

T-12978

ORIGINAL

T-12978

NOAA FORM 76-35

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey ... Shoreline (Photogrammetric)

Job No. Map No. T-12978

Classification No. Edition No.

Field Edited

LOCALITY

State ... Massachusetts

General Locality ... Boston to Plum Island

Locality ... Salem Harbor

1966 TO 1968

REGISTRY IN ARCHIVES

DATE

DESCRIPTIVE REPORT - DATA RECORD

TP-12978

PROJECT NO. (II):

Job PH-6601

FIELD OFFICE (II):

None

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center

OFFICER-IN-CHARGE

Alfred C. Holmes, Director, AMC

INSTRUCTIONS DATED (II) (III):

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 (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):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

SEPT 1975

GEOGRAPHIC DATUM (III):

N.A. 1927

VERTICAL DATUM (III):

MEAN ~~SEA~~ ^{High Water} LEVEL EXCEPT AS FOLLOWS:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water ~~on mean low water~~

REFERENCE STATION (III):

Salem, New England Power Co., South Stack, 1954

LAT.:

LONG.:

42° 31' 33.687" (1039.4M) 70° 52' 37.487" (855.6M)

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

Y = 556,697.83 Ft.

X = 767,920.18 Ft.

Massachusetts

Mainland

MAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (I) FIELD PARTY, (II) 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

TP-12978



FIELD INSPECTION BY (II): None		DATE:
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. E. Roundtree		DATE 5/27/66
PROJECTION AND GRIDS CHECKED BY (IV): R. Glaser		DATE 6/1/66
CONTROL PLOTTED BY (III): L. Neterer		DATE 9/9/66
CONTROL CHECKED BY (III): A. Santillian		DATE 9/9/66
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): H. P. Eichert		DATE 11/1/66
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY A. Shands	DATE 8/12/67
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III): A. L. Shands (W. of Long. 70° 55')		DATE 8/23/67
Reduction of T-12972 traced by A. L. Shands		6/12/68
Reduction of T-12975 traced by L. L. Graves		10/14/68
SCRIBING BY (III): C. H. Bishop		DATE 9/12/67
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
REMARKS:		



DESCRIPTIVE REPORT - DATA RECORD
TP-12978

CAMERA (KIND OR SOURCE) (III):

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
65S(C) 7314 thru 7316	31 Aug 1965	08:41	1:15,000	2.6 ft. above MLW
65S(C) 7221 and 7222	31 Aug 1965	07:30	1:30,000	2.8 ft. above MLW
65S 6918R	24 Aug 1965	08:15	1:30,000	11.3 ft. above MLW

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Boston		9.5	11.0
SUBORDINATE STATION: Beverly		9.0	10.4
SUBORDINATE STATION: Salem		9.0	10.4

