

T-12970

T-12970

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline (Photogrammetric)
Field No.	Office No. T-12970
LOCALITY	
State	Massachusetts
General locality	Boston to Plum Island
Locality	Little River
1965 - 1968	
CHIEF OF PARTY	
Allen L. Powell, Director, Atlantic Marine Center	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

T - 12970

PROJECT NO. (II):

Job Ph-6601

FIELD OFFICE (II):

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center

OFFICER-IN-CHARGE

Allen L. Powell
Director, AMC

INSTRUCTIONS DATED (II) (III):

Field - August 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

MANUSCRIPT SCALE (III):

1:5,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:7,500 pantographed to 1:5,000

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): MHW

~~XXXXXXXXXX~~ 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 mean low water~~

REFERENCE STATION (III):

MEAD 2 1934 ✓

LAT.:

42° 37' 17.798" (549.2m)

LONG.:

70° 41' 03.097" (70.6m)

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

Massachusetts

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



FIELD INSPECTION BY (II):		DATE:
None		
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
Air Photo Compilation		
Date of Photography: August 25 & 31, 1965		
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. E. Roundtree		4-26-66
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
R. Glaser		4-28-66
CONTROL PLOTTED BY (III):		DATE
L. Neterer		9/22/66
CONTROL CHECKED BY (III):		DATE
Blood		9/22/66
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
Henry P. Eichert (Washington Science Center)		11/1/66
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY L. O. Neterer Rev. by: A. L. Shands	DATE 6-6-67 6-6-67
	Wild B-8	DATE
CONTOURS Inapplicable		
MANUSCRIPT DELINEATED BY (III):		DATE
C. H. Bishop - Shoreline R. R. White		6-9-67
SCRIBING BY (III):		DATE
B. Wilson		5-19-69
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
Compilation: R. J. Pate Field Edit: R. E. Smith Scribing and stickup: R. E. Smith		2-5-68 1-14-69 7-23-69

REMARKS:

Field Edit by: E. W. Hartford

Date: 10-13-68



DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

Wild RC-8 "S"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
65S 7285 through 65S 7288	8-31-65	0822	1:15,000	0.5 Below MLW
65S 7124R through 65S 7127R	8-25-65	0943	1:15,000	0.0 MHW
65S 7108R	8-25-65	0937	1:15,000	0.1 above MHW

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: BOSTON		9.5	11.0
COORDINATE STATION: GLOUCESTER HARBOR		8.7	10.1
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): Bernard Kurs

