
U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Ph-1142 Office No. T-11452

LOCALITY
State Rhode Island
General locality Block Island Sound
Locality Watch Hill Point

1954

CHIEF OF PARTY
L.F. Woodcock, Chief of Party
W.F. Deane, Balt., District Office

LIBRARY & ARCHIVES

DATE April 1962
DATA RECORD

T -11452

Project No. (II): Ph-142  Quadrangle Name (IV):

Field Office (II): Groton, Conn.  Chief of Party: L. F. Woodcock


Instructions dated (II) (III): 8 June 1954 (Field)

18 Aug. 1954

15 Sept. 1955

Copy filed in Division of Photogrammetry (IV)

Method of Compilation (III): Kelsh Plotter

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:4000

(Pantograph ratio 2/5)

Scale Factor (III): 1.000

Date received in Washington Office (IV): SEP 1 1955

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 30 Aug. 1960

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): MHW

Elevations shown as (f) refer to mean high water
Elevations shown as (g) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): PHILPS, 1932

Lat.: 41° 18' 11.156" (1269.6 m)  Long.: 71° 51' 13.113" (3050.0 m)

Adjusted

Plane Coordinates (IV):

State:

Zone:

Y =

X =

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.
Field Inspection by (II): I. Y. Fitzgerald

Date: 11 Aug 1954

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location):
22 April 1954 (date of photography), photogrammetric

Projection and Grids ruled by (IV): A. Riley

Date: 7 Dec. 1954

Projection and Grids checked by (IV): A. Riley

Date: 10 Dec. 1954

Control plotted by (III): J. B. McDonald

Date: 3 April 1956

Control checked by (III): C. O. DeMarr

Date: 3 April 1956

Radial Plot or Stereoscopic: E. L. Rolle

Control extension by (III):

Planimetry B. Kurs

Date: 24 May 1956

Stereoscopic Instrument compilation (III):

Date: 8 Aug. 1957

Manuscript delineated by (III): R. E. Lindauer

(scribing)

Date: 22 May 1959

Photogrammetric Office Review by (III): J. W. Vonasek

Date: 12 Feb. 1958

Elevations on Manuscript checked by (II) (III):

Date:
PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time (EST)</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>5h-W-1262 and</td>
<td>4/22/54</td>
<td>1500</td>
<td>1:20,000</td>
<td>0.3' above MLW</td>
</tr>
<tr>
<td>1263</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tide (III)
(from Predicted Tables)

<table>
<thead>
<tr>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>3.1</td>
<td></td>
</tr>
</tbody>
</table>

Date: April 28, 1960

Reference Station: Newport
Subordinate Station: Watch Hill Point

Final Drafting by (IV): [Signature]
Drafting verified for reproduction by (IV): [Signature]
Proof Edit by (IV): [Signature]

Land Area (Sq. Statute Miles) (III): 0.3
Shoreline (More than 200 meters to opposite shore) (III): 3
Shoreline (Less than 200 meters to opposite shore) (III): -
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 9
Number of BMs searched for (II): 3
Number of Recoverable Photo Stations established (III): None
Number of Temporary Photo Hydro Stations established (III): None

Remarks:
SUMMARY
PROJECT PH-142
TWENTY-FOUR

This project consists of 3 3/4' x 7 1/2', 1:10,000 scale shoreline maps. Three manuscripts T-1144, T-11448, and T-11449 were compiled by the Tampa District Office. The remainder were compiled by the Baltimore District Office.

The objective of the project was to provide shoreline and horizontal control data for contemporary hydrographic surveys and base maps for nautical charts.

It extends from the New Bedford, Connecticut area west to Old Saybrook along Block Island Sound and includes parts of Massachusetts, Rhode Island, and Connecticut.

Aerial photography was taken in the spring of 1954 with the "W" camera at 1:20,000 scale and supplemental nine-lens at 1:10,000 at low water. Some additional photography was flown in May 1956 for revision purposes.