WASHINGTON OFFICE REVIEW BY (IV): Bernard Kurs

DATE:
Feb., 1974

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 26

RECOVERED:
19IDENTIFIED:
7

NUMBER OF BM(S) SEARCHED FOR (II): 4

RECOVERED:
3IDENTIFIED
1

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

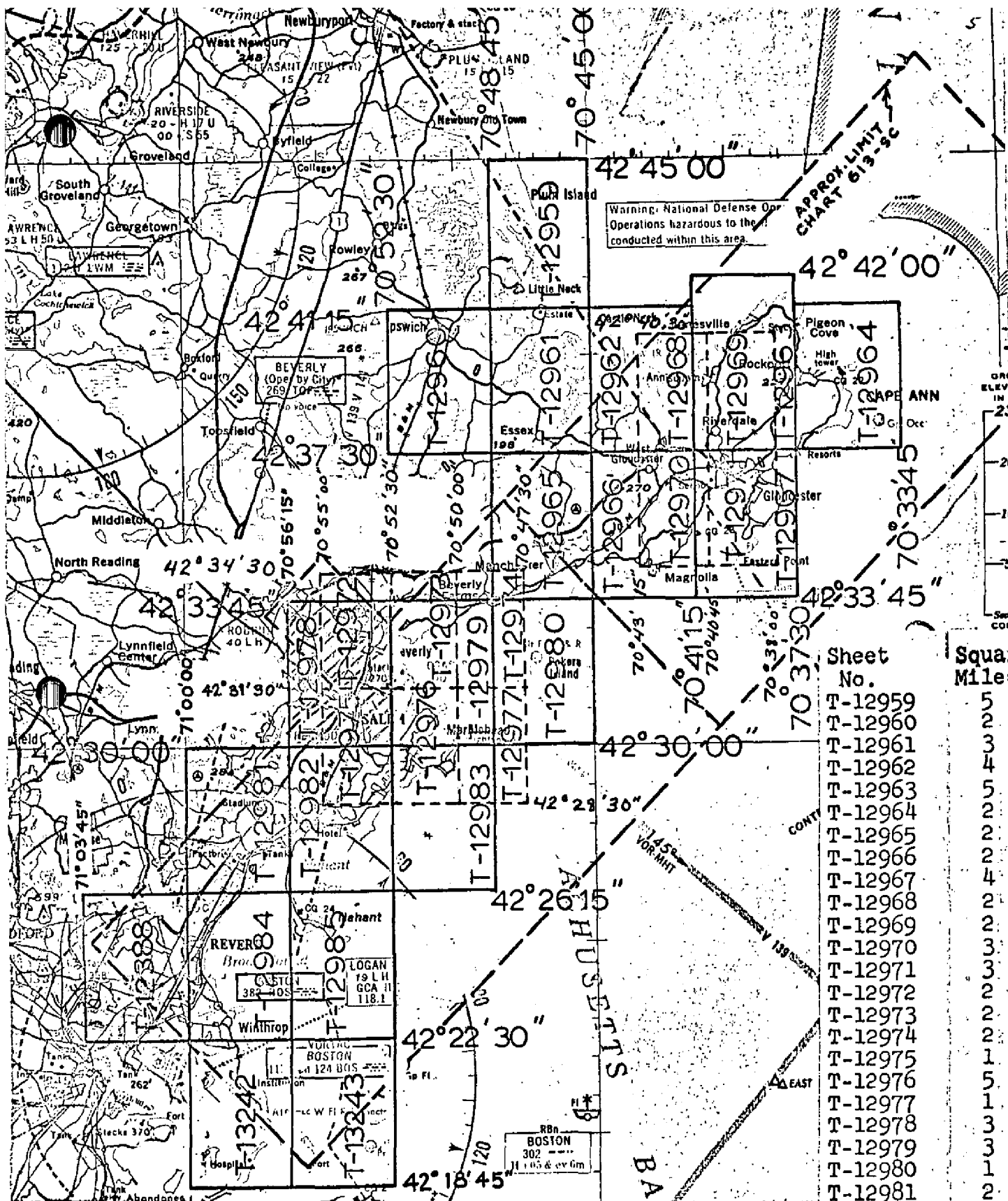
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

REMARKS:

The stage of Tide of the photography was determined by staff readings at Gloucester Harbor at the time of photography.

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TP-12978

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation Complete pending Field Edit	March, 1967	Superseded
Field Edit applied	July, 1968	Superseded
Additional field edit applied	Oct., 1968	Superseded
Transfer of reductions checked, additional field edit applied	Oct., 1969	Superseded
Final Review	Feb., 1973	



Sheet
No.

- T-12959
- T-12960
- T-12961
- T-12962
- T-12963
- T-12964
- T-12965
- T-12966
- T-12967
- T-12968
- T-12969
- T-12970
- T-12971
- T-12972
- T-12973
- T-12974
- T-12975
- T-12976
- T-12977
- T-12978
- T-12979
- T-12980
- T-12981
- T-12982
- T-12983
- T-12984
- T-12985
- T-12388
- T-13242
- T-13243

Square
Mile:

- 5
- 2
- 3
- 4
- 5
- 2
- 2
- 2
- 4
- 2
- 2
- 3
- 3
- 2
- 2
- 2
- 1
- 5
- 1
- 3
- 3
- 1
- 2
- 3
- 2
- 3
- 2
- 3
- 2

TOTAL 79

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

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-12978

There was no field inspection prior to compilation.

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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.