DATE:
March, 1974

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 9

RECOVERED:
6

IDENTIFIED:
4

NUMBER OF BM(S) SEARCHED FOR (II): None

RECOVERED:
None

IDENTIFIED
None

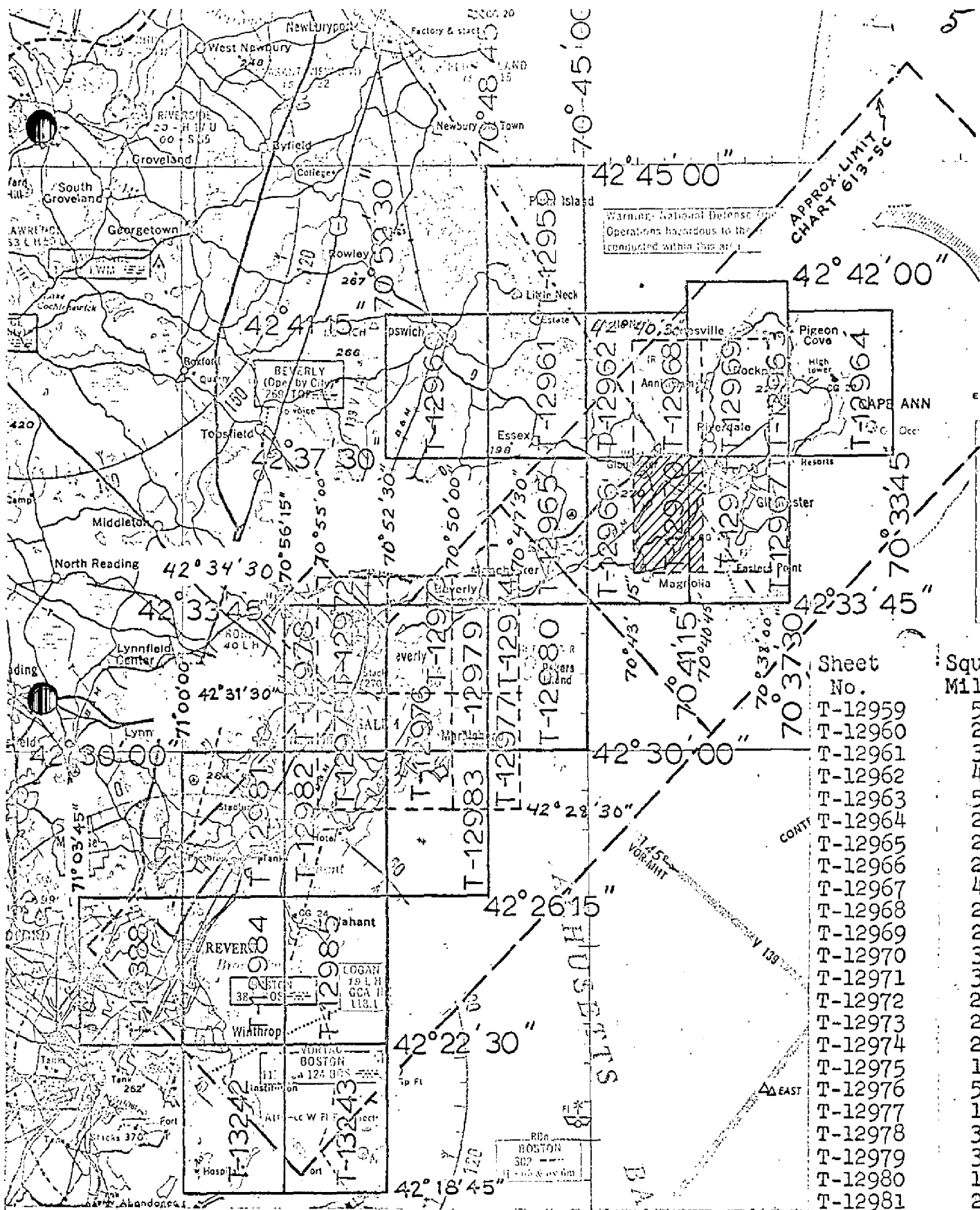
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): None

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): None

REMARKS:

T-12970

COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore area for hydro	2-7-68	superseded
Field edit applied compilation complete	12-19-68	superseded
Streets and inshore detail corrected	December 1968	Superseded
Final Review	March, 1974	



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

Sheet No. list:

- 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

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-12970
BOSTON TO PLUM ISLAND
PH-6601

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.

