United States Department of the Interior
National Park Service

National Register of Historic Places
Inventory—Nomination Form

See instructions in How to Complete National Register Forms
Type all entries—complete applicable sections

1. Name

historic U.S. Weather Bureau Station

and/or common

2. Location

street & number Beach Avenue, Fire Number 577

city, town New Shoreham

state Rhode Island
code 44

3. Classification

Category

X district

building(s) 

X building

structure

site

object

Ownership

public

X private

both

Public Acquisition

N.A

Status

X occupied

X unoccupied

X work in progress

Accessible

X yes: restricted

X yes: unrestricted

Present Use

X museum

X commercial

X educational

X entertainment

X government

X industrial

X military

X private residence

X religious

X scientific

X transportation

X other:

4. Owner of Property

name Alexandra Pence

street & number 517 East 87th Street, Apt. 4W

city, town New York City

state New York

code 009

5. Location of Legal Description

courthouse, registry of deeds, etc. New Shoreham Town Hall

state Rhode Island

code 009

6. Representation in Existing Surveys

title None

has this property been determined eligible? ___ yes X no

date

X federal ___ state ___ county ___ local

depository for survey records

city, town

state
The former U.S. Weather Bureau Station, even though it no longer has its instrument and signal towers, is a highly visible building. Seated prominently on the crest of a hillock, the station sits near the center of a grassy 1.3 acre lot with a white picket fence along Beach Avenue. It is a stark white Neoclassical block resting on a red brick base and crowned with a projecting cornice and a parapet. The portico, parapet and surface ornament give the building a restrained monumentality and the dignity which the Chief of the Weather Bureau sought for his observatories.

The building is two stories tall and three bays wide, with a flat roof and a high basement. It is a frame structure, originally clad with clapboards, which were replaced by asbestos shingles, painted white, in 1947. A single-story portico, supported by paired Doric columns, and a shallow, pedimented, central pavilion stretch across the southerly facade. The exterior is enriched with finely-drawn detailing, including channeled pilasters at the corners, a full entablature and an eared tablet, framed by scrolls, in the center of the frieze on the facade. The windows, capped by cornice moldings, have twelve-over-one double-hung sashes. The doorway in the center of the facade contains a paneled oak door with a large window. The transom over the door, originally housed a boxed glass sign, now kept inside the house; a single plexiglass pane is in its place.

The interior is laid out on a center-hall plan with two rooms on a side, front and rear vestibules and a single-flight stairway with a turned-spindle railing at the north end of the hall. The two parlors on the easterly side served as the Bureau offices and on the westerly side of the hall there is a parlor/dining room and a pantry and kitchen. On the second floor there are four bedrooms and a bath. A narrow gangway, enclosed by paneled pine walls, leads to the roofdeck where the instrument tower was mounted and where there is still a flagpole. The rooms are finished with plaster walls, hardwood floors and oak and yellow pine trim. The parlors have vertical matchboard wainscoting; the other rooms have baseboard moldings. The doors have five horizontal panels and molded trim with corner blocks. There are tramsoms over the parlor and front bedroom doorways.

In the southeast parlor there is a two-story mantel with fluted Doric columns supporting mantel and overmantel shelves. A large beveled mirror occupies the center of the overmantel. The shelves have egg-and-dart bed molding; the same style of molding frames the mirror as well. The fire surround and the hearth are covered with green ceramic tiles; the cast-iron firebox is embossed with fleurs-de-lys. A similar mantel is in the southeast bedroom, though it is only one story high and its bed molding is fuller and more prominent. The tiles surrounding the opening are white, mottled with yellow, purple and green; the hearth tiles are green with borders of the mottled
white and plain black tiles. In both locations the chimneybreast projects into the room.

There are two internal brick chimneys, stuccoed above the roof line; one for the furnace and the kitchen stove in the northwest corner and the other for the fireplaces in the southeast corner.

