## T-12985

**FORM C&GS-504**

**U.S. DEPARTMENT OF COMMERCE**

**ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION**

**COAST AND GEODETIC SURVEY**

### DESCRIPTIVE REPORT

**Type of Survey** Shoreline (Photogrammetric)

**Field No:** 

**Office No:** T-12985

### LOCALITY

**State:** Massachusetts

**General locality** Boston to Plum Island

**Locality** Nahant Harbor

**1965-69**

**CHIEF OF PARTY**

Alfred C. Holmes, Director, AMC

### LIBRARY & ARCHIVES

**DATE**
DESCRIPTIVE REPORT - DATA RECORD
T-12985

PROJECT NO.: Job PH-6601

FIELD OFFICE: None

PHOTOGRAMMETRIC OFFICE: Atlantic Marine Center, Norfolk, VA

CHIEF OF PARTY: Alfred C. Holmes, Director, AMC

OFFICER-IN-CHARGE:

INSTRUCTIONS DATED:
- Field - Aug. 4, 1965
- Field - Aug. 19, 1965 - Provisional Instructions, Aerial Photography
- Office - Oct. 8, 1965 - Instructions, Aerotriangulation
- Office - Jan. 27, 1966 -
- Office - Feb. 2, 1966 - Instructions, Aerotriangulation
- Office - Apr. 28, 1966
- Field - May 20, 1966 - Supplement I
- Office - July 11, 1966 - Supplement I

METHOD OF COMPILATION: Wild B-8 & Graphic

MANUSCRIPT SCALE: 1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE: 1:15,000 Pantographed to 1:10,000

DATE RECEIVED IN WASHINGTON OFFICE: DATE REPORTED TO NAUTICAL CHART BRANCH:

APPLIED TO CHART NO.: DATE: DATE REGISTERED: SEP 75

GEOMETRIC DATUM: NA 1927

REFERENCE STATION: Nahant Coast Guard Cupola 1919

LAT.: 42o 25' 50.464" (1557.11) LONG.: 70o 56' 103.890" (88.9)

PLANE COORDINATES: (V):
x = 521,846.24 Ft. y = 752,695.29 Ft.

STATE: MASS ZONE: Mainland

ADJUSTED: □ UNADJUSTED: □

LATERAL 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.
### DESCRIPTIVE REPORT - DATA RECORD

#### T-12985

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<tr>
<th>FIELD INSPECTION BY (II):</th>
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<tr>
<th>MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):</th>
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| Air Photo Compilation  
Date of Photography: August 26, 1966                             |

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<td>L.G. Neterer, Jr.</td>
<td>9/22/66</td>
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<td>C. Blood</td>
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<tr>
<td>H.P. Eichert</td>
<td>11/1/66</td>
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<th>STEREOSCOPIC INSTRUMENT COMPILATION (III):</th>
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<td>Wild B-8</td>
<td>B.H. Barnes</td>
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<td>Kelsh Plotter</td>
<td>CONTOURS</td>
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<th>MANUSCRIPT Delineated BY (III):</th>
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<td>W.P. White</td>
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<th>PHOTOMGRAMMETRIC OFFICE REVIEW BY (III):</th>
<th>DATE</th>
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<tbody>
<tr>
<td>L.L. Graves</td>
<td>Nov. 1969</td>
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<tr>
<th>REMARKS:</th>
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</thead>
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### US COMM. DC 353938-P58
**PHOTOGRAPHS (III)**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>DATE</th>
<th>TIME</th>
<th>SCALE</th>
<th>STAGE OF TIDE</th>
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<tr>
<td>66-L-2936</td>
<td>26 Apr. 1966</td>
<td>11:30</td>
<td>1:30,000</td>
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**TIDE (III)**

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<td>Boston</td>
<td></td>
<td></td>
<td>9.5</td>
<td>11.0</td>
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**SUBORDINATE STATION:**

- Boston
- Nahant

**WASHINGTON OFFICE REVIEW BY (IV):**

<table>
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<th>Bernard Kurs, AMC</th>
<th>DATE:</th>
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<tbody>
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<td></td>
<td>10/73</td>
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**PROOF EDIT BY (IV):**

- None

**NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (III):**

- 16

**RECOVERED:**

- 10

**IDENTIFIED:**

- 6

**NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):**

- None

**NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):**

- None

**REMARKS:**

This stage of tide at the time of photography was determined by staff readings at Gloucester Harbor (Ten Pound Island).