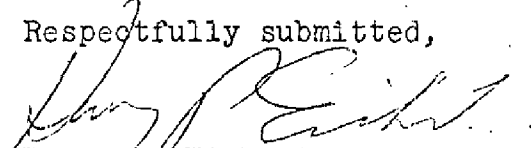
24. Supplemental Data

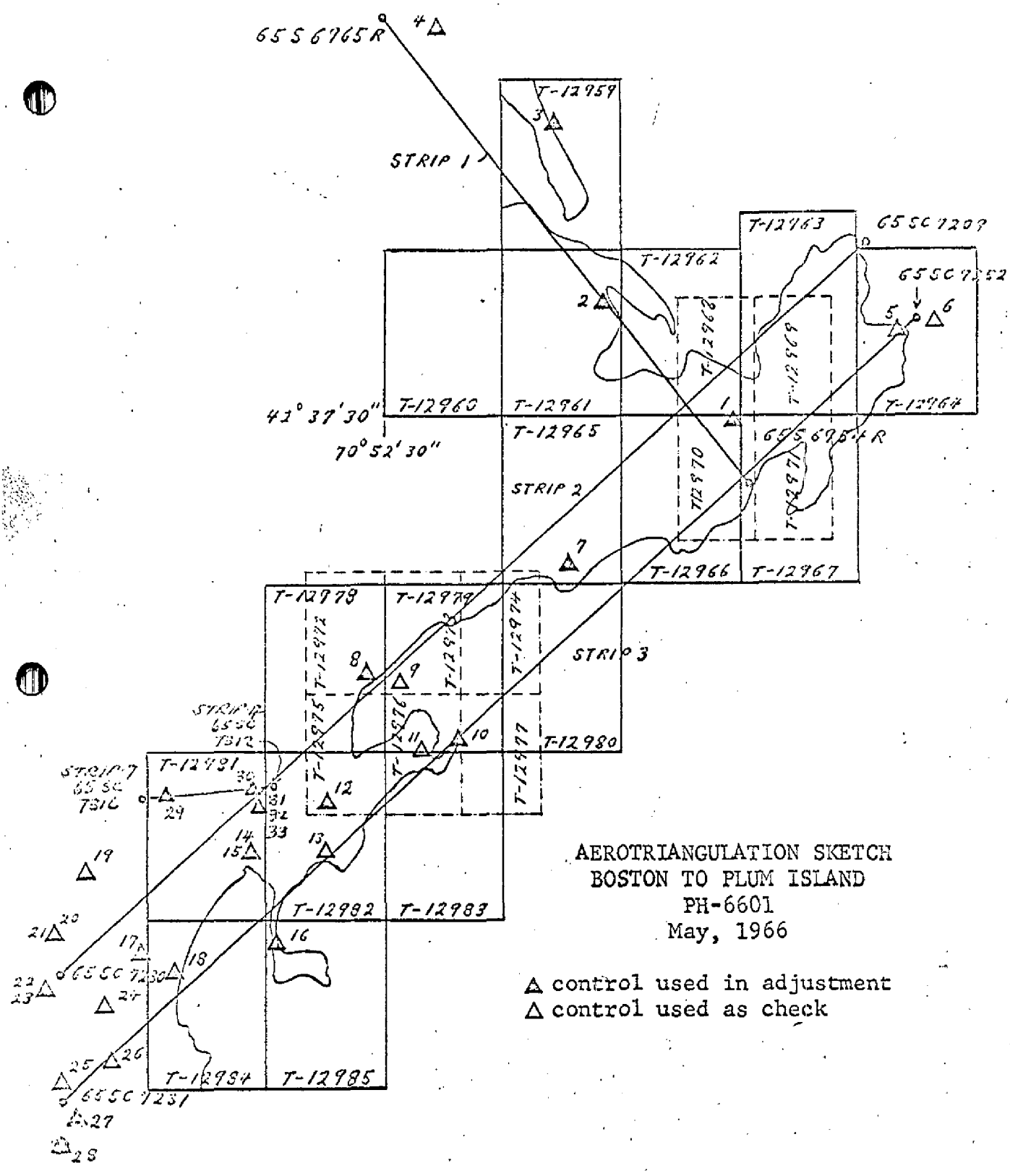
Vertical control points needed ^{as} ~~and~~ control for strip adjustments were taken from USGS quads.

25. Photography

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

Respectfully submitted,


Henry P. Eichert



Flt. to control
(feet)

STRIP #1

1 MEAD 2 (MGS), 1934

target (+0.1, +0.1)

sub. pt. (-0.9, +1.7)

2 CH. DATE, 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 (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, 1848

target $(-6.0, +0.8)$

sub. pt. A $(-7.1, +3.1)$

~~sub. pt. B~~

8 SALEM, NEW ENGLAND POWER CO. SOUTH STACK, 1954

office identified $(+4.8, +1.9)$

9 FORT PICKERING LIGHTHOUSE, 1877

office identified $(+6.0, +1.0)$

14 HIGH ROCK 2 (MGS)

sub. pt. A $(+3.2, -4.4)$

sub. pt. B $(+2.0, -2.8)$

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. pt. A $(+3.4, -1.4)$

24 CHELSEA QUIGLEY MEM. HOSPITAL W.T., 1958

office identified $(-1.5, +2.2)$

20 MEDFORD RADIO STATION WEEI-FM TOWER, 1958

~~office~~ office identified $(+2.1, -1.0)$

21 MEDFORD TV STATION WNAC TOWER, 1958

office identified $(+5.3, -1.0)$

22 MEDFORD RADIO STATION WEEI NE TOWER, 1958

office identified (+1.4, +3.0)