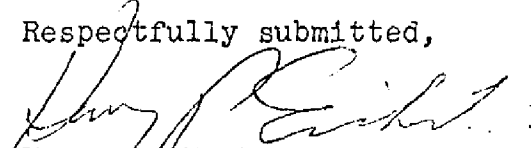
24. Supplemental Data

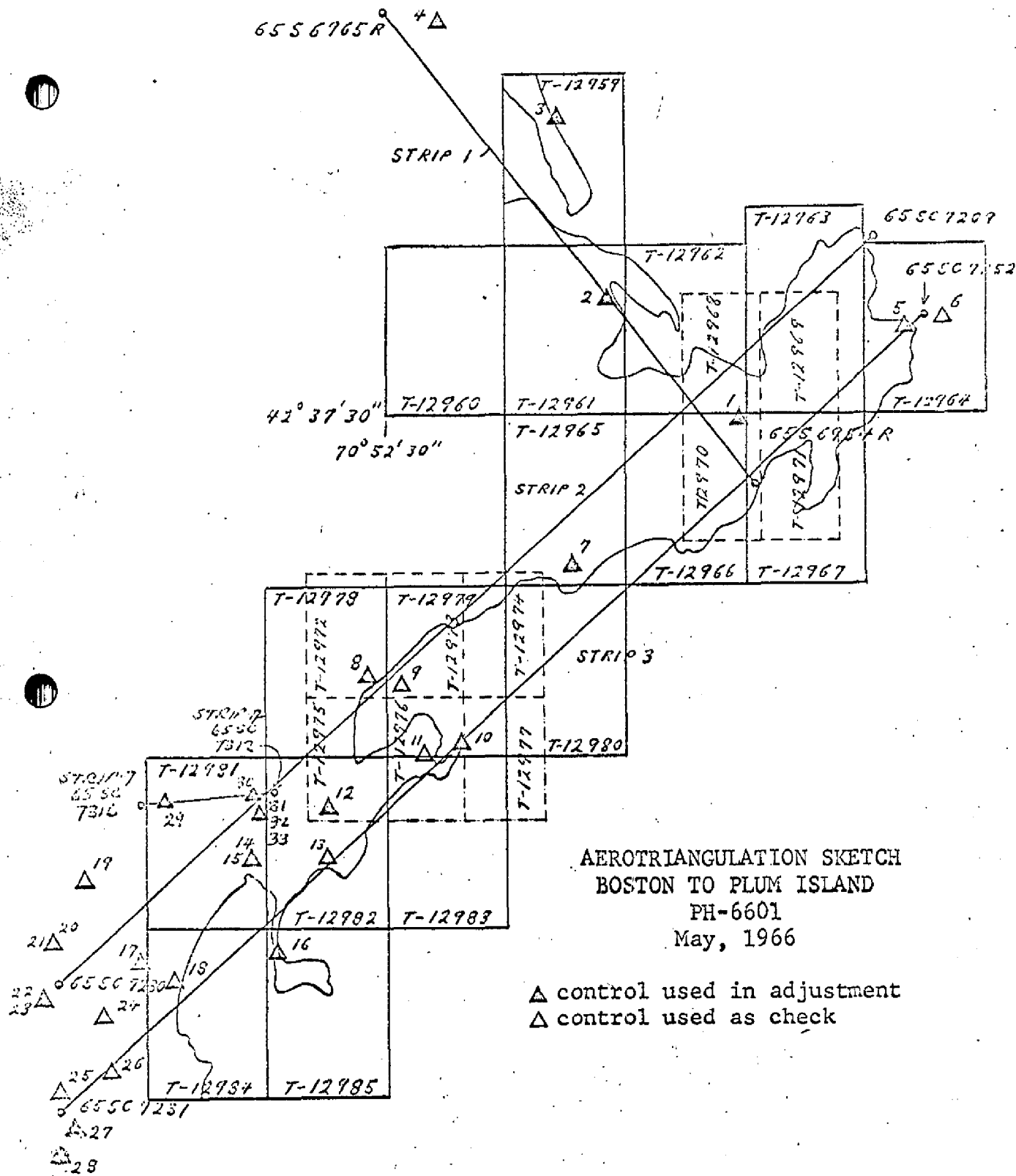
Vertical control points needed ^{as} ~~and~~ control for strip adjustments were taken from USGS quads.

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

Flt. 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 CUPOKA, 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

~~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 WEST NE TOWER, 1958

office identified (+1.4, +3.0)

23 MEDFORD RADIO STATION WEST 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 (+3.2, +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 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, 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 # 4

29 DANVERS, COOKE & ^{KRAUSE} ~~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)

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)

MAP T. 12970

PROJECT NO.

PH-6601

SCALE OF MAP

SCALE OF MAP
1:5,000

SCALE FACTOR

[illegible]

1 FT. = 3048006 MEYER
COMPUTED BY: LLG

DATE 12/13/66

CHECKED BY: ALS

DATE 10/17/66

COMM-DC-57843

COMPILATION REPORT
T-12970

31. DELINEATION

The B-8 Plotter was used to establish substitute control including shoreline passpoints, to compile planimetry and low water features. Graphic method was used to delineate the shoreline and roads.

Photographic coverage was adequate.

32. CONTROL

See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage was delineated from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline was delineated by office interpretation of photographs based on tide staff observations at MHW. Low water line, ledges, reef areas and rocks were compiled from photographs based on tide staff observations at MLW.

Corrections and completion was achieved by use of the field editors notes.

36. OFFSHORE DETAILS

No statement.