Photographs 65-S-7236, 65-S-7237, 65-S-6934R and 65-S-6935 R were used to compile this manuscript, however the centers are located on T-12984 and T-12982.
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<td>Superseded</td>
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<td>Field Edit Applied</td>
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<td>Superseded</td>
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<tr>
<td>Compilation Complete</td>
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<tr>
<td>Final Review</td>
<td>Oct. 1973</td>
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JOB PH-6601

BOSTON TO PLUM ISLAND

SHORELINE MAPPING AT 1:5,000 & 1:10,000 SCALE

CHART 613-SC

CHART TOPOGRAPHY AT 1:40,000 SCALE

TOTAL 79
SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORTS PH-6601

This shoreline manuscript is one of thirty-one maps that make up this project. The primary purpose of the project is to provide contemporary shoreline for nautical chart construction. Maps were also used to provide photogrammetric hydro support data for the hydrographic surveys to be conducted in the same area.

The only field work prior to compilation was recovery and identification of horizontal control required for aeroetri-angulation.

Field edit was accomplished by a photogrammetric field party during the years 1967, 1968, 1969 and 1970. The field edit was adequate.

Cronaflex positives and ozalids of the manuscripts were furnished for the use of the field editor and the preparation of the hydrographers boat sheets. Accompanying these were specially prepared ratio photographs to aid in the location of hydrographic signals.

Final review was accomplished at the Atlantic Marine Center from September, 1973 to April, 1974.

A cronaflex positive and negative of each reviewed manuscript are being forwarded for record and registry.
FIELD INSPECTION REPORT

T-12985

There were no field inspection prior to compilation.
PHOTOGAMMETRIC PLOT REPORT
Job PH-6601
Boston to Plum Island, Massachusetts

November 1, 1966

21. **Area Covered**

This report covers aerotriangulation for 1:5,000 and 1:10,000 scale surveys in an area north of Boston, Massachusetts. The 1:5,000 scale surveys are T-12963 thru T-12977; the 1:10,000 scale surveys are T-12959 thru T-12967 and T-12978 thru T-12985.

22. **Method**

Four strips were bridged by the analytic method. Strip 1 was at a scale of 1:30,000 using infrared photography; Strips 2 and 3 at a scale of 1:30,000 using color film; and Strip 4 using color film at a scale of 1:15,000.

The 1:30,000 scale bridges were to be used for the 1:10,000 scale compilation. The four-model 1:15,000 scale bridge was necessary to complete coverage on surveys T-12972 and T-12978.

Common points between the 1:30,000 and 1:15,000 scale photog-raphy were selected. Plane coordinate positions from our bridges were determined so that 1:15,000 scale models could be controlled to compile the 1:5,000 scale surveys. Plane coordinates are on the Massachusetts State Grid (Mainland). The attached aerotriangulation sketch shows location of strips bridged. Closures to control have been tabulated.

23. **Adequacy of Control**

Field identified control was supplemented by office identified horizontal control points and was adequate.

24. **Supplemental Data**

Vertical control points needed were taken from USGS quads.

25. **Photography**

The color photography was excellent. The infrared photography, which is not particularly suited for bridging, was adequate.