23 MEDFORD RADIO STATION WEEI SW TOWER, 1958

office identified (+1.7, +3.1)

STRIP #3

28 BOSTON STATE HOUSE, 1934

office identified (+2.6, +5.5)

27 BOSTON CUSTOM HOUSE TOWER, 1916

office identified (+3.7, +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 CHESLEA QUIGLEY MEM. HOSPITAL W.T., 1958

office identified (+7.3, -2.0)

17 REVERE CATHOLIC CHURCH TOWER, 1934

office identified (-4.0, -5.0)

18 REVERE BEACH STACK, 1919

office identified (-4.1, -2.2)

14 HIGH ROCK #2

sub ~~pt.~~ pt. B (+2.9, +3.9)

16 NAHANT 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, ABERT TOWER, 1919

office identified $(-0.6, +4.4)$

10 MARBLEHEAD LIGHTHOUSE, 1914

office identified $(+2.0, +5.1)$

7 MANCHESTER CHURCH PARK SPIRE, 1843

target $(-3.5, -5.8)$

sub pt A $(-4.1, -5.2)$

1 HEAD 2 (MGS), 1934

target $(+3.8, -0.7)$

sub.pt. $(+6.2, -1.2)$

5 STONEHAVEN (ROCKPORT TOWN (MGS)), 1939

target $(-2.1, +0.3)$

sub pt A $(-1.3, +1.6)$

sub pt B $(-2.0, +1.2)$

6 STRAITS MOUTH LIGHTHOUSE, 1902

office identified $(-3.1, -5.2)$

STRIP # 4

29 DANVERS, COOKE & ^{KRAUSE} ~~COOKE~~ CO. CHIMNEY, 1919

HOME STA (-0.78 +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)

31 BEVERLY, ODD FELLOWS' CUPOLA, 1934

(-1.29 +1.25)

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

(-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 (-2.56 -3.47)

14601 (-3.15 -1.53)

DESCRIPTIVE REPORT CONTROL RECORD

2 of 2

MAP T- 12978 PROJECT NO. PH-6601 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (2 ft. = 3048006 meter)	FORWARD	(BACK)
SALEM NAUMKEAG CHIMNEY, 1916	Vol. 1 P. 854	NA 1927	42° 31' 00.507" 70° 53' 11.116"	15.6 (1835.8)	253.8 (1115.9)	
SALEM, HOSPITAL CHIMNEY, 1919	Vol. 1 P. 870	NA 1927	42° 30' 42.585" 70° 54' 27.863"	1314.0 (537.4)	636.1 (733.7)	
BEVERLY, FIRST BAPTIST CHURCH, 1914	Vol. 1 P. 33	NA 1927	42° 32' 53.602" 70° 52' 44.259"	1653.9 (197.5)	1009.8 (359.1)	
DANVERS COOKE AND KRAUSE CO. CHIMNEY, 1919	Vol. 1 P. 872	NA 1927	42° 33' 10.389" 70° 55' 35.184"	320.6 (1530.8)	802.7 (566.2)	
SOUTH SALEM NORMAL SCHOOL CHIMNEY 1919	Vol. 1 P. 870	NA 1927	42° 30' 14.685" 70° 53' 29.606"	453.1 (1398.3)	676.0 (693.9)	
SALEM COURTHOUSE CUPOLA, 1934	Vol. 1 P. 52	NA 1927	42° 31' 23.774" 70° 53' 49.163"	733.6 (1117.8)	1122.2 (247.4)	
BEVERLY, POWER HOUSE, 1848	1 P. 824	NA 1927	42° 33' 12.033" 70° 52' 33.170"	371.3 (1480.1)	756.7 (612.1)	
BEVERLY, STUART'S FACTORY YELLOW CHIMNEY, 1919	GP P. 875	NA 1927	42° 32' 24.94" 70° 53' 22.43"	769.5 (1081.9)	511.8 (857.3)	
PEABODY, CATHOLIC CHURCH, SPIRE, 1919	GP P. 52	NA 1927	42° 31' 32.960" 70° 55' 47.588"	1017.0 (834.4)	1086.2 (283.3)	
SALEM GAS CO., CUPOLA, 1919	GP P. 871	NA 1927	42° 32' 02.506" 70° 53' 07.599"	77.3 (1774.1)	173.4 (1195.9)	
SALEM, GAS CO., S.W. CHIMNEY, 1919	GP P. 871	NA 1927	42° 32' 02.118" 70° 53' 02.668"	65.4 (1785.0)	60.9 (1308.4)	
SOUTH DANVERS, TALL SPIRE 1848	GP P. 827	NA 1927	42° 31' 34.808" 70° 55' 40.568"	1074.0 (777.4)	926.0 (443.5)	

