<table>
<thead>
<tr>
<th><strong>Type of Survey</strong></th>
<th>Shoreline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field No.</strong></td>
<td>Office No.</td>
</tr>
<tr>
<td><strong>State</strong></td>
<td>Massachusetts</td>
</tr>
<tr>
<td><strong>General locality</strong></td>
<td>Boston to Plum Island</td>
</tr>
<tr>
<td><strong>Locality</strong></td>
<td>Sandy Bay</td>
</tr>
</tbody>
</table>

**1965-1969**

**CHIEF OF PARTY**

Alfred C. Holmes, Director, AMC

**LIBRARY & ARCHIVES**

**DATE**
PROJECT NO. (III): 
PH-6601

FIELD OFFICE (III): 

CHIEF OF PARTY 

PHOTOGRAMMETRIC OFFICE (III): 

OFFICER-IN-CHARGE 

Atlantic Marine Center 
Alfred C. Holmes, Director, AMC

INSTRUCTIONS DATED (III) (IV): 
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 II

METHOD OF COMPILATION (III): 
Wild B-8 Plotter and Graphic

MANUSCRIPT SCALE (III): 
1:10,000

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

DATE RECEIVED IN WASHINGTON OFFICE (IV): 

DATE REPORTED TO NAUTICAL CHART BRANCH (IV): 
S.E.D.T. 1475

APPLIED TO CHART NO. 

DATE: 

DATE REGISTERED (IV): 

GEOGRAPHIC DATUM (III): 
N. A. 1927

REFERENCE STATION (III): 
Stonehaven (Rockport Town) 1939

LAT.: 
42° 39' 38.370" 

LONG.: 
70° 35' 46.739"

PLANE COORDINATES (IV): 

Y = 606, 439.69 Ft. 
X = 943, 083.15 Ft.

STATE 
Massachusetts

ZONE 
Mainland

ADJUSTED 

UNADJUSTED 

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

VERTICAL DATUM (III): 

MEAN ELLIPSOIDAL 

OMM NUNERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (III) 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

### FIELD INSPECTION BY (III):

None

### MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):

Air photo Compilation Date of Photography: August 24, 1965

### PROJECTION AND GRIDS RULED BY (IV):

A. Bethea

**DATE:** 2-18-69

### PROJECTION AND GRIDS CHECKED BY (IV):

L. F. VanScoy

**DATE:** 2-18-69

### CONTROL PLOTTED BY (III):

L. O. Neterer Jr.

**DATE:** 9/15/66

### CONTROL CHECKED BY (III):

C. Blood

**DATE:** 9/15/66

### RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):

H. P. Eichert

**DATE:** 11-1-66

### STEREOSCOPIC INSTRUMENT COMPILATION (III):

**PLANIMETRY**

B. H. Barnes

**DATE:** 5- -67

**CONTOURS**

Inapplicable

**DATE**

### MANUSCRIPT DELINEATED BY (III):

Traced By:

B. H. Barnes

**DATE:** 5- -67

8-8-69

### SCRIBING BY (III):

C. H. Bishop

**DATE**

### PHOTOGRAMMETRIC OFFICE REVIEW BY (III):

Charles H. Bishop

**DATE:** 8-8-69

### REMARKS:
### PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>DATE</th>
<th>TIME</th>
<th>SCALE</th>
<th>STAGE OF TIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>65S(C) 7209</td>
<td>Aug. 31, 1969</td>
<td>0727</td>
<td>1:30,000</td>
<td>0.2 Ft. above M.L.W.*</td>
</tr>
<tr>
<td>65S(C) 7251-7252</td>
<td>Aug. 31, 1969</td>
<td>0748</td>
<td>1:30,000</td>
<td>0.2 Ft. below M.L.W.*</td>
</tr>
<tr>
<td>65S 6906R</td>
<td>Aug. 24, 1969</td>
<td>0832</td>
<td>1:30,000</td>
<td>8.5 Ft. above M.L.W.*</td>
</tr>
<tr>
<td>65S 6949R-6951R</td>
<td>Aug. 24, 1969</td>
<td>0853</td>
<td>1:30,000</td>
<td>8.6 Ft. above M.L.W.*</td>
</tr>
</tbody>
</table>