Respectfully submitted,

Henry P. Eichert
AEROTRIANGULATION SKETCH
BOSTON TO PLUM ISLAND
PH-6601
May, 1966

△ control used in adjustment
△ control used as check


**STRIP #1**

1. MEAD 2 (MGS), 1939
   - target: (+0.1, +0.1)
   - sub. pt.: (-0.9, +1.7)

2. CHOATE, 1849
   - target: (-0.4, -0.2)

3. PLUM ISLAND COAST GUARD CUPOLA, 1943
   - target: (+0.5, +0.3)
   - sub. pt.: (-2.8, +4.5)

4. OLD TOWN, 1850
   - target: (-0.2, -0.2)
   - RM #1: (-0.2, +0.3)

**STRIP #2**

5. STONEHAVEN (ROCKFORT TOWN (MGS)), 1939
   - target: (+1.2, -2.6)
   - sub. pt. A: (-0.7, -1.6)
   - sub. pt. B: (+1.3, -3.0)

- 1. MEAD 2 (MGS), 1939
   - target: (0.0, +3.3)
   - sub. pt.: (+0.9, +3.6)
7. MANCHESTER CHURCH DARK SPIRE, 1848
   target (-6.0, +0.8)
   sub. pt. A (-7.1, +3.1)

8. SALEM, NEW ENGLAND POWER CO., SOUTH STACK, 1954
   office identified (+4.8, +1.7)

9. FORT PICKERING LIGHTHOUSE, 1877
   office identified (+6.0, +1.0)

14. HIGH ROCK 2 (MGS)
    sub. pl. A (+3.2, -4.4)
    sub. pl. B (+2.0, -2.8)

15. HIGH ROCK 3, 1943
    office identified (+1.8, -3.7)

17. REVERE CATHOLIC CHURCH, TOWER, 1934
    office identified (-4.0, -4.0)

19. BOOTH (MGS), 1934
    sub. pl. A (+3.4, -1.4)

21. CHELSEA QUIGLEY MEM. HOSPITAL, W.T., 1958
    office identified (-1.5, +2.2)

20. MEDFORD RADIO STATION, WEZF-FM TOWER, 1958
    office identified (+2.1, -1.0)

21. MEDFORD TV STATION, WNAC TOWER, 1958
    office identified (+5.3, -1.0)
22. MEDFORD RADIO STATION WEZF, NE TOWER, 1955
   office identified (+1.4, +3.0)
23. MEDFORD RADIO STATION WEZF, SW TOWER, 1955
   office identified (+1.2, +3.1)

STRIP #3
29. BOSTON STATE HOUSE, 1934
   office identified (+2.6, +5.5)
27. BOSTON CUSTOM HOUSE TOWER, 1916
   office identified (+3.2, +4.7)
25. CHARLESTOWN BUNKER HILL MON., 1846
   office identified (+2.2, +0.1)
26. EAST BOSTON, BOSTON AND ALBANY R.R. TANK, 1916
   office identified (+1.6, +5.5)
24. CHELSEA QUIGLEY MEM. HOSPITAL W.T., 1958
   office identified (+2.3, -2.0)
17. REVERE CATHOLIC CHURCH TOWER, 1924
   office identified (+4.0, -5.0)
13. REVERE BEACH STACK, 1917
   office identified (-41, -22)
14. HIGH ROCK #2
   Sub-p. B (+2.9, +3.9)
16. NANTUCKET COAST GUARD CUPOLA, 1919
   office identified (+3.6, +6.4)
13. Swampscott High School Finial, 1940
   office identified (+0.7, +3.4)

12. Swampscott Larger Standpipe, 1934
   office identified (+0.7, +1.8)

11. Marblehead, Abbot Tower, 1919
   office identified (-0.6, +4.4)

10. Marblehead Lighthouse, 1914
    office identified (+2.9, +5.1)

 7. Manchester Church Park Spire, 1848
    target (-3.5, -5.8)
    sub pt. A (-4.1, -5.2)

 1. Mead 2 (M65), 1934
    target (+3.8, -0.7)
    sub pt. (+6.2, -1.2)

 5. Stonehaven (Rockport Town (M65)), 1939
    target (-2.1, +0.3)
    sub pt. A (-1.3, +1.6)
    sub pt. B (-2.0, +1.2)

 6. Straitsmouth Lighthouse, 1902
    office identified (-3.1, -5.2)


29. Danvers, Cooke & Cooke Co. chimney, 1919
   Home sta. (-0.18 + 0.79)
   SS "A" (-0.01 - 0.01)
   SS "B" (-1.83 + 1.74)