COMPUTED BY
CHB
LLG

DATE 9/30/69
10/16/66

CHECKED BY
LLG
JSP

DATE 9/30/69
10/13/66



DESCRIPTIVE REPORT CONTROL RECORD



1 8 2

MAP T- T-12978 PROJECT NO. PH-6601 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter)
				FORWARD (BACK)
RAMSHORN BEACON 1914	Vol. 1 P. 509	NA 1927	42° 32' 09.091" 70° 52' 32.337"	280.5 (1570.9) 738.0 (631.2)
LOBSTER ROCKS BEACON, 1914	Vol. 1 P. 509	NA 1927	42° 32' 17.845" 70° 52' 55.186"	550.6 (1300.8) 1259.3 (109.9)
DERBY WHARF LIGHTHOUSE, 1877	Vol. 1 P. 828	NA 1927	42° 30' 59.33" 70° 53' 02.56"	1830.7 (20.7) 58.4 (1311.3)
SALEM, NEW ENGLAND POWER CO. SOUTH STALK, 1954	Vol. 1 P. 891	NA 1927	42° 31' 33.687" 70° 52' 37.487"	1039.4 (812.0) 855.6 (513.9)
SALEM, NEW ENGLAND POWER CO. NORTH STACK, 1954	Vol. 1 P. 891	NA 1927	42° 31' 34.340" 70° 52' 37.103"	1059.6 (791.8) 846.9 (522.6)
BEVERLY, UNITED SHOE MFG., CO. STACK, 1934	Vol. 1 P. 51	NA 1927	42° 33' 33.912" 70° 53' 16.148"	1046.4 (805.0) 368.4 (1000.3)
DANVERS LAWRENCE STACK, 1934	Vol. 1 P. 51	NA 1927	42° 32' 29.603" 70° 55' 39.979"	913.4 (938.0) 912.3 (456.9)
PEABODY, LAWRENCE STACK, 1919	Vol. 1 P. 52	NA 1927	42° 31' 43.744" 70° 55' 54.692"	1249.9 (501.6) 1248.3 (121.2)
SALEM, STL JAMES CATHOLIC CHURCH SPIRE, 1916	Vol. 1 P. 52	NA 1927	42° 31' 12.677" 70° 54' 20.158"	391.2 (1460.2) 460.1 (909.5)
BEVERLY, ST. MARKS CHURCH SPIRE, 1914	Vol. 1 P. 53	NA 1927	42° 32' 58.850" 70° 52' 41.453"	1815.9 (35.5) 945.8 (423.1)
BEVERLY, ODD FELLOWS CUPOLA 1934	Vol. 1 P. 54	NA 1927	42° 32' 51.810" 70° 52' 47.089"	1598.6 (252.8) 1074.4 (294.6)
SALEM, IMMACULATE CONCEPTION CATHOLIC CHURCH SPIRE, 1934	Vol. 1 P. 93	NA 1927	42° 31' 16.243" 70° 53' 25.438"	501.2 (1350.2) 580.6 (789.0)

COMPUTED BY

L.L. Graves

DATE

10/10/66

CHECKED BY

J.S. Pate A.L. Shands

DATE

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COMPILATION REPORT

MAP MANUSCRIPT T-12978

PROJECT PH-6601

31. DELINEATION:

West of Long. $70^{\circ} 55'$:

The Wild B-8 Plotter was used to compile all details in this area.

Photography was adequate.

East of Long. $70^{\circ} 55'$:

This area was compiled at 1:5000 scale (T-12978 and T-12975) and photographically reduced to 1:10,000 scale for application to this sheet. All details were transferred from the reductions by tracing.

32. CONTROL:

See Photogrammetric Plot Report dated November 1, 1966.

33. SUPPLEMENTARY DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable.

Drainage was compiled from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

West of Long. $70^{\circ} 55'$, all details except the mean high water line compiled from office interpretation of photographs taken at

mean low water. The mean high water line was compiled from office interpretation of infrared photographs taken at mean high water.

East of Long. $70^{\circ} 55'$, refer to reports for 1:5000 scale manuscripts T-12972 and T-12975.

36. OFFSHORE DETAILS:

None.