37. LANDMARKS AND AIDS

Appropriate copies of Form 567's for landmarks and aids have been forwarded to the Washington Office under date January 9, 1969.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

Junctions are satisfactory with T-12968, 1:5,000 scale, T-12962 1:10,000 to the north, T-12971, 1:5,000 and T-12967 to the east, T-12966 to the south and west.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with U.S.G.S. Quadrangle GLOUCESTER, Mass., scale 1:24,000 dated 1960.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with Coast and Geodetic Survey Chart 233, Scale 1:10,000 dated September 23, 1942, revised May 27, 1963, Chart 243, Scale 1:20,000, dated September 14, 1964, Chart 1206, Scale 1:80,000, dated November 23, 1964 and Chart 1207, Scale 1:80,000 dated May 14, 1962.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted:

L. L. Graves

L. L. Graves
Cartographic Technician

Approved and Forwarded:

Allen L. Powell

Allen L. Powell
Director, Atlantic Marine Center

Sept. 24, 1973

GEOGRAPHIC NAMES

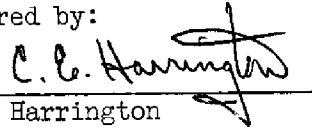
FINAL NAME SHEETS

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

T-12970

Annisquam River
Biskie Head
Bond Hill
Boston and Maine (RR)
Buswell Pond
Cressy Beach
Dolliver Neck
Field Rocks
Fernwood Lake
Freshwater Cove
Gloucester Harbor
Gray Beach
Little River
Magnolia
Magnolia Harbor
Massachusetts Bay
Mussel Point
Normans Woe
Normans Woe Cove
Normans Woe Rock
Old House Cove
Presson Point
Rafes Chasm
Stanwood Point
Susan Point
Wallace Pond
West Gloucester
West Pond
Wolf Hill

Prepared by:


C. E. Harrington
Staff Geographer

PRELIMINARY
T-12970 & T-12971

49. NOTES FOR THE HYDROGRAPHER

Due to the urgency of your need of these two sheets, they are temporarily classified as "Preliminary".

Your customary copy of "Notes for the Hydrographer" and your individual "Hydro Edit Ozalid" have been temporarily suspended until such a time as these sheets can be further completed. These copies will then be forwarded to you.

These two sheets are "Preliminary" only insofar as interior details are concerned.

The MHWL has been compiled from infrared photography taken at or about MHW and much of the obvious foreshore has been compiled. These should serve your needs concerning Hydro Signal Sites, but should not be construed as finished "Incomplete" surveys.

They will be further completed on your return to the Atlantic Marine Center of all processed cronapaque ratio photos in these areas.

PHOTOGRAMMETRIC OFFICE REVIEW

T- 12970

1. PROJECTION AND GRIDS RJP	2. TITLE RJP	3. MANUSCRIPT NUMBERS RJP	4. MANUSCRIPT SIZE RJP
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY RJP	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) RJP		7. PHOTO HYDRO STATIONS XX
8. BENCH MARKS None	9. PLOTTING OF SEXTANT FIXES None	10. PHOTOGRAMMETRIC PLOT REPORT HPE (WSE)	11. DETAIL POINTS LLG RJP
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE RJP	13. LOW-WATER LINE RJP	14. ROCKS, SHOALS, ETC. RJP	15. BRIDGES RJP
16. AIDS TO NAVIGATION RJP LLG	17. LANDMARKS RJP LLG	18. OTHER ALONGSHORE PHYSICAL FEATURES RJP LLG	19. OTHER ALONGSHORE CULTURAL FEATURES RJP
PHYSICAL FEATURES			
20. WATER FEATURES RJP	21. NATURAL GROUND COVER RJP		22. PLANETABLE CONTOURS XX
23. STEREOSCOPIC INSTRUMENT CONTOURS XX	24. CONTOURS IN GENERAL XX	25. SPOT ELEVATIONS XX	26. OTHER PHYSICAL FEATURES RJP
CULTURAL FEATURES			
27. ROADS LLG	28. BUILDINGS RJP LLG	29. RAILROADS RJP	30. OTHER CULTURAL FEATURES RJP
BOUNDARIES			
31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES LLG	34. JUNCTIONS RJP LLG		35. LEGIBILITY OF THE MANUSCRIPT RJP
36. DISCREPANCY OVERLAY RJP	37. DESCRIPTIVE REPORT LLG	38. FIELD INSPECTION PHOTOGRAPHS XX	39. FORMS LLG
40. REVIEWER R. J. Pate <i>RJPate</i> 2/5/68 L. L. Graves <i>LLG</i> 1/7/69		SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck Jr.</i> 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 <i>LLG</i> L. L. Graves 12/19/68 Rev. by: R. E. Smith 1/14/69		SUPERVISOR <i>Albert C. Rauck Jr.</i> Albert C. Rauck, Jr.	
43. REMARKS Field edit applied from: Field Edit ozalid Field photos nos. 65S7285 65S7288 65S7292 65S7293 65S7294			