### TIDE (III)

<table>
<thead>
<tr>
<th>REFERENCE STATION:</th>
<th>Portland, ME</th>
<th>MEAN RANGE: 9.0</th>
<th>SPRING RANGE: 10.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBORDINATE STATION:</td>
<td>Rockport, MA</td>
<td>MEAN RANGE: 8.5</td>
<td>SPRING RANGE: 10.0</td>
</tr>
</tbody>
</table>

### REMARKS:

*The stage of tide at time of photography was determined from readings on a staff at Plum Island (Merrimack River Entrance). See Instructions, Office, dated April 28, 1966.*
<table>
<thead>
<tr>
<th>COMPILATION RECORD</th>
<th>COMPLETION DATE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alongshore area for Hydrography</td>
<td>May 1967</td>
<td>Superseded</td>
</tr>
<tr>
<td>Compilation complete pending Field Edit</td>
<td>Dec. 1967</td>
<td>Superseded</td>
</tr>
<tr>
<td>Broken manuscript re-drafted, Field Edit applied, compilation complete</td>
<td>Aug. 1969</td>
<td>Superseded</td>
</tr>
<tr>
<td>Final Review</td>
<td>Feb. 1974</td>
<td></td>
</tr>
</tbody>
</table>
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 aerotriangulation.

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-12964

There was no field inspection prior to compilation.
PHOTOGRAMMETRIC 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-12968 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 photography 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 for control for strip adjustments 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

Δ control used in adjustment
Δ control used as check
STRIP #1

1. MEAD 2 (MGS), 1934
   target (+0.1, +0.1)
   sub. pt. (-0.9, +1.7)

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

3. PLUM ISLAND COAST GUARD SCAFFOLD, 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 (ROCKPORT 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), 1934
   target (0.0, +3.3)
   sub. pt. (+0.7, +3.6)
7. Manchester Church. Dark spire, 1842.
   Target (-6.0, +0.0)
   Sub pt. A (-7.1, +3.1)

   Office identified (+4.8, +1.9)

   Office identified (+6.0, +1.0)

14. High Rock 2 (MGS)
   Sub pt. A (+3.2, -4.4)
   Sub pt. B (+2.0, -2.8)

   Office identified (+1.8, -3.7)

17. Revere Catholic Church Tower, 1934.
   Office identified (-4.0, -4.0)

   Sub pt. A (+3.4, -1.4)

   Office identified (-1.5, +2.2)

    Office identified (+2.1, -1.0)

    Office identified (+5.3, -1.0)
22. MEDFORD RADIO STATION. WEEI. NE TOWER, 1953
   Office identified (+1.4, 3.0)

23. MEDFORD RADIO STATION. WEEI. SW TOWER, 1953
   Office identified (+1.2, 3.1)

strip #3

29. BOSTON STATE HOUSE, 1934
   Office identified (+2.5, 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., 1953
   Office identified (+2.3, -2.0)

17. REVERE CATHOLIC CHURCH TOWER, 1934
   Office identified (-4.0, -5.0)

18. REVERE BEACH STACK, 1917
   Office identified (-.41, -2.2)

14. HIGH ROCK #2
   sub pt. B (+2.9, +3.9)

   Office identified (+3.6, +6.4)
11. Marblehead, Abbot Tower, 1717
   Office identified (0.6, 14.9)

10. Marblehead Lighthouse, 1914
    Office identified (0.9, 15.1)

9. Manchester Church Park Spire, 1848
   Target (-3.5, -5.8)
   Sub pt A (-4.1, -5.2)

8. Head 2 (M65), 1934
   Target (+3.8, -0.7)
   Sub pt (16.2, -1.2)

7. 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)
STICK # 47

29 DARNERS, COKE & COKE CO. CHALMETTE, LA.

<table>
<thead>
<tr>
<th>Home Sta.</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(0.18)</td>
<td>(-0.01)</td>
<td>(-1.83)</td>
</tr>
<tr>
<td>(0.79)</td>
<td>(-0.01)</td>
<td>(1.74)</td>
</tr>
</tbody>
</table>

30 BEVERLY, UNITED SHOE MFG. CO. STK., 1934

<table>
<thead>
<tr>
<th>31 BEVERLY, CORD FELLOWS COMRADE, 1934</th>
</tr>
</thead>
<tbody>
<tr>
<td>(0.01) - 0.01</td>
</tr>
<tr>
<td>(-1.29) + 1.02</td>
</tr>
</tbody>
</table>