30. Beverly, United Shoe Mfg. Co. stk., 1934
    (-0.01 - 0.01)

    (-1.29 + 1.55)

32. Beverly St. Mary's Church spire, 1935
    (-1.32 - 1.09)

33. Beverly 1st Baptist Church, 1914
    (+1.35 + 1.10)

tie points

12601 (-0.28 - 6.78)
12602 (-3.79 - 3.20)
13601 (-2.52 - 3.47)
14601 (-3.15 - 1.53)
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<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR Y COORDINATE</th>
<th>LONGITUDE OR X COORDINATE</th>
<th>DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 PT. = 304.806 METRO)</th>
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<tr>
<td>NAHANT COAST GUARD CUPOLA 1919</td>
<td>Vol. I Pg. 59</td>
<td>NA</td>
<td>42° 25' 50.464&quot;</td>
<td>70° 56' 03.890&quot;</td>
<td>1557.1 (294.2)</td>
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<td>Vol. I Pg. 59</td>
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<td>42° 26' 04.001&quot;</td>
<td>70° 56' 05.074&quot;</td>
<td>123.5 (1727.8)</td>
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<td>B 3 S 3, B 5 S 5 9 &amp; G6, 1943</td>
<td>Vol. I Pg. 384</td>
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<td>42° 25' 01.876&quot;</td>
<td>70° 54' 35.197&quot;</td>
<td>57.9 (1793.4)</td>
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<td>Vol. I Pg. 392</td>
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<td>42° 25' 24.457&quot;</td>
<td>70° 54' 34.874&quot;</td>
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<td>42° 25' 00.667&quot;</td>
<td>70° 54' 35.824&quot;</td>
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<td>70° 55' 57.826&quot;</td>
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<td>Vol. I Pg. 28</td>
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<td>42° 25' 00.529&quot;</td>
<td>70° 56' 12.635&quot;</td>
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<td>SHAG ROCK DATUM, 1940</td>
<td>Vol. I Pg. 288</td>
<td>&quot;</td>
<td>42° 25' 50.622&quot;</td>
<td>70° 54' 59.837&quot;</td>
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<td>EGG ROCK, 1847</td>
<td>Vol. I Pg. 468</td>
<td>&quot;</td>
<td>42° 25' 59.837&quot;</td>
<td>70° 53' 53.370&quot;</td>
<td>598.0 (273.8)</td>
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</table>

COMPUTED BY: L. M. Graves  DATE: 10/12/66  CHECKED BY: J. S. P.  DATE: 10/21/66
COMPILATION REPORT

T-12985

JOB PH-6601

31.  **DELINEATION**

   Delineation was done with the Wild B-8. There was no field inspection. Detail on the photographs was office interpreted.

32.  **CONTROL**

   See Photogrammetric Plot Report.

33.  **SUPPLEMENTAL DATA**

   None

34.  **CONTOURS AND DRAINAGE**

   Contours not applicable. Drainage was delineated from office interpretation of the photographs.

35.  **SHORELINE AND ALONGSHORE DETAILS**

   The mean high water line was delineated from office interpretation of photographs taken at mean high water.

   The low water line was delineated by the wild B-8. Rocks were also located by the B-8.

36.  **OFFSHORE DETAILS**

   Offshore details are rocks awash and small islands located by B-8 and graphically.

37.  **LANDMARKS AND AIDS**

   Appropriate copies of Forms 567 for 6 landmarks, 1 nonfloating aid and 2 landmarks for deletion were forwarded to the Rockville office under date (Dec. 10, 1969).

38.  **CONTROL FOR FUTURE SURVEYS**

   None
39. JUNCTIONS

Satisfactory junctions have been made with T-12982 to the north and T-12984 to the west. There are no contemporary surveys to the east and south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with U.S.G.S. Quadrangle Lynn, Massachusetts, scale 1:24,000 dated 1956.