The Weather Bureau Station is essentially unchanged although there have been minor alterations. On the exterior, elements in the portico and the parapet have been replaced and the railing on the portico roof has been removed. In the portico, the columns were replaced sometime after 1950, with ones that are similar, except that they rest on plain boxes rather than classical bases. On the portico roof only a central section of wall remains of the parapet, which was similar to that on the main roof. In the parapet on the roof, the channeled piers are original, but the square balusters are replacements for the curved originals. The ornamental black shutters on the front windows are recent additions, as are the aluminum storm windows, which replace ones with wooden frames. The brick steps in front replace earlier wooden steps. The small porch in the center of the rear elevation is now open, although originally enclosed. The single pairs of pilasters and columns that support it are original, and proportionately smaller than those in the front. An open wooden deck has been added to this porch recently.

Inside the station, the alterations include a picture window in the rear wall of the kitchen, new ceilings suspended from the original canvas ceilings and wallpaper over the original wall paint in several rooms. In the southeast parlor there are false exposed joists attached to the ceiling. Although none of the original lighting fixtures remain, other fixtures do, including iron radiators, the pantry sink and cupboards, and the clawfooted bathtub and tile floor in the bathroom.

The basement, which has a concrete floor and six-pane casement windows on the east and west sides, is essentially unchanged. It is reached by an inner stair under the main stairway and a bulkhead entrance in the rear.

The house is in good condition, although the chimney in the southeast corner has settled, causing some cracking and water damage to the plaster in those two rooms.

The house lot slopes down to Beach Avenue on the southerly side and Trim's Pond on the northerly side. There is a lock on the pond and there was formerly a frame garage in the southeast corner of the lot, where there is still a large gate in the picket fence. A concrete slab walk leads from another gate in the center of the fence up to the

(See Continuation Sheet #2)
house. There is a private house on the westerly side of the property. There are no intrusions on the property.
8. Significance

<table>
<thead>
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<th>Period</th>
<th>Areas of Significance—Check and justify below</th>
<th>Specific dates</th>
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<td>1900-</td>
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Specific dates 1903

Statement of Significance (in one paragraph)

The former U.S. Weather Bureau Station, Beach Avenue, New Shoreham, was the meteorological observatory and observer's residence for forty-six years of the national weather service's first century on Block Island. A nearly cubical Neoclassical block house situated on a hillock overlooking the Old Harbor to the southeast and the New Harbor to the northwest, the Weather Bureau was built by the Department of Agriculture in 1903, to a design by Harding and Upman of Washington, D.C., to replace an earlier station destroyed by fire in 1902. By employing a design with the formal dignity of the Classical Revival, the Chief of the Weather Bureau hoped to bolster public respect for the weather service and its forecasts.

The observer and his assistant tended the station's meteorological instruments, which were mounted on the ground and on the flat roof, and transmitted weather reports to the national forecast bureau four times daily. The forecasts which they then received were displayed by signal flags on the steel storm warning tower adjacent to the building, for the benefit of the fishing fleet and pleasure yachts. The Weather Service vacated this building in 1950 for an office at the new airport, and the former station has subsequently become a private summer residence. Although the instruments and the warning tower have been removed, the former Weather Bureau is well-preserved and has had only minor alterations.

The U.S. Army Signal Corps began operations at the first weather station on Block Island September 1, 1880, when the national weather service was only a decade old. After laying a submarine cable connecting Block Island with the mainland, the Signal Corps set up office in a room adjacent to J.T. Dodge's store in the village by the Old Harbor. With the aid of an assistant, the weather observer recorded barometric pressure, temperature, wind direction and velocity, precipitation and cloud cover and telegraphed the data to the national forecast bureau in Washington three times daily. (This became twice daily in 1888 and four times daily in 1939.) Upon receipt of the forecasts from Washington or from the local forecasting bureau such as Boston or Providence, they displayed the information by signal flags flown on Harbor Hill. While Block Island's strategic location in the sealanes made its weather conditions of particular concern for New England maritime traffic, the weather forecasts, especially the storm warnings, were of crucial importance for the island's fishermen and the pleasure sailors who helped make Block Island a fashionable resort.

(See Continuation Sheet #3)
In 1887, the station moved nearby to a new building on Main Street that had been designed as an observatory with an attached tower. The anemometer was moved from the roof of Dodge's store to the cupola of the National Hotel. The new station also had a telegraph office, to accommodate the considerable commercial use of the telegraph service.

The transfer of the Weather Service from the Army to the Department of Agriculture occurred on July 1, 1891, without any major change in the activities of the Block Island station.

