station and all its historic structures.

11. Form Prepared By

name/title: Candace Clifford, NCSHPO Consultant and Ralph Eshelman, Consultant under a cooperative agreement with the U.S. Lighthouse Society; Edited and revised August 2002 by Jennifer Perunko, NCSHPO Consultant, National Maritime Initiative, National Park Service

organization: National Park Service National Maritime Initiative

date: November 25, 1997

street & number: National Park Service (NRHE--2280), 1849 C St., NW, Room NC400

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

telephone: 202-343-9508

Property Owner

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

Light Tower:

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

Other Structures:

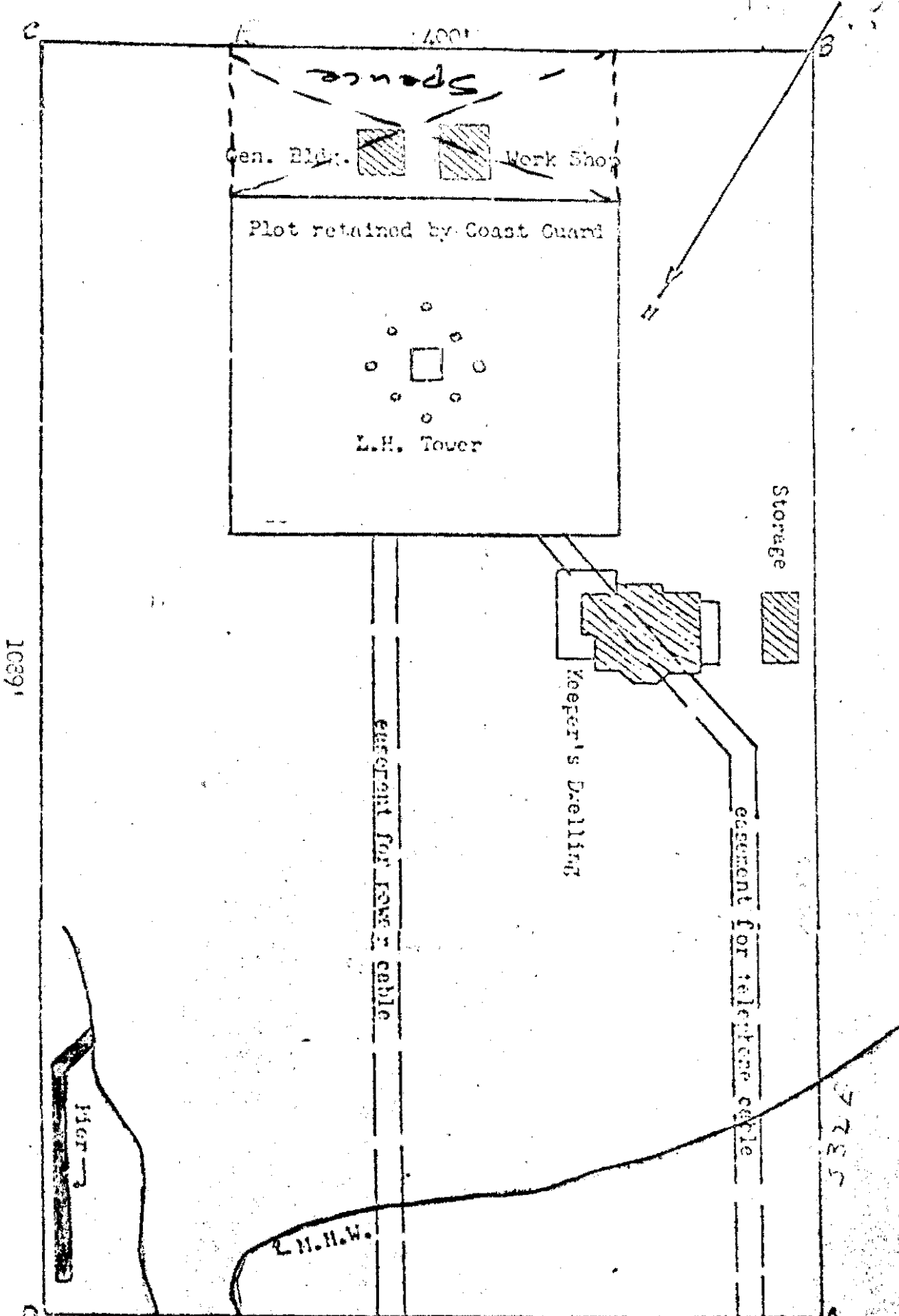
Nature Conservancy, Virginia Coast Reserve