32 BEVERLY, ST. MARY'S CHURCH SPIRE, 1934

33 BEVERLY, 1ST BAPTIST CHURCH, 1914

<table>
<thead>
<tr>
<th>Tie Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>12601</td>
</tr>
<tr>
<td>12602</td>
</tr>
<tr>
<td>13601</td>
</tr>
<tr>
<td>14601</td>
</tr>
</tbody>
</table>
## DESCRIPTIVE REPORT CONTROL RECORD

<table>
<thead>
<tr>
<th>MAP T.</th>
<th>12964</th>
<th>PROJECT NO.</th>
<th>PH 6601</th>
<th>SCALE OF MAP</th>
<th>1:10,000</th>
<th>SCALE FACTOR</th>
<th>NA. 1927 - DATUM</th>
<th>DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 FT. = 304.8006 meter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATION</td>
<td>SOURCE OF INFORMATION (INDEX)</td>
<td>DATUM</td>
<td>LATITUDE OR Y COORDINATE</td>
<td>LONGITUDE OR X COORDINATE</td>
<td>FORWARD</td>
<td>BACK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRAITSMOUTH LIGHTHOUSE, 1902</td>
<td>G.P. Vol. 1 Page 280</td>
<td>NA 1927</td>
<td>42°</td>
<td>39° 43' 786</td>
<td>1361.1</td>
<td>(500.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THATCHERS ISLAND SOUTH LIGHT, 1940</td>
<td>G.P. Vol. 1 Page 280</td>
<td>NA 1927</td>
<td>42°</td>
<td>38° 12' 226</td>
<td>377.3</td>
<td>(1474.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAPE ANN NORTH LIGHTHOUSE, 1902</td>
<td>G.P. Vol. 1 Page 281</td>
<td>NA 1927</td>
<td>42°</td>
<td>38° 20' 654</td>
<td>637.3</td>
<td>(1474.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROCKPORT, ORTHODOX CHURCH, 1902</td>
<td>G.P. Vol. 1 Page 835</td>
<td>NA 1927</td>
<td>42°</td>
<td>39° 28' 213</td>
<td>870.6</td>
<td>(980.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROCKPORT COAST GUARD CUPOLA 1940</td>
<td>G.P. Vol. 1 Page 280</td>
<td>NA 1927</td>
<td>42°</td>
<td>39° 32' 174</td>
<td>992.8</td>
<td>(850.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROCKPORT COAST GUARD STATION IRON TOWER, 1916</td>
<td>G.P. Vol. 1 Page 858</td>
<td>NA 1927</td>
<td>42°</td>
<td>39° 32' 44</td>
<td>1001.0</td>
<td>(850.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROCKPORT METHODIST CHURCH SPIRE, 1916</td>
<td>G.P. Vol. 1 Page 858</td>
<td>NA 1927</td>
<td>42°</td>
<td>39° 22' 98</td>
<td>709.1</td>
<td>(1142.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STONEHAVEN (ROCKPORT TOWN) 1939</td>
<td>G.P. Vol. 1 Page 278</td>
<td>NA 1927</td>
<td>42°</td>
<td>39° 38' 370</td>
<td>1184.0</td>
<td>(667.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROCKPORT UNIVERSALIST CHURCH SPIRE 1916</td>
<td>G.P. Vol. 1 Page 856</td>
<td>NA 1927</td>
<td>42°</td>
<td>39° 27' 425</td>
<td>846.3</td>
<td>(1005.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LONDONER BEACON 1849</td>
<td>G.P. Vol. 1 Page 832</td>
<td>NA 1927</td>
<td>42°</td>
<td>39° 05' 664</td>
<td>174.8</td>
<td>(1676.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 9 S 9 1943</td>
<td>G.P. Vol. 1 Page 394</td>
<td>NA 1927</td>
<td>42°</td>
<td>38° 22' 403</td>
<td>691.3</td>
<td>(1160.1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COMPUTED BY**
K. Boyle
**DATE**
SEPT. 20, 1966