37. LANDMARKS AND AIDS:

Form 567 for non-floating aids and landmarks for charts have been submitted, dated October 3 and 4, 1968.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Satisfactory junctions have been made with T-12979 to the east and T-12982 to the south. There are no contemporary 1:10,000 scale surveys to the north or west.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

41. thru 45. ADDITIONAL ITEMS:

None.

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with U.S.G.S. quadrangle SALEM, MA; scale 1:24,000, dated 1956, reprinted 1959.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Chart 240, Salem and Lynn Harbors, scale 1:25,000, 8th Edition, Revised 2/8/65, and Chart 241, Salem, Marblehead and Beverley Harbors, scale 1:10,000, 3rd Edition, dated September 30, 1963.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Charles H. Bishop

Charles H. Bishop
Cartographer
October 9, 1969

Approved:

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

Sept. 24, 1973

GEOGRAPHIC NAMES

FINAL NAME SHEETS

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

T-12978

Bass River
Beverly
Beverly Harbor
Boston and Maine (RR)
Collins Cove
Crane River
Danvers
Danvers River
Danversport
Fosters Point
Green Hill
Lobster Rocks
Long Point
North River
North Salem
Palmer Cove
Palmer Point
Peters Point
Pickering Point
Porter River
Prospect Hill
Salem
Salem Harbor
Salem Neck
Salters Point
South River
South Salem
Tuck Point
Waters Rivers

Prepared by:

C. E. Harrington

C. E. Harrington
Staff Geographer

T - 12978

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-P-12978

1. PROJECTION AND GRIDS CHB	2. TITLE CHB	3. MANUSCRIPT NUMBERS CHB	4. MANUSCRIPT SIZE
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY CHB	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) X		7. PHOTO HYDRO STATIONS X
8. BENCH MARKS CHB	9. PLOTTING OF SEXTANT FIXES X	10. PHOTOGRAMMETRIC PLOT REPORT W.O. Bridge	11. DETAIL POINTS CHB
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE CHB	13. LOW-WATER LINE CHB	14. ROCKS, SHOALS, ETC. CHB	15. BRIDGES CHB
16. AIDS TO NAVIGATION CHB	17. LANDMARKS CHB	18. OTHER ALONGSHORE PHYSICAL FEATURES CHB	19. OTHER ALONGSHORE CULTURAL FEATURES CHB
PHYSICAL FEATURES			
20. WATER FEATURES CHB	21. NATURAL GROUND COVER X		22. PLANETABLE CONTOURS X
23. STEREOSCOPIC INSTRUMENT CONTOURS X	24. CONTOURS IN GENERAL X	25. SPOT ELEVATIONS X	26. OTHER PHYSICAL FEATURES X
CULTURAL FEATURES			
27. ROADS CHB	28. BUILDINGS CHB	29. RAILROADS CHB	30. OTHER CULTURAL FEATURES CHB
BOUNDARIES			
31. BOUNDARY LINES X		32. PUBLIC LAND LINES X	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES CHB	34. JUNCTIONS CHB		35. LEGIBILITY OF THE MANUSCRIPT CHB
36. DISCREPANCY OVERLAY	37. DESCRIPTIVE REPORT CHB	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS CHB
40. REVIEWER Charles H. Bishop Charles H. Bishop 10/10/69		SUPERVISOR, REVIEW SECTION OR UNIT Albert C. Rauck, Jr. Albert C. Rauck, Jr.	
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.			
COMPILED L.L. Graves & A.L. Shands Reviewed: C.H. Bishop 10/10/69		SUPERVISOR Albert C. Rauck, Jr. Albert C. Rauck, Jr.	
43. REMARKS Field Edit from: Field Edit Ozalid - T012978 and ratio print 65 S 7215; Reductions of 1:5,000 map manuscripts T-12972 and T-12975.			

FIELD EDIT REPORT

PH-6601

Boston to Plum Island

T-12959 T-12975 T-12976 T-12978 T-12980

GENERAL NOTES

This report is submitted for four T-sheets, field edited May and June 1968 one sheet T-12980 was field edited June 1967 and is being returned.

Most discrepancies on sheet T-12978 are referenced to sheet T-12975 because of duplication. A few in the northwest corner of sheet T-12978 are noted directly on the sheet or referenced to photo 65-S-7315.

All notations on T-sheet and Photographs are made in violet ink. The notations were made either directly on the discrepancy sheet or referenced to photos.

51 METHODS

Field edit was accomplished by the following methods, by skiff and truck travel and by walking sections of the shoreline.

All rock and ledge areas were inspected at or near low-water. The rock and ledge heights were obtained by hand leveling from mean high-water or mean low-water lines, or by using hourly tide heights obtained from the ship Pierce.