47. COMPARISON WITH NAUTICAL CHARTS


ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None

ITEMS TO BE CARRIED FORWARD

None

Submitted:

Richard R. White
R.R. White
Cartographic Technician

Approved:

Albert C. Rauck, Jr.
Chief, Coastal Mapping Section, AMC
GEOGRAPHIC NAMES

FINAL NAME SHEETS

Ph-6601 (Boston to Plum Island, Mass.)

T-12985

Baileys Hill
Bass Point
Bass Rock
Black Mine
Black Rock Beach
Broad Sound
Cedar Point
Dorothy Cove
East Point
Egg Rock
Great Ledge
Joe Beach Ledge
Johns Peril
Josephs Beach
Little Nahant
Little Nahant Beach
Massachusetts Bay
Nahant
Nahant Bay
Nahant Harbor
Pea Island
Pond Beach
Sanders Ledge
Shag Rocks
Spouting Horn
Swallow Cave
West Cliff

Prepared by:

C. E. Harrington
Staff Geographer
49. NOTES FOR THE HYDROGRAPHER AND FIELD EDITOR

Separate edit ozalids have been prepared for your respective uses. These are intended to simplify your efforts and eliminate the possibility of any duplication of edit procedures.

On each are noted pertinent remarks concerning doubtful interpretations or items of compilation requiring additional clarification and/or verification.

For the field editor, notes include all items inshore from the approximate M.L.W.L. All offshore items are noted for the Hydrographer's attention.

Among these items requiring edit by both parties, are "Landmarks and Aids". These are indicated by a numeral. The following key is an explanation of the attention they may require:

1. Object not visible on photos. Verify by edit.
2. Object visible, position verified. (by compiler)
3. Object visible, position re-determined. Verify by edit.
4. Object which may be a landmark or new aid. Verify by edit.

Forms 567 should be submitted for all "Landmarks and Aids".
49. **NOTES TO THE HYDROGRAPHER**

Reef areas shown on this sheet were determined by office inspection of aerial photographs of the area and are shown to aid the hydrographer in locating possible hazardous areas. Their existence and extent should be verified by the hydrographer. If an area that is shown does not exist, this fact should be noted on the discrepancy sheet.

Bass Rock, Joe Beach Ledge, Shag Rocks and Flip Rock were outside of photo coverage and must be located and verified by hydrographers. Also, please locate area called North Channel.
PHOTOGRAMMETRIC OFFICE REVIEW
T. 1985-2985

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<th>1. PROJECTION AND GRIDS</th>
<th>2. TITLE</th>
<th>3. MANUSCRIPT NUMBERS</th>
<th>4. MANUSCRIPT SIZE</th>
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CONTROL STATIONS

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<tr>
<th>5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY</th>
<th>6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)</th>
<th>7. PHOTO HYDRO STATIONS</th>
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BENCH MARKS

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<tr>
<th>8. BENCH MARKS</th>
<th>9. PLOTTING OF SEXTANT FIXES</th>
<th>10. PHOTOGRAMMETRIC PLOT REPORT</th>
<th>11. DETAIL POINTS</th>
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ALONGSHORE AREAS (Nautical Chart Data)

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<tr>
<th>12. SHORELINE</th>
<th>13. LOW-WATER LINE</th>
<th>14. ROCKS, SHOALS, ETC.</th>
<th>15. BRIDGES</th>
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AIDS TO NAVIGATION

<table>
<thead>
<tr>
<th>16. AIDS TO NAVIGATION</th>
<th>17. LANDMARKS</th>
<th>18. OTHER ALONGSHORE PHYSICAL FEATURES</th>
<th>19. OTHER ALONGSHORE CULTURAL FEATURES</th>
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PHYSICAL FEATURES

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<tr>
<th>20. WATER FEATURES</th>
<th>21. NATURAL GROUND COVER</th>
<th>22. PLANETABLE CONTOURS</th>
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STEREOSCOPIC INSTRUMENT CONTOURS

