

T-12985

T-12985

FORM C&GS-504	
U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey <u>Shoreline (Photogrammetric)</u>	
Field No.	Office No. <u>T-12985</u>
LOCALITY	
State <u>Massachusetts</u>	
General locality <u>Boston to Plum Island</u>	
Locality <u>Nahant Harbor</u>	
<u>1965-69</u>	
CHIEF OF PARTY	
<u>Alfred C. Holmes, Director, AMC</u>	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

T-12985

SUBJECT NO. (II): Job PH-6601		
FIELD OFFICE (III): None		CHIEF OF PARTY
PHOTOGRAMMETRIC OFFICE (III): Atlantic Marine Center, Norfolk, VA		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 & 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): NA 1927		VERTICAL DATUM (III): MHW MEAN SEA 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 of spring water
REFERENCE STATION (III): Nahant Coast Guard Cupola 1919		
LAT.: 42° 25' 50.464" (1557.1M)	LONG.: 70° 56' 03.890" (88.9M)	☒ ADJUSTED ☐ UNADJUSTED
PLANE COORDINATES (IV): Y = 521,846.24 Ft. X = 752,695.29 Ft.		STATE MASS ZONE Mainland
ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE. WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.		

DESCRIPTIVE REPORT - DATA RECORD

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FIELD INSPECTION BY (II):		DATE:
None		
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
Air Photo Compilation Date of Photography: August 26, 1966		
PROJECTION AND GRIDS RULED BY (IV):		DATE
A.E. Roundtree		5/31/66
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
R. Glaser		6/1/66
CONTROL PLOTTED BY (III):		DATE
L.O. Neterer, Jr.		9/22/66
CONTROL CHECKED BY (III):		DATE
C. Blood		9/22/66
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
H.P. Eichert		11/1/66
STEREOSCOPIC INSTRUMENT COMPILATION (III): Wild B-8 Kelsh Plotter	PLANIMETRY	DATE
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III):		DATE
P.P. White		8/1/67
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
L.L. Graves		Nov. 1969
REMARKS:		

DESCRIPTIVE REPORT - DATA RECORD

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 AREA (KIND OR SOURCE) (III):

Wild RC 8 "S"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
66-L-2936	26 Apr. 1966	11:30	1:30,000	2.5

TIDE (III)

		RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Boston			9.5	11.0
SUBORDINATE STATION: Nahant			9.0	10.4
SUBORDINATE STATION:				
WASHINGTON OFFICE REVIEW BY (IV): Bernard Kurs, AMC		DATE: 10/73		
PROOF EDIT BY (IV):		DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 16	RECOVERED: 10	IDENTIFIED: 6		
NUMBER OF BM(S) SEARCHED FOR (II):	RECOVERED: None	IDENTIFIED: None		
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 Round Island).

Photographs 65-S-7236, 65-S-7237, 65-S-6934 and 65-S-6935 R were used to compile this manuscript, however the centers are located on T-12984 and T-12982.