Control was extended by stereoplanigraph and multiplex methods. Compilation was accomplished by Kelsh.

More stations were identified than necessary for this project. This was due to the fact that the original intentions were to extend horizontal control by radial line plot methods. Subsequent purchase of an additional first order bridging instrument reduced the need for the density of control. This item is the subject of supplemental instructions dated 15 September 1955, Paragraph 5. The field phase of control identification was initiated in June 1954.

The project is classified as Shoreline yet instructions to the field dated 8 June 1954, Paragraph 9 "Interior Inspection" states "the inland limits of inspection and delineation are the map limits".
Five contemporary hydrographic surveys dated 1956-57 have been completed in this area by visual hydrographic methods.

The sheets were scribed and transmitted to the Washington Office by Baltimore Office.

Final Review was completed by April 1960.

Submitted by:

A. K. Heywood
2. AREAL FIELD INSPECTION

This area is the well known summer resort of Watch Hill, Rhode Island. The area is almost exclusively summer resort with no other industry in evidence. There are a few permanent residents but the majority of the homes are summer ones.

Watch Hill Point is the only salient feature of the area. Part of Napatree Beach, forming a barrier on the south side of entrance to the Pawcatuck River, is located just west of Watch Hill Point.

Field inspection is complete. Field inspection notes were applied to 1:10,000 scale ratio prints of photograph 54-W-1263.

Photographic quality was excellent; no difficulty was encountered in interpretation.

Field inspection was done before a hurricane of 31 August 1954. There was some damage to buildings on Napatree Beach and near the small boat basin on the northwest side of Watch Hill Point. Judging from adjoining areas visited since 31 August, there was very little if any change in the location of the mean high and low water lines.

3. HORIZONTAL CONTROL

Coast and Geodetic Survey triangulation comprises all horizontal control in the area. All stations were searched for. Two stations were identified.

The following stations were reported lost: WATCH HILL CHURCH SPIRE 1904; LARKIN HOTEL, NORTH TOWER 1904; LARKIN HOTEL SOUTH TOWER 1904; and WATCH HILL SOUTH TOWER 1904; WATCH HILL REEF BEACON 1904.

4. VERTICAL CONTROL

Existing tidal bench marks were recovered and one was identified.

5. CONTOURS AND DRAINAGE

Contours inapplicable.

There is no definite drainage pattern.

6. WOODLAND COVER

Classified in accordance with project instructions.
7. SHORELINE AND ALONGSHORE FEATURES

The mean high water line was inspected by walking the beach and was found to be as date of photography.

The approximate mean low water line has been indicated on single-lens photograph. The nine-lens low water photographs were taken at a higher stage of tide than were the single lens photographs.

The foreshore is of three types: sand, sand and rock, and rock. The various types have been indicated on the photograph.

There is one prominent bluff which was labeled on the photograph and its height given.

All shoreline structures are individually labeled on the photograph.

There are no submarine cables.

8. OFFSHORE FEATURES

The location and heights above water at time and date of field inspection of several rocks off Watch Hill Point were noted on the photograph.

9. LANDMARKS AND AIDS

One landmark was recommended for charting.

One aid to navigation is in operation on Watch Hill Point.

Both the landmark and the aid were listed on Form 567.

10. BOUNDARIES, MONUMENTS AND LINES

There are no boundaries which effect the map.

11. OTHER CONTROL

None was established.

12. OTHER INTERIOR FEATURES

Class 1 buildings were indicated by placing an "x" in red ink on the image of the building. Class 2 buildings were indicated by placing the numeral "2" in red ink on the image of the building. Objects which might be mistaken for buildings were deleted.
Roads were classified in accordance with instructions. There are no national or state highways in the area.

There are no bridges or overhead cables.

13. **GEOGRAPHIC NAMES**

No discrepancies in names were noted during field inspection.