All discrepancies on the field edit sheets have been verified directly on the sheets or referenced to a photograph.

Notations on photographs by sheet numbers are as follows.

T-12975	T-12976	T-12978	T-12959
65-S-7340	65-S-7324	65-S-7315	65-S-7263
7349	7325		
7351	7350		
	7351		
	7352		
	7353		

52 ADEQUACY OF COMPILATION

The compilation of MHWL and MLWL around ledge areas as a whole appeared to be good, several ledge areas were inspected at low water, these are noted on the discrepancy print and referenced to a photograph. Compilation of piers, streets, and buildings was found to be good.

54 RECOMMENDATIONS:

None

56 ROCKS

Very few rocks were verified directly on the field edit sheets. However areas of rocks in question and rocks recommended for charting are noted on the field edit sheet and referenced to

photos.

24

These are inked on the following photos.

T-12976	T-12975
65-S-7324	65-S-7340
7325	7351
7350	
7351	
7352	
7353	

NAUTICAL LANDMARKS AND FIXED AIDS

All nautical landmarks and fixed aids were inspected and submitted on form 567.

58 LANDMARK BUILDINGS AND BLUFFS

Three landmark buildings are recommended for deletion, one each on the following T-sheets, T-12975, T-12976, and T-12978. All landmark buildings recommended for charting are circled and labeled as such on the following photos.

65-S-7324, 7350, 7352

All bluffs were investigated off shore and bluffs recommended for charting are inked on the following photos.

65-S-7324 7350 7352

All Public Buildings are circled on the following photos,
65-S-7340 ~~7340~~ 7349 7352

59 STREETS

All street additions and classifications for T-sheets T-12975 and T-12976 are noted on the field edit sheet and referenced to the photos.

Submitted by

E. W. Hartford
E. W. Hartford

2 June 1968

TO BE CHARTED
YB W 36 N 15 E 15
YB W 36 N 15 E 15

PRIME OUT TWO

NON-BOATING AIDS OR LANDMARKS FOR CHARTS

Oct. 3 1968

Atlantic Marine Center

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

The positions given have been checked after listing by

B. L. Barge

Acting Director,

[illegible]

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

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
TO BE REVISED
TO BE DELETED

STRIKE OUT TWO

Atlantic Marine Center November 14, 1967

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

The positions given have been checked after listing by

R. R. White
R. R. White

J. J. Bull, RADN, USFSA

Director, AWC Chief of Party

STATE	MASSACHUSETTS			SIGNAL NAME	DESCRIPTION	POSITION					METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
	CHARTING NAME	LATITUDE *	LONGITUDE *			DATUM										
						°	'	D.P. METERS	N.A.	1927						
												</				

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.



NONRELAXING AIDS/ OR LANDMARKS FOR CHARTS

TO BE CHARTED
TO BE REVISED
TO BE DELETED

STRIKE OUT TWO

Atlantic-Norine Center November 14, 1967

I recommend that the following objects which have *(White Lbs)* been inspected from seaward to determine their value as landmarks be charted on *(Colored/White)* the charts indicated. *to be 1-2 2/2-2 1/2*

The positions given have been checked after listing by

R. R. White

J. Bull, RADM, USFSA

Director, ANS

[illegible]

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.

The positions given have been checked, after listing by

6/17 Bull. PADM ICSGCA

Director, ASG

Chief of Party.

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.

NONFLOATING AIDS OR LANDMARKS/FOR CHARTS

TO BE CHARTED
TO BE REVISED
TO BE DELETED

STRIKE OUT TWO

Atlantic Marine Center November 14, 19 67

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

The positions given have been checked after listing by

R. R. White

for J. Bull, RADN, USESSA
Director, ANS

Chief of Party

STATE	CHARTING NAME	MASSACHUSETTS	DESCRIPTION	SIGNAL NAME	POSITION								METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
					LATITUDE		LONGITUDE											
					°	'	°	'	°	'	°	'						
					D.P. METERS	D.P. METERS	D.P. METERS	D.P. METERS	D.P. METERS	D.P. METERS	D.P. METERS	D.P. METERS						
					42	32	53.602	70	52	44.259	N.A.	1927	x				240SC, 241SC 1207	
	* LIGHT		SALEM HARBOR APPROACHES MAIN CHANNEL (Beverly First Baptist Church 1914) Hospital Point Range Rear Light.			1653.9				1009.8								
			BEVERLY HARBOR															
	DAYBEACON		Lobster Rocks Daybeacon (Lobster Rocks Beacon 1914)		42	32	17.845	70	52	55.186	N.A.	1927	x				240SC, 241SC 1207	
			RAMS HORN CHANNEL															
	DAYBEACON		Rams Horn Rock Daybeacon (Rams Horn Beacon 1914)		42	32	09.091	70	52	32.337	N.A.	1927	x				240SC, 241SC 1207	
							280.5			738.0								
	*		See Form 567 LANDMARKS TO BE CHARTED															

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.