**CHECKED BY**
L. O. Neterer Jr.
**DATE**
SEPT. 20, 1966
<table>
<thead>
<tr>
<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 FT. = 0.3048 METER)</th>
</tr>
</thead>
<tbody>
<tr>
<td>THATCHERS ISLAND 1849</td>
<td>G.P. Vol. 1 Page 829</td>
<td>NA</td>
<td>42° 38' 10&quot;. 364</td>
<td>70° 34' 46&quot;. 312</td>
<td>319.8 (1531.6)</td>
</tr>
<tr>
<td>MILK ISLAND 2, 1916</td>
<td>G.P. Vol. 1 Page 853</td>
<td>NA</td>
<td>42° 37' 40&quot;. 627</td>
<td>70° 35' 32&quot;. 023</td>
<td>1055.2 (311.8)</td>
</tr>
<tr>
<td>SALT ISLAND 2, 1916</td>
<td>G.P. Vol. 1 Page 853</td>
<td>1927</td>
<td>42° 37' 10&quot;. 973</td>
<td>70° 37' 25&quot;. 358</td>
<td>1253.7 (597.7)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>729.7 (637.5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>338.6 (1512.8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>577.9 (789.5)</td>
</tr>
</tbody>
</table>

COMPUTED BY K. Boyle  DATE SEPT. 20, 1966  CHECKED BY L. O. Neterer Jr.  DATE SEPT. 20, 1966
COMPILATION REPORT
Map Manuscript T-12964
Project PH-6601

31. **DELINEATION**

Delineation was by Wild B-8 Plotter and Graphic Methods. Shoreline pass points were dropped and interior and offshore details were compiled with the B-8; the mean high water line and any features missed during instrument compilation were compiled graphically.

32. **CONTROL**

See PHOTOGRAMMETRIC PLOT REPORT dated November 1, 1966 attached to this report.

Station ROCKPORT BREAKWATER LIGHT 1940 did not hold in the B-8 Plotter. A new position was dropped approximately 5 meters north-northwest of the position determined in 1940 and shown as a photogrammetric point.

32. **CONTROL (CONT'D)**

Station DODGE ROCK BEACON 1916 was declared destroyed by E.H.K. in 1953. The 1916 position was plotted on the map and the object identified on the photographs as the beacon held to this position in the B-8 Compilation. In as much as the original intersected object has been destroyed, the symbol shown on the manuscript is for a photogrammetric point.

Station PIGEON COVE ORTHODOX CHURCH RED BELFRY SPIRE 1902 was disturbed in 1932. The present spire was office identified on the photographs and held the plotted position during B-8 Compilation and when orienting the photographs under the manuscript. Since this object is no longer useful for triangulation, the position was removed from the manuscript.

33. **SUPPLEMENTAL DATA**

None.

34. **CONTOURS AND DRAINAGE**

Contours are not applicable.

Drainage was compiled from office interpretation of the photographs.

35. **SHORELINE AND ALONGSHORE DETAILS**

The mean high water line was delineated from office interpretation of infrared photographs taken at high water.
35. SHORELINE AND ALONGSHORE DETAILS (CON'D)

The mean low water line, foreshore details, alongshore structures and interior details were delineated from office interpretation of color photographs taken at low water.

36. OFFSHORE DETAILS

Reefs and rocks detached from the foreshore area were compiled from office interpretation of color photographs taken at low water.

37. LANDMARKS AND AIDS

Four Landmarks were recommended for deletion.

Seven Landmarks and five fixed aids to navigation were mapped. Appropriate copies of Form 567 were forwarded to the Washington Office, dated August 13, 1969.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

Satisfactory junctions have been made with T-12963 to the west. There are no contemporary surveys to the north, east or south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

41-45 Not Applicable.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with U.S.G.S. Quadrangle ROCKPORT, MASS., Scale 1:24,000, dated 1960.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 243, scale 1:20,000, 10th Edition, dated September 16, 1968.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.
Submitted:

Charles H. Bishop
Cartographer
August 7, 1969

Approved For Forwarding:

Jeffrey G. Carlen, CDR, NOAA
Chief, Coastal Mapping Division, AMC

Approved:

Alfred C. Holmes, RADM, NOAA
Director, Atlantic Marine Center

Approved:

Chief, Photogrammetric Branch  Chief, Coastal Mapping Division
GEOGRAPHIC NAMES

FINAL NAME SHEETS

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

Atlantic Ocean
Back Harbor
Bearskin Neck
Cape Ann
Cape Hedge
Cape Hedge Beach
Dodge Rock
Dry Salvages
Emerson Point
Flat Point
Gap Cove
Gap Head
Gully Point
Henry's Pond
Lands End (locality)
Lands End
Little Salvages
Loblolly Cove
Loblolly Point
Londoner
Long Beach
Milk Island
Old Garden Beach, Pebble Beach
Pigeon Cove (locality)
Pigeon Cove
Rockport
Rockport Harbor
Rowe Point