P.O. Box 158

Nassawadox, VA 23413

(757) 442-3049

C-3



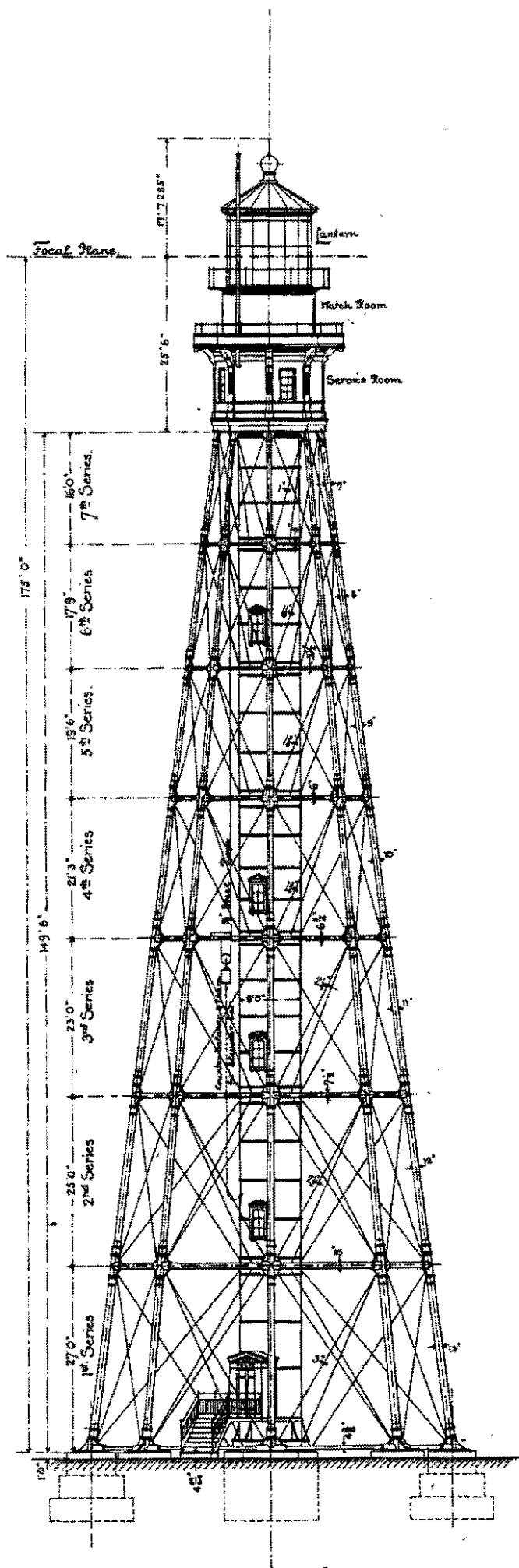
1089'

7285'

Post "D" on shore of Magthy Bay

NOT TO SCALE

Post "A" set in ground on the high water line of Magthy Bay.