<table>
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<tr>
<th>23. STEREOSCOPIC INSTRUMENT CONTOURS</th>
<th>24. CONTOURS IN GENERAL</th>
<th>25. SPOT ELEVATIONS</th>
<th>26. OTHER PHYSICAL FEATURES</th>
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<tbody>
<tr>
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CULTURAL FEATURES

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<thead>
<tr>
<th>27. ROADS</th>
<th>28. BUILDINGS</th>
<th>29. RAILROADS</th>
<th>30. OTHER CULTURAL FEATURES</th>
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</thead>
<tbody>
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BOUNDARIES

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<thead>
<tr>
<th>31. BOUNDARY LINES</th>
<th>32. PUBLIC LAND LINES</th>
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MISCELLANEOUS

<table>
<thead>
<tr>
<th>33. GEOGRAPHIC NAMES</th>
<th>34. JUNCTIONS</th>
<th>35. LEGIBILITY OF THE MANUSCRIPT</th>
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DISCREPANCY OVERLAY

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<tr>
<th>36. DISCREPANCY OVERLAY</th>
<th>37. DESCRIPTIVE REPORT</th>
<th>38. FIELD INSPECTION PHOTOGRAPHS</th>
<th>39. FORMS</th>
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REVIEWED

<table>
<thead>
<tr>
<th>Reviewed by:</th>
<th>Supervisory Review Section or Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>L.L. Graves</td>
<td>Albert C. Rauck, Jr.</td>
</tr>
</tbody>
</table>

REMARKS

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

<table>
<thead>
<tr>
<th>Compiler:</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.J.P.</td>
<td>11/15/69</td>
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</table>

SUPERVISOR

<table>
<thead>
<tr>
<th>Supervisor:</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albert C. Rauck, Jr.</td>
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REMARKS

<table>
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<tr>
<th>Reviewed:</th>
<th>Date</th>
</tr>
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<tbody>
<tr>
<td>R.J. Pates</td>
<td>6/23/72</td>
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<table>
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<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Albert C. Rauck, Jr.</td>
<td></td>
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</table>
FIELD EDIT REPORT
JOB PH-6601
Map T-12986
Massachusetts

This map was field-edited during August and September 1969. The map was compiled without field inspection prior to compilation, therefore, a complete and thorough field edit was done. All field notes were made in violet ink on the ratio prints and referenced from the field edit sheet.

52. ADEQUACY OF COMPILATION

The adequacy of the compilation was good. A few representative areas were selected to check the high and low-water line. Distances were measured from identifiable points on the photograph. All of which agreed generally with the compilers' interpretation.

54. RECOMMENDATIONS

None

56. LANDMARKS AND AIDS

Form 567 is submitted for all nautical landmarks and fixed aids to navigation within the limits of this map. Several of the old nautical landmarks have been destroyed. The concrete observation towers are very prominent. They are the type built during World War 2 for protection of our coast line. These same type towers are found along the east coast in many other states.

Bass Rock Daybeacon was not questioned on the field edit sheet by the compiler. The field editor located it by direct photo identification and checking it with two theodolite cuts from triangulation stations. The daybeacon is located on the eastern end of Bass Rock. It is marked by a red triangular daymark on an iron spindle and is believed to have not been in place near as long as other spindles in the general area.

57. ROCKS AND ROCK LEDGES

Rocks in question and rock changes have been shown on the photographs and referenced from the field edit ozalid.

At Black Rock Beach, two small rocks were found. This is a very shallow area composed of sand and mud. Dark spots on the photograph were misinterpreted by compiler as rocks. The compiler could see something on the photograph about 1500 feet north of Bass Rock, which he labeled a rock. The area was thoroughly checked at low-water and nothing could be found. The photographs were also misleading at Joe Beach Ledge. What appeared on the photograph to be rocks, were not rocks, but something causing a breaker. Joe Beach Ledge appears as a dark circular area on the photograph and is located several hundred feet northeast. You will note that when the 1966 photograph was flown that the water was extremely rough.
58. MISCELLANEOUS

Several streets, roads etc. have been shown by notation on the field edit control.
Field Edit corrections have been shown on the following photographs: 65-S-7236, 65-S-7237 and 66-L-2936.