Sandy Bar Ledge
Sandy Bay
Straitsmouth Island
Thacher Island
The Headlands
Whale Cove

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".
# Photogrammetric Office Review

**T-12964**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
<td>CHB</td>
<td>CHB</td>
<td>CHB</td>
</tr>
</tbody>
</table>

## Control Stations

<table>
<thead>
<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>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

## Bench Marks

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>CHB</td>
<td>CHB</td>
</tr>
</tbody>
</table>

## Alongshore Areas (Nautical Chart Data)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
<td>CHB</td>
<td>CHB</td>
<td></td>
</tr>
</tbody>
</table>

## Aids to Navigation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
<td>CHB</td>
<td>CHB</td>
<td>CHB</td>
</tr>
</tbody>
</table>

## Physical Features

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

## Stereoscopic Instrument Contours

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

## Cultural Features

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Boundaries

<table>
<thead>
<tr>
<th>31. Boundary Lines</th>
<th>32. Public Land Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

## Miscellaneous

<table>
<thead>
<tr>
<th>33. Geographic Names</th>
<th>34. Juncions</th>
<th>35. Legibility of the Manuscript</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
<td>CHB</td>
<td>CHB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
<td>CHB</td>
<td>NONE</td>
<td>CHB</td>
</tr>
</tbody>
</table>

### Reviewer

C.H. Bishop 8/18/69

### Supervisor

A.C. Rauck Jr.

### Field Completion Additions and Corrections to the Manuscript

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

C.H. Bishop 8-8-69

### Reviewer

R.E. Smith 8-8-69

### Remarks

Field Edit applied from: Field Edit Callid, 7-12-64

Ma
FIELD EDIT REPORT
JOB PH-6601
Map T-12964
Massachusetts

This map was field-edited during June and July 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 compiler's interpretation. There is a definite color contrast along the high-water line, usually between a dark and light color. This is found especially in ledge areas and rocky sections. The sandy beaches have less contrast.

54. RECOMMendations

None

56. ROCKS AND ROCK LEDGES

All rock inspection was done at or near low-water.

57. LANDMARKS AND AIDS

Form 567 is submitted for all nautical landmarks and fixed aids within the limits of this map.

Two theodolite cuts were taken to the Londoner Beacon, which is located 3/8 mile southeast of Thacher Island. A single triangle was computed using MILK ISLAND 2 and THATCHERS ISLAND. The new computed position checked the original position within four or five feet.

58. MISCELLANEOUS

One submerged cable has been discontinued, which links Stratsmouth Island and the mainland.

Duplicate copies of Form 526 are submitted for many of the triangulation stations.

Field Edit corrections have been shown on the following ratio prints: 65-S-7210, 65-S-7250 and 65-S-7252.

Submitted By:
Ernest W. Hartford
Surveying Technician
July 11, 1969
NON-EXISTING AIDS OR LANDMARKS FOR CHARTS

Atlantic Marine Center August 7, 1969

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

The positions given have been checked after listing by Charles H. Bishop

Afred C. Holmes, Director, AMC
Chief of Party.

<table>
<thead>
<tr>
<th>STATE</th>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>POSITION</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF SURVEY</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td></td>
<td>Sandy Bay</td>
<td></td>
<td></td>
<td>6-23-69</td>
<td>T-12964</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>WS</td>
<td>STA</td>
<td>Razed</td>
<td></td>
<td>42 39.6</td>
<td>70 35.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Iron TR</td>
<td>Not Prominent</td>
<td></td>
<td></td>
<td>6-23-69</td>
<td>T-12964</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>Seacoast</td>
<td></td>
<td></td>
<td></td>
<td>6-23-69</td>
<td>T-12964</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>Cup</td>
<td>Removed</td>
<td></td>
<td></td>
<td>6-23-69</td>
<td>T-12964</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>House</td>
<td>Not prominent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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 redetermined, 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 August 7, 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

Charles H. Bishop

Director, A.M.C.