OF VIRGINIA
L RESOURCES

Cape Charles Light Station

Northampton County, VA

UTM Coordinates:

18 419462 4108675

65-71

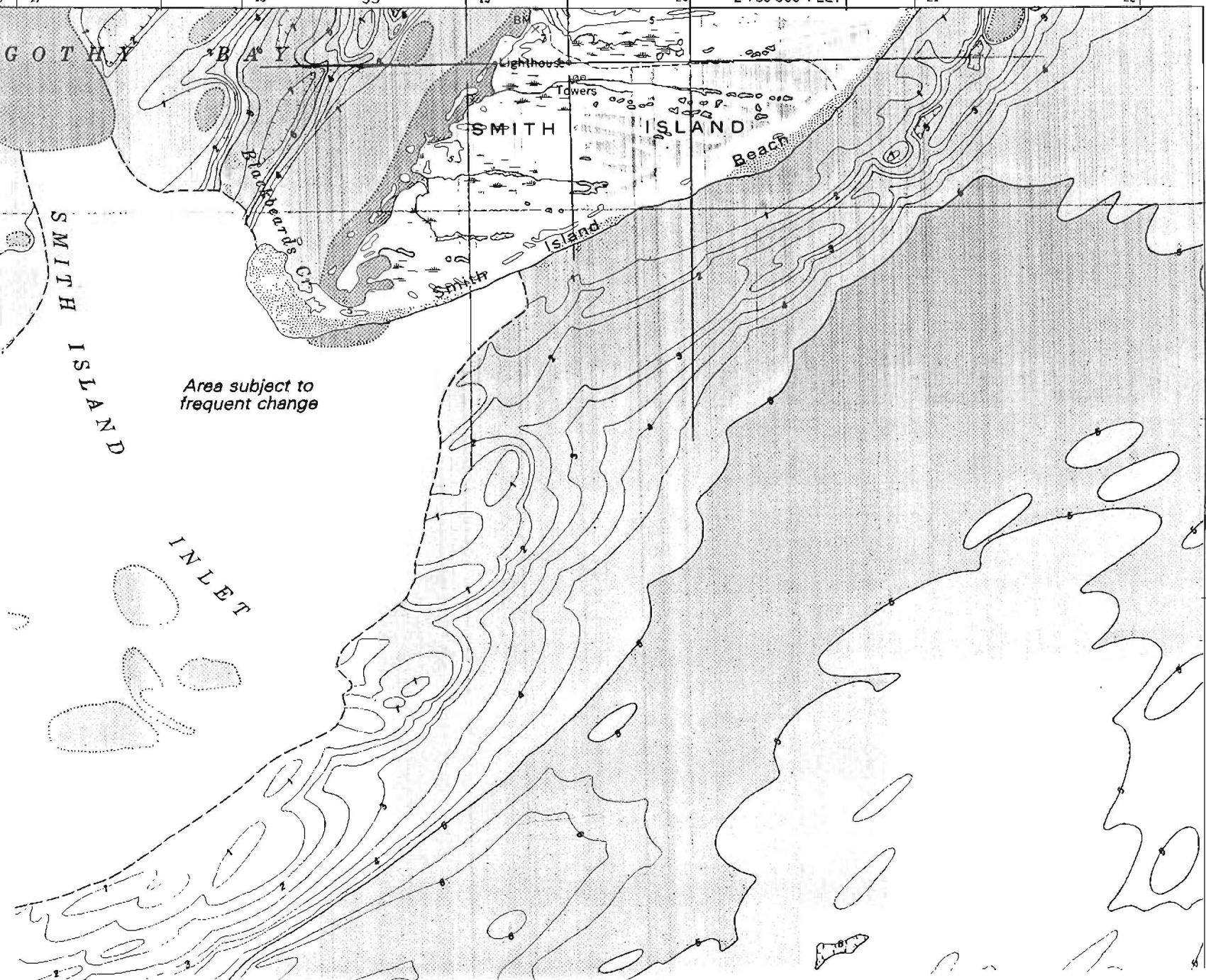
FISHERMANS ISLAND QUADRANGLE

VIRGINIA-NORTHAMPTON CO.

7.5 MINUTE SERIES (TOPOGRAPHIC-BATHYMETRIC)

5858 III NE
(SHIP SHOAL INLET)

17 18 55' 19 20 2 760 000 FEET 21 22 75°52'30" 37°07'30"



Area subject to frequent change

290 000
FEET

4105