On July 17-18, 1902, a major fire destroyed a number of buildings in the village, including the National Hotel and the Weather Bureau; however, most of the records and the equipment were saved. A temporary station was established in the village in the Island Drug Store, with the anemometer on the roof of the Surf Hotel.

The need for a new observatory on Block Island came at a time when the Weather Bureau, under its chief, Willis C. Moore, was seeking to upgrade its equipment and to strengthen its institutional status. The major change in instrumentation was the adoption of automatic registers that maintained continuous records of the principal meteorological conditions. By 1903, the Block Island station was equipped with a complete set of these automatic registers. In the same year a new three-conductor submarine telegraph cable was laid, replacing the original cable and a supplementary one laid in 1886.

In 1903, the Weather Service purchased a lot of land on Beach Avenue north of the village and constructed a new observatory that contained living quarters for the weather observer and his family. The rationale for building a station of this type was provided by Moore in his annual report for 1902-03:

The wisdom of the Weather Bureau in erecting and owning its own buildings becomes more apparent each day. It not only saves to the Government the amount heretofore paid for rent of office quarters, which in many cases are unsuited to our needs, especially as regards the architecture of the roofs for the exposure of the meteorological instruments, but places the Weather Bureau on a footing of equality with other branches of the Government service such as the Light-House Board and Life-Saving Service. Aside from this, they provide living accommodations for our employees, who are so often required to remain on duty both day and night, add dignity to the service and compel more respect from the general public for our forecasts.1

(See Continuation Sheet #4)
At the same time that work was underway on Block Island, an identical weather station was being built at Narragansett Pier. It seems likely that if the design was duplicated in these two stations, it was used elsewhere in the course of the Weather Bureau's building program as well. The classical monumentality of the design was particularly appropriate for the Block Island and Narragansett Pier settings, where the stations were built alongside the massive resort hotels of the Victorian period.

The new observatory, which opened on January 1, 1904, occupied a strategic position between the Old Harbor and the New Harbor in Great Salt Pond; thus the signal flags displayed on the skeleton steel storm warning tower on the east side of the building were visible to the coast on either side of the island. The anemometer was mounted on a 14' high standard on the roof deck, while the rain gauge and the thermometer stand were located on the ground, a short distance from the station. The automatic registers and communications equipment were in the two rooms on the east side of the central hall on the first floor, which served as the offices.

Once the new observatory was established, the regular routine of the meteorological crew continued with few significant interruptions.

In the 1930s, the teletype was introduced into the Weather Service, after a brief use of radio, for sending and receiving reports and forecasts. Another change in the 1930's was the result of the Hurricane of 1938, which wreaked such destruction in New England and Rhode Island in particular. Unlike most storms, this hurricane moved northward at a rapid rate, a fact that escaped the attention of the weather observers who made only two reports a day, at 8 a.m. and 8 p.m. To avoid being caught unaware by such a phenomenon in the future, the Weather Service adopted a schedule of four daily observations at 1 and 7 a.m. and 1 and 7 p.m. The Block Island station was fortunate in avoiding serious damage during this and other hurricanes, although the anemometer did crash during the storm, after recording a wind velocity of 92 mph.

The growth of aviation encouraged a new emphasis on aerology or the study of the upper air mass. The greater demand for aviation forecasting prompted the transfer of the Weather Service to the Department of Commerce in 1940. Although no immediate change resulted on Block Island, this transfer did mark the beginning of a trend which finally brought about the closing of the building on Beach Avenue and the installation of a new station at the recently-completed Block Island airport in 1950. The move to the airport was also dictated by

(See Continuation Sheet #5)
the increasing automation of the meteorological instruments. The so-called AMOS or Automatic Meteorological Observation Station installed in the new station transmitted the readings from the principal gauges automatically by teletype. Only the data on cloud cover, visibility and wind gusts remained to be observed and sent in by hand. Consequently, the staff was reduced to a single meteorologist technician and the problem of providing convenient living quarters was effectively ended.

After the Weather Service vacated the former Bureau, the building passed into private ownership. It is currently used as a summer residence.

The logs and records of the early Block Island weather stations are now in the possession of the Block Island Historical Society.

Footnote:

#9


Newspapers:

The Mid Ocean, Block Island, 8/30/1905, p. 1.


Personal Communications:

William Phelan to the author, 4/5/83.