Chief of Party

<table>
<thead>
<tr>
<th>STATE</th>
<th>MASSACHUSETTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SANDY BAY</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LIGHT</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SEACOAST</td>
</tr>
<tr>
<td></td>
<td>LIGHT</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LIGHT</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The original daybeacon has been destroyed; however, the position determined in 1916 was held in the photogrammetric plot and is listed on this form.

** Photogrammetric position is approximately 5 meters NW of Rockport Breakwater Light 1940.

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, 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
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 Charles H. Bishop

<table>
<thead>
<tr>
<th>State</th>
<th>Charting Name</th>
<th>Description</th>
<th>Signal Name</th>
<th>Position</th>
<th>Method of Location and Survey No.</th>
<th>Date of Location</th>
<th>Charts Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASSACHUSETTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SAWY BAY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WB SIG STA</td>
<td>Razed</td>
<td></td>
<td>42 39.6</td>
<td>70 35.9</td>
<td>T-12964 x</td>
<td>6-23-69</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>Non prominent</td>
<td></td>
<td>42 39.5</td>
<td>70 35.9</td>
<td>T-12964 x</td>
<td>6-23-69</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>SEACOAST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CUP</td>
<td>Removed</td>
<td>42 38.5</td>
<td>70 36.9</td>
<td>T-12964 x</td>
<td>6-23-69</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>House</td>
<td>Not prominent</td>
<td>42 38.1</td>
<td>70 36.9</td>
<td>T-12964 x</td>
<td>6-23-69</td>
<td>243</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, 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

signed

USCG AMC 15254P01
**U.S. DEPARTMENT OF COMMERCE**
**COAST AND GEODETIC SURVEY**

**NONFLOATING AIDS OR LANDMARKS FOR CHARTS**

Atlantic Marine Center  August 7  1969

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

The positions given have been checked after listing by Charles H. Bishop  Allen L. Powell
Director, A.M.C.  Chief of Party

<table>
<thead>
<tr>
<th>STATE</th>
<th>MASSACHUSETTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>SANDY BAY</td>
<td>Concrete, round, white</td>
</tr>
<tr>
<td>STACK</td>
<td>ht= 120 (135)'</td>
</tr>
<tr>
<td>CHURCH</td>
<td>Black spire, gold knob</td>
</tr>
<tr>
<td>SPIRE</td>
<td>(Rockport Universalist Church Spire 1916)</td>
</tr>
<tr>
<td>CLOCK</td>
<td>Wood, white, hexagonal</td>
</tr>
<tr>
<td>TOWER</td>
<td>(Rockport Orthodox Church 1902)</td>
</tr>
<tr>
<td>RADIO TOWER</td>
<td>Skeleton, steel, red and white</td>
</tr>
<tr>
<td>SEACOAST</td>
<td></td>
</tr>
<tr>
<td>N. TOWER (Aband. Lt.</td>
<td>Gray stone L.H. N'ly of two</td>
</tr>
<tr>
<td>Ho)</td>
<td>Gray stone L.H. N'ly of two</td>
</tr>
<tr>
<td>STANDPIPE</td>
<td>Round, green steel</td>
</tr>
<tr>
<td>OBS TOWER</td>
<td>Round concrete ht= 50 (110)</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, 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*
REVIEW REPORT T-12964

SHORELINE

February, 1974

61. GENERAL STATEMENT:

See summary which is page 6 of the Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with Registered Survey Number T-11156. Except for minor changes and additions there are no significant differences.

This survey supersedes the prior listed survey for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Comparison was made with U.S.G.S. Quadrangle, Rockport, Mass., 1969 at 1:24,000 scale. There are some discrepancies in the shapes of Thacher and Milk Islands also the position of Dry Salvages. These are noted on the discrepancy sheet in brown.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with Boat Sheets H-8940 and H-8941, both are 1:10,000 scale and dated 1967. There is very good agreement of the boat sheets and manuscript.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with chart 243, November 4, 1972 at 1:20,000 scale. There is very good general agreement. There are two wrecks shown on the chart which are not visible on the photographs. These are noted in red on the discrepancy sheet.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Reviewed by:

[Signature]
Bernard Kurs
Cartographer
Approved For Forwarding:

Jeffrey G. Carlen, CDR, NOAA
Chief, Coastal Mapping Division, AMC

Approved:

Alfred C. Holmes, RADM, NOAA
Director, Atlantic Marine Center

Approved:

Randall C. Youngblood
Chief, Photogrammetric Branch
Chief, Coastal Mapping Division