TO BE CHARTED
NO REVISIONS
NO REVISIONS

STRIKE OUT TWO

MASSACHUSETTS LANDMARKS FOR CHARTS

Atlantic Marine Center, Norfolk, Va. Nov. 19, 1968

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

The positions given have been checked after listing by

Lawrence L. Graves
Lawrence L. Graves
Howard S. Cole
Director, AMC Chief of Party

Director, ANC

Chief of Party

STATE	CHARTING NAME	MASSACHUSETTS	DESCRIPTION	SIGNAL NAME	POSITION					METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION-Verified	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
					LATITUDE		LONGITUDE									
					°	'	°	'	"							
					D.M. METERS <td></td> <td></td> <td></td> <td>D.P. METERS<td></td><td></td><td></td><td></td><td></td><td></td><td></td></td>				D.P. METERS <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
		SALEM HARBOR														
	SPIRE	Slate, gold ball and cross atop Ht. = 150 (170) Ft. ✓ (SALEM, IMMACULATE CONCEPTION CATHOLIC CHURCH, SPIRE 1934)			42	31	16.243	70	53	25.438	5/24/68	X				240
							501.2			580.6	1927	X				241
	SPIRE	Slate, gold cross atop Ht. = 185 (205) Ft. ✓ (SALEM, ST. JAMES CATHOLIC CHURCH SPIRE 1916)			42	31	12.677	70	54	20.158	"	X				240
							391.2			160.1	"	X				241
	STANDPIPE CHURCH TOWER	Steel Ht. = 96 (206) Ft. ✓			42	30	55.74	70	54	54.01	6/7/68	X				240
							1720			1233	"	X				241
		Wood, dark color Ht. = 120 (150) Ft. ✓			42	31	01.20	70	53	34.21	"	X				240
		Brick, red Ht. = 155 (165) Ft. ✓ (SALEM, NAUMKEAG CHIMNEY 1916)					37			781	"	X				241
	STACK	Brick, red Ht. = 115 (185) Ft. ✓ (SALEM, HOSPITAL CHIMNEY 1919)			42	31	00.507	70	53	11.116	"	X				240
							15.6			253.8	"	X				241
	STACK	Brick, red Ht. = 115 (185) Ft. ✓ (SALEM, HOSPITAL CHIMNEY 1919)			42	30	42.585	70	54	27.863	"	X				240
							1314.0			636.1	"	X				241
	STANDPIPE CHURCH TOWER	Steel, silver color Ht. = 100 (220) Ft. ✓ (SWAMPSCOTT, LARGER STANDPIPE 1934)			42	28	39.252	70	54	37.805	"	X				240
							1211.2			863.5	"	X				241
		Wood Ht. = 90 (110) Ft. ✓			42	31	23.76	70	53	36.71	"	X				240
							733			838	"	X				241

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.

TO BE CHARTED
TO BE RE-REVIEWED
TO BE RE-REVIEWED

NONFLOATING AIDS ORGANOIDS FOR ORGANOIDS

Atlantic Marine Center, Norfolk, Va. Nov. 19 1968

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

The positions given have been checked after listing by

Lawrence L. Graves	Howard S. Cole
	Director, AMC
	Chief of

Director, AMC *Chief of Party.*

[illegible]

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-12978

SHORELINE

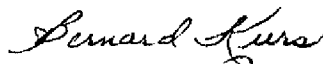
FEB., 1974

61. - 66. GENERAL STATEMENT & ETC.:

See summary which is page six (6) of the Descriptive Report.

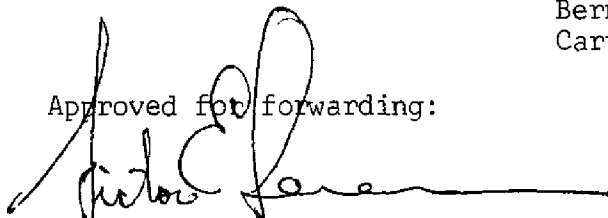
Since 95% of the navigable waters are on sheet T-12972, compiled at 1:5,000 scale, see report (included) of this sheet.

Reviewed by:



Bernard Kurs
Cartographer

Approved for forwarding:



Victor E. Serena
Chief, Photogrammetric Branch, AMC