14. **SPECIAL REPORTS AND SUPPLEMENTAL DATA**

Letter of Transmittal No. Ph-142-3, Form 567, Fixed Aids to Navigation, to be forwarded to Washington Office at a later date.

Letter of Transmittal No. Ph-142-4, Form 567, Landmarks for Charts, to be forwarded to Washington Office at a later date.


Submitted
27 October 1954

[Signature]
I. A. Fitzgerald
Photo, Engineer

Approved & Forwarded
**OCT 27 1954**

[Signature]
Lorin F. Woodcock
Chief of Party
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>LATITUDE OR y-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</th>
<th>N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCEAN HOUSE, FLAGSTAFF, 1934</td>
<td>R.I. 19, 1499, 1927</td>
<td>41 18</td>
<td>1137.7, 713.3</td>
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</tr>
<tr>
<td></td>
<td>3-23</td>
<td>71 51</td>
<td>319.4, 1016.3</td>
<td></td>
</tr>
<tr>
<td>PHELPS, 1932</td>
<td>R.I. 1992, 2</td>
<td>41 18</td>
<td>1269.6, 581.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>71 51</td>
<td>305.0, 1090.7</td>
<td></td>
</tr>
<tr>
<td>WATCH HILL LIGHTHOUSE, 1873</td>
<td>R.I. 1927, 492</td>
<td>41 18</td>
<td>1421.0, 1430.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>71 51</td>
<td>757.3, 638.5</td>
<td></td>
</tr>
</tbody>
</table>

1 FT. = 0.3048006 METER

COMPUTED BY: J. B. McDonald

DATE: April 3, 1956

CHECKED BY: C. O. DeMarr

DATE: April 3, 1956
Photogrammetric Plot Report is part of the descriptive report for Survey No. T-11440.

31. **DELINEATION**

The Kelsh plotter was used for delineation on vinylite projection. Field inspection was good.

32. **CONTROL**

Horizontal control was adequate. Vertical control is inapplicable.

33. **SUPPLEMENTAL DATA**

Final Names Standard dated 12/15/54.

34. **CONTOURS AND DRAINAGE**

Drainage is complete. Contours are inapplicable.

35. **SHORELINE AND ALONGSHORE DETAILS**

All shoreline details are from field inspection which was thorough. Low water lines are based on field inspection.

36. **OFFSHORE DETAILS**

Gangway Rock and Watch Hill Reef could not be identified on the photographs and have not been delineated.

37. **LANDMARKS AND AIDS**

Forms 567 have been submitted for one aid to navigation and one landmark.
38. **CONTROL FOR FUTURE SURVEYS**

A set of 1:10,000 scale ratio prints showing points for photo-hydro control has been prepared.

39. **JUNCTIONS**

Junctions have been made as follows:

To the north with T-1147
To the west with T-11451

40. **HORIZONTAL AND VERTICAL ACCURACY**

No comment.

41. through 45.

Inapplicable.

46. **COMPARISON WITH EXISTING MAPS**

USGS 7½ minute quadrangle Watch Hill, R. I. - Conn., scale 1:31680, 1953.

Bureau Survey No. T-9085 (1948), scale 1:10,000.

47. **COMPARISON WITH NAUTICAL CHARTS**

Chart No. 358, scale 1:20,000, published December 12, 1942, corrected to 5/11/56.

Items to be applied to nautical charts immediately: None.
Items to be carried forward: None.

Respectfully submitted
12 February 1958

[Signature]

Joseph W. Vonasek
Carto. (Photo.)

Approved and forwarded

[Signature]

William F. Deane
CDR, C&GS
Baltimore District Officer
PHOTOGRAWMETRIC OFFICE REVIEW

T. 11 / 452


CONTROL STATIONS


ALONGSHORE AREAS

(Nautical Chart Data)


PHYSICAL FEATURES


CULTURAL FEATURES


BOUNDARIES

31. Boundary lines  V  32. Public land lines  

MISCELLANEOUS


40. Reviewer  

Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler  

Supervisor

43. Remarks:  

COMM- DC 34529
49. NOTES TO THE HYDROGRAPHER

A set of 1:10,000 scale ratio prints has been prepared showing detail points for use in locating photo-hydro signals.