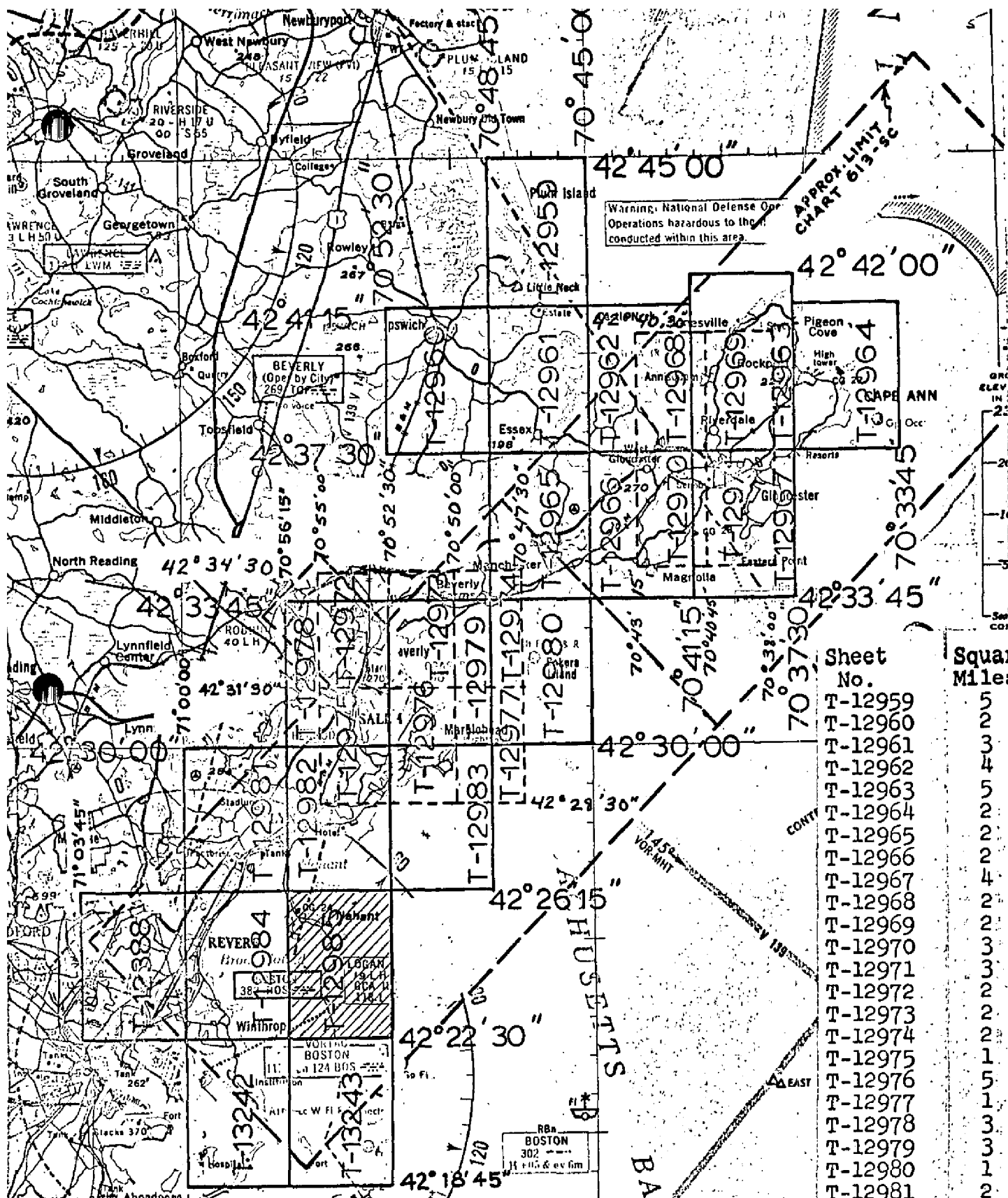
T-12985

COMPILATION RECORD

COMPLETION DATE

REMARKS

Incomplete	8/1/67	Superseded
Field Edit Applied Compilation Complete	Nov. 1969	Superseded
Final Review	Oct. 1973	



Sheet
No.

T-12959
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T-12984
T-12985
T-12388
T-13242
T-13243

Square
Mile:

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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-12985

There ^{were} ~~were~~ 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.