#10

boundaries as described in New Shoreham Deed Book Vol. 48 Page 228, as the lot dimensions have not changed since the property was first purchased by the U.S. government in 1903. These dimensions are as follows: Starting at the southwesterly corner, 199.9' along the north side of Beach Avenue to a stone wall, thence northerly 286.7' along said wall to the shore of Trim's Pond, thence westerly 203' along said shore, thence southerly 345' to the point of origin.
9. Major Bibliographical References

Ball, Nicholas, "Lighthouse, Life-Saving Stations, Cable, Block Island, R.I." Typescript, 1890?, Rhode Island Historical Society Library.

(See Continuation Sheet #6)

10. Geographical Data

Acreage of nominated property 1.3 acres
Quadrangle name Block Island, RI

Quadrangle scale 1:24,000

Verbal boundary description and justification
The historic boundaries are coterminous with the present legal

(See Continuation Sheet #6)

List all states and counties for properties overlapping state or county boundaries

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<thead>
<tr>
<th>state</th>
<th>code</th>
<th>county</th>
<th>code</th>
</tr>
</thead>
</table>

11. Form Prepared By

name/title Richard E. Greenwood / Historic Preservation Consultant
organization

date April, 1983

street & number 48 Carrington Avenue

telephone 751-8005

city or town Providence

state Rhode Island

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

national state X local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature

For NPS use only

I hereby certify that this property is included in the National Register

Keeper of the National Register

Attest

Chief of Registration
U.S. WEATHER BUREAU STATION
Beach Avenue
New Shoreham, Rhode Island

Photographer: Gerald Abbott
Date: October, 1982
Negative filed at: Block Island Historical Society
Old Town Road
Block Island, RI 02807

View: ventilating pattern, garret door, in the gangway.

Photo #8
U.S. WEATHER BUREAU STATION
Beach Avenue
New Shoreham, Rhode Island

Photographer: Gerald Abbott
Date: October, 1982
Negative filed at: Block Island Historical Society
Old Town Road
Block Island, RI 02807

View: View of the station from the southeast: Front facade on the left, easterly elevation on right.

Photo #1
U.S. WEATHER BUREAU STATION
Beach Avenue
New Shoreham, Rhode Island

Photographer: Gerald Abbott
Date: October, 1982
Negative filed at: Block Island Historical Society
Old Town Road
Block Island, RI 02807

View: View of the station from the southwest.

Photo #2
U.S. WEATHER BUREAU STATION
Beach Avenue
New Shoreham, Rhode Island

Photographer: Gerald Abbott
Date: October, 1982
Negative filed at: Block Island Historical Society
Old Town Road
Block Island, RI 02807

View: Front (southerly) facade.

Photo #3
U.S. WEATHER BUREAU STATION
Beach Avenue
New Shoreham, Rhode Island

Photographer: Gerald Abbott
Date: October, 1982
Negative filed at: Block Island Historical Society
Old Town Road
Block Island, RI 02807

View: Mantelpiece, southeast parlor, first floor.

Photo #4
U.S. WEATHER BUREAU STATION  
Beach Avenue  
New Shoreham, Rhode Island

Photographer: Gerald Abbott  
Date: October, 1982  
Negative filed at: Block Island Historical Society  
Old Town Road  
Block Island, RI 02807

View: Mantelpiece, southeast bedroom, second floor.

Photo #5
U.S. WEATHER BUREAU STATION
Beach Avenue
New Shoreham, Rhode Island

Photographer: Gerald Abbott
Date: October, 1982
Negative filed at: Block Island Historical Society
Old Town Road
Block Island, RI 02807

View: Newel post and railing, main stairway.

Photo #6
U.S. WEATHER BUREAU STATION
Beach Avenue
New Shoreham, Rhode Island

Photographer: Gerald Abbott
Date: October, 1982
Negative filed at: Block Island Historical Society
Old Town Road
Block Island, Rhode Island 02807

View: Doorway, northwest bedroom, second floor.

Photo #7
U.S. WEATHER BUREAU STATION
Beach Avenue
New Shoreham, RI

Photographer: Gerald Abbott
Date: October, 1982
Negative filed at: Block Island Historical Society
Old Town Road
Block Island, RI 02807

View: Paneled gangway walls, second floor.

Photo #9