There are no recoverable topographic stations.

Gangway Rock and Watch Hill Reef could not be identified on the photographs and have not been delineated.

No inspection was furnished for the charted submarine cable end at Watch Hill Point.
U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED

Baltimore, Maryland  31 October, 1953

I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on the charts indicated.

The positions given have been checked after listing by Henry P. Ricchart

<table>
<thead>
<tr>
<th>STATE</th>
<th>RHODES ISLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>LII</td>
<td>Watch Hill Light (△ Watch Hill Lighthouse)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POSITION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>41 18</td>
<td>421.0</td>
<td>71 51</td>
<td>757.3</td>
<td>1927</td>
<td>T-11152</td>
<td>1673</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on the charts indicated.

The positions given have been checked after listing by Henry P. Richart.

<table>
<thead>
<tr>
<th>State</th>
<th>Rhode Island</th>
<th>Charting Name</th>
<th>Description</th>
<th>Signal Name</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Datum</th>
<th>Method of Location</th>
<th>Date of Location</th>
<th>Charts Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>CUPOLA</td>
<td>Hotel, ht=73 (127)</td>
<td>OCEAN HOUSE FLAGSTAFF</td>
<td>36.68</td>
<td>15.02</td>
<td>NA</td>
<td>Triangulation</td>
<td>1927</td>
<td>1211</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.
48. GEOGRAPHIC NAMES LIST

Block Island Sound
East Beach
Little Narragansett Bay
Mickill Pond
Napatree Beach
New York
Rhode Island
Sugar Reef Passage
Watch Hill
Watch Hill Beach
Watch Hill Cove
Watch Hill Passage
Watch Hill Point

GEографIC NAMES SECTION
4 May 1960
62. Comparison with Registered Topographic Surveys

<table>
<thead>
<tr>
<th>Year</th>
<th>Scale</th>
<th>Date</th>
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<tbody>
<tr>
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<td>1:10,000</td>
<td>1839-55</td>
</tr>
<tr>
<td>1882</td>
<td></td>
<td>1882-83</td>
</tr>
<tr>
<td>1886</td>
<td></td>
<td>1886</td>
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<tr>
<td>1948</td>
<td></td>
<td>1948</td>
</tr>
</tbody>
</table>

The new survey supercedes the above previous surveys in common area for new nautical chart construction. Survey T-9085 was carefully compared with latest photography. Where offshore rocks appeared on T-9085 and could be seen on at least two photographs, they were added during final review. The photographs were taken at .3' above MLW.

63. Comparison with Maps of Other Agencies

USGS Watch Hill, R. I.-Conn. 1:31,680 1953

64. Comparison with Contemporary Hydrographic Surveys

None

65. Comparison with Nautical Charts

1211 1:80,000 7 Ed. Jan. 17, 1941 Revised 8/24/59

66. Adequacy of Results and Future Surveys

This survey complies with instructions and meets the National Standards of Map Accuracy.

Submitted by

A. R. Heywood

Approved

L. C. Lande, Chief
Review Section

E. L. Swanson, Chief
Photogrammetry Division

Maurice Thalman
Chief, Chart Division

J. E. Ward
Chief, Coastal Surveys Division
### NAUTICAL CHARTS BRANCH

#### SURVEY NO. T-11452

Record of Application to Charts

<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-23-73</td>
<td>358</td>
<td>DL Polinac</td>
<td><strong>FULLY APPLIED, SUPERCEDED BY BP 62286 RS-723</strong></td>
</tr>
</tbody>
</table>

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under “Comparison with Charts” in the Review.