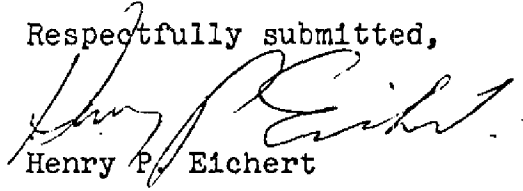
24. Supplemental Data

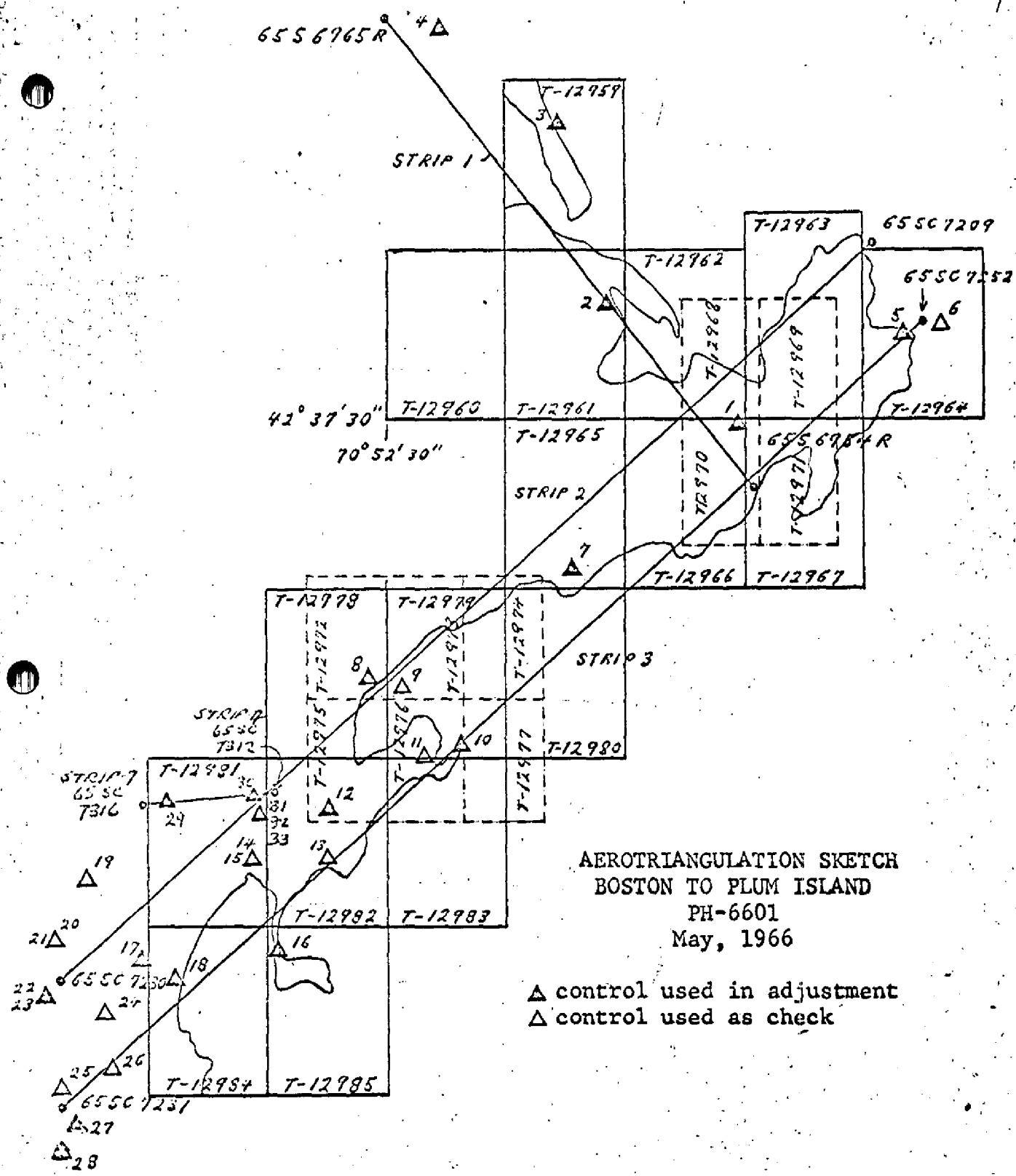
Vertical control points needed ^{as} ~~and~~ control for strip adjustments were taken from USGS quads.

25. Photography

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

Respectfully submitted,


Henry P. Eichert



AEROTRIANGULATION SKETCH
 BOSTON TO PLUM ISLAND
 PH-6601
 May, 1966

△ control used in adjustment
 △ control used as check

10

FIT To control
(feet)

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 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, 1957

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

~~sub. pt. A~~ 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

23 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 ~~5~~ 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, ABBOT TOWER, 1919

office identified (-0.6, +4.4)

10 MARBLEHEAD LIGHTHOUSE, 1914

office identified (+2.0, +5.1)

7 MANCHESTER CHURCH PARK SPIRE, 1848

target (-3.5, -5.8)

sub pt A (-4.1, -5.2)

1 MEAD 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 # 7

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 +1.55)