Submitted By:

[Signature]
Ernest W. Hartford
Surveying Technician
September 5, 1969
NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Atlantic Marine Center  December 2, 1969

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

R. J. Pate

Allan L. Powell, Director, AMC

<table>
<thead>
<tr>
<th>STATE</th>
<th>MASSACHUSETTS</th>
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<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>NAHANT HARBOR</td>
<td></td>
</tr>
<tr>
<td>DAYBEACON</td>
<td>Bass Rock Daybeacon</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-13 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if re-determined, shall be reported on this form. Revisions shall show both the old and new positions. 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
# NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Atlantic Marine Center Dec. 2 1969

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 R. J. Pate

Allen W. Powell, Director, AMC

Chief of Party

### MASSACHUSETTS

<table>
<thead>
<tr>
<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><strong>NAHANT HARBOR</strong></td>
<td>(G70P &amp; B5/5 S5/5 &amp; B5/3S5/3) Square, Concrete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>42 25</td>
<td>24.457</td>
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<tr>
<td><strong>TOWER</strong></td>
<td>ht=65(115)</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>OBS</strong></td>
<td>(B3/9,83/9,85/6S5/6 &amp; Gb, 1943) Square, Concrete ht=85(125)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOWER</strong></td>
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</tr>
<tr>
<td><strong>OBS</strong></td>
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<td><strong>OBS</strong></td>
<td>(B4/2S4/2,1943) Square, Concrete ht=55(125)</td>
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</tr>
<tr>
<td><strong>CUPOLA</strong></td>
<td>(NAHANT COAST GUARD CUPOLA, 1919) N.W. Corner of CG Bldg. Red Top, White Bldg. ht=54(64)</td>
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<td></td>
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<tr>
<td><strong>CUPOLA</strong></td>
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</tr>
<tr>
<td><strong>CUPOLA</strong></td>
<td>(LITTLE NAHANT CUPOLA, 1919) Black, S.W. Side 3-Story, Green White house ht=66(106)</td>
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</tbody>
</table>

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* TABULATE SECONDS AND METERS
# Non-floating Aids or Landmarks for Charts

**Atlantic Marine Center**  
December 2, 1969

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

The positions given have been checked after listing by R.J. Pate.

---

<table>
<thead>
<tr>
<th>State</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 and Survey No.</th>
<th>Date of Location</th>
<th>Charts Affected</th>
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</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>NAHANT HARBOR</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>CH. SP. (NAHANT CHURCH STEEPLE, 1894)</td>
<td>Raz ed</td>
<td></td>
<td>42 25</td>
<td>70 55</td>
<td>02.21</td>
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<td>70 55</td>
<td></td>
<td>T12985 7/23/69</td>
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</tr>
</tbody>
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† TABULATE SECONDS AND METERS

USCOMM-DC 36485-P60
REVIEW REPORT T-12985

SHORELINE

October 1973

61. GENERAL

See summary which is page 6 of the Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

None available in this office at this time.

T-12985 supersedes any other previous map for chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A visual comparison was made with U.S.G.S. Quadrangle Lynn, MA dated 1956 at 1:24,000 scale. There is good general agreement with minor shoreline differences.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

None

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 240, dated May 19, 1973 at 1:25,000 scale. There is good general agreement with minor differences in shoreline due to natural and man-made changes. A rock awash indicated on the chart at Joe Beach Ledge is not visible on the photos.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

Reviewed by:

[Signature]

Bernard Kurs
Cartographer
Approved for forwarding:

Víctor E. Serena
Chief, Photogrammetric Branch, AMC

Approved:

Randolph C. Spring solder
Chief, Photogrammetric Branch, Chief, Coastal Mapping Division