32 BEVERLY, ST. MARYS 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

MAP T-12985 PROJECT NO. Ph-6601 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 ft. = 3048006 meter) FORWARD (BACK)	N.A. 1927 - DATUM
NAHANT COAST GUARD CUPOLA 1919	Vol. I Pg. 59	NA 1927	42° 25' 50.464"	1557.1	(294.2)
LITTLE NAHANT CUPOLA 1919	Vol. I Pg. 59	"	70° 56' 03.890"	88.9	(1282.7)
			42° 26' 04.001"	123.5	(1727.8)
			70° 56' 05.074"	116.0	(1255.5)
B 3 S 3, B 5 S 5 9 6, 5, 6 and G6, 1943	Vol. I Pg. 384	"	42° 25' 01.876"	57.9	(1793.4)
			70° 54' 35.197"	804.7	(567.1)
G 7 OP and B 5 S 5 & B 5 S 5 1943 5 S 5 3, 3	Vol. I Pg. 392	"	42° 25' 24.457"	754.6	(1096.7)
			70° 54' 34.874"	797.3	(574.4)
B 4, S 4 & B 3 S 3 & BC9, 10, 40, 8, 4, 1943	Vol. I Pg. 391	"	42° 25' 00.667"	20.6	(1830.7)
			70° 54' 35.824"	819.1	(552.7)
B 4, S 4, 1943 2 2	Vol. I Pg. 391	"	42° 25' 11.200"	345.6	(1505.7)
			70° 55' 57.826"	1322.1	(49.6)
BASS POINT (USE) 1902	Vol. I Pg. 28		42° 25' 00.529"	16.3	(1835.0)
		"	70° 56' 12.635"	288.9	(1082.9)
SHAG ROCK DATUM, 1940	Vol. I Pg. 288	"	42° 24' 50.622"	1562.0	(289.3)
			70° 54' 59.837"	598.0	(773.8)
EGG ROCK, 1847	Vol. I Pg. 468	"	42° 25' 59.837"	1846.3	(05.0)
			70° 53' 53.370"	1219.9	(151.6)
COMPUTED BY L2142 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 down 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

Comparison was made with U.S.C. & G.S. chart 240 scale 1:25,000, 8th Edition, dated 2/8/65; 1207, scale 1:80,000, 5th Edition, dated May 14, 1962 and revised May 18, 1964 and prior survey. Register No. 2129, Broad Sound and Entrance to Lynn Harbor, scale 1:10,000, dated Aug. 15, 1892 ended Sept. 28, 1892.

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.

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-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

C. E. Harrington
Staff Geographer

T - 12985

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-10365 12985

1. PROJECTION AND GRIDS LG	2. TITLE LG	3. MANUSCRIPT NUMBERS LG	4. MANUSCRIPT SIZE LG
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY LG	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)		7. PHOTO HYDRO STATIONS NA
8. BENCH MARKS LG	9. PLOTTING OF SEXTANT FIXES LG	10. PHOTOGRAMMETRIC PLOT REPORT LG	11. DETAIL POINTS LG
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE LG	13. LOW-WATER LINE LG	14. ROCKS, SHOALS, ETC. LG	15. BRIDGES LG
16. AIDS TO NAVIGATION LG	17. LANDMARKS LG	18. OTHER ALONGSHORE PHYSICAL FEATURES LG	19. OTHER ALONGSHORE CULTURAL FEATURES LG
PHYSICAL FEATURES			
20. WATER FEATURES LG	21. NATURAL GROUND COVER NA		22. PLANETABLE CONTOURS NA
23. STEREOSCOPIC INSTRUMENT CONTOURS NA	24. CONTOURS IN GENERAL NA	25. SPOT ELEVATIONS NA	26. OTHER PHYSICAL FEATURES LG
CULTURAL FEATURES			
27. ROADS LG	28. BUILDINGS LG	29. RAILROADS LG	30. OTHER CULTURAL FEATURES LG
BOUNDARIES			
31. BOUNDARY LINES NA		32. PUBLIC LAND LINES NA	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES LG	34. JUNCTIONS LG		35. LEGIBILITY OF THE MANUSCRIPT LG
36. DISCREPANCY OVERLAY LG	37. DESCRIPTIVE REPORT LG	38. FIELD INSPECTION PHOTOGRAPHS LG	39. FORMS LG
40. REVIEWER L.L. Graves		SUPERVISOR REVIEW SECTION OR UNIT 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.			
COMPILER R.J.P. Reviewed: R.J. Pates		SUPERVISOR 11/15/69 6/23/72 Albert C. Rauck, Jr.	
43. REMARKS			

FIELD EDIT REPORT

JOB PH-6601

Map T-12985

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 so 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 sheet.

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 ozalid.

Field Edit corrections have been shown on the following photographs: 65-S-7236, 65-S-7237 and 66-L-2936.

Submitted By:

E W Hartford
Erwest W. Hartford
Surveying Technician
September 5, 1969

TO BE CHARTED
TO BE REVISED
TO BE DELETED

STRIKE OUT TWO

Atlantic Marine Center

December 2, 1969

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by

R. J. PATE

Allen E. Powell, Director, AMC	Chief of Party.
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This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-35, 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.

TO BE CHARTED
~~TO BE REVISED~~
~~TO BE DELETED~~

STRIKE OUT TWO

~~NON-FLOATING AIDS OR LANDMARKS FOR CHARTS~~

Atlantic Marine Center

Dec. 2

19 69

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

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

R. J. Pate

Allen H. Powell, Director, AMC

Chief of Party

MASSACHUSETTS				POSITION					METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE		LONGITUDE									DATUM
				° ' "	"	° ' "	"	D.P. METERS							
		NAHANT HARBOR ✓													
OBS TOWER		(G70P & B5/5 S5/5 & B5/3S5/3, 1943) Square, Concrete, ht=65(115) ✓		42 25	24.457 ✓	70 54	34.874 ✓	NA 1927	Tri T12985	7/17/69	✓	X		1207- 240 ✓	
OBS TOWER		(B3/9, B5/6S5/6 & G6, 1943) Square, Concrete ht=85(125) ✓		42 25	01.876 ✓	70 54	35.197 ✓	"	"	"	✓	X		1207- 240 ✓	
OBS TOWER		(B4/10S4/10 & B3/8S3/8 & Bc9, 1943) Sq., Concrete ht=75(115) ✓		42 25	00.667 ✓	70 54	35.824 ✓	"	"	"	✓	X		1207- 240 ✓	
OBS TOWER		(B4/2S4/2, 1943) Square, Concrete ht=55(125) ✓		42 25	11.200 ✓	70 55	57.826 ✓	"	"	"	✓	X		1207- 240 ✓	
CUPOLA		(NAHANT COAST GUARD CUPOLA, 1919) N.W. Corner of CG Bldg., Red Top, White Bldg. ht=54(64) ✓		42 25	50.464 ✓	70 56	03.890 ✓	"	"	7/23/69	✓	X		1207- 240 ✓	
CUPOLA		(LITTLE NAHANT CUPOLA, 1919) Black, S.W. Side 3-Story, Green, White house ht=66(106) ✓		42 26	04.001 ✓	70 56	05.074 ✓	"	"	"	✓	X		1207- 240 ✓	

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

STRIKE OUT TWO

~~NUMBER-ON-THE-VIDEO OR LANDMARKS FOR CHARTS~~

Atlantic Marine Center

December 2, 1969

附錄

The positions given have been checked after listing by

Floyd R. Tucker, Jr.

R. J. PATE

Allen L. Powell, Director	AMC	Chief of Party.
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AMC

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-35, 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

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

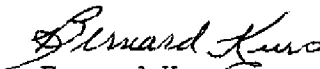
65. COMPARISON WITH NAUTICAL CHARTS

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.

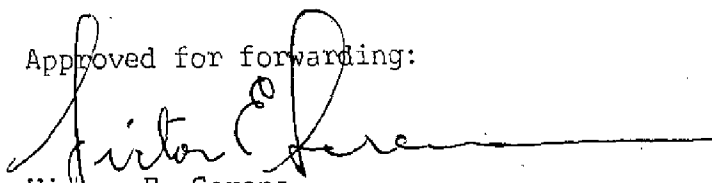
66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

Reviewed by:


Bernard Kurs
Cartographer

Approved for forwarding:



Victor E. Serena
Chief, Photogrammetric Branch, AMC

Approved:

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