FIELD EDIT REPORT

PH-6601

Boston to Plum Island

T-12966-67-1 0,000 T-12970 71 :5000

GENERAL NOTES

This report is submitted for four T-sheets, field edited July thru September 13, 1968.

All notations on discrepancy sheets and Photographs are made in violet ink. The notations were made either directly on the discrepancy print or referenced to Photos.

51 METHODS

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

All rock and ledge areas were inspected at or near low-water, and found to be compiled adequate. The rock and ledge heights were obtained by hand leveling from mean high-water line or from mean low-water.

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-12966	T-12967	T-12970	T-12971
65-S-7245	65-S-7049	65-S-7285	65-S-7049
7246	7051	7288	7050
		7292	7051
		7293	7292
		7294	7293
			7294

52 ADEQUACY OF COMPIATION

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

54 RECOMMENDATIONS

None

56 ROCKS

Several rocks were verified directly on the field edit sheets. All other rocks, rock areas, and additional rocks recommended for charting are noted on the field edit ozalids and referenced to photos.

57 NAUTICAL LANDMARKS AND FIXED AIDS

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

58 SUBMERGED PIPE LINES AND CABLES

All submerged pipe lines and cable areas are noted on the field edit ozalid and referenced to a photograph. These areas being verified either by Gloucester City engineers and by the electric light and power company.

59 LANDMARK BUILDINGS AND BLUFFS

Landmark building recommended for deletion and charting are noted directly on the discrepancy sheet. All addition landmark and water-front buildings recommended for charting are circled or outlined on the following photos. 65-S-7049, 50, 72, 45, 85, 88, 92, 93, and 94.

There are four new water-front buildings in Gloucester Harbor shown directly on the field edit ozalid.

All bluffs were investigated of shore and bluff recommended for charting are inked on the following photos. 65-S-7049, 50, 7245, 88, and 93.

Three public buildings are circled on photos 65-S-7050, and 7293.

60 STREETS

All street additions and classification are not on the field edit sheet and referenced to the photos.

Submitted by

E. W. Hartford

28 oct. 1968

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DOCK CHARTERED
FOR REBBER
TO BE DELETED

STRIKE OUT TWO

THE 100 BEST LANDMARKS FOR CHARTS

Atlantic Marine Center

Jan. 8 1969

I recommend that the following objects which have ~~(been inspected from seaward to determine their value as landmarks be~~ 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

L. L. Graves

Allen L. Powell

Director, ANC *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 *non-floating 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

USCOMM-DC 10234-P01

USCOMM-DC 16
v by *R. Minster*

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TO BE CHARTED
TO BE REVISED
TO BE DELETED

STRIKE OUT TWO

NONFUNCTIONAL LANDMARKS FOR CHARTS

Atlantic Marine Center

Jan. 8 1969

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

L. L. Graves

Allen L. Powell

Chief of Party.

Director, AMC

[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.

considered for the charts of the

USCOMM-DC 16254-P61

by G. L. Winter-

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TO BE CHARTED
ROBERT WISE
ROBERT WISE

STRIKE OUT TWO

NONFLOATING AIDS ON LANDMARKS FOR PROGRESS

Atlantic Marine Center

Jan. 8 1969

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

L. L. Graves

Allen L. Powell

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 *non-floating 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

182-7321 20-711031

✓ by R. Winter

REVIEW REPORT T-12970

SHORELINE

MARCH, 1974

61. GENERAL STATEMENT:

See Summary which is p. six (6) of the Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with T-9079 at 1:10,000 scale with 1952 photography and field edited 1953. There was very good agreement except in areas where natural changes are to be expected. These areas are grass in water, marshy shoreline and sandy beaches. There are no significant differences.

This survey supersedes any prior listed surveys for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with USGS Quadrangle Gloucester, MA, dated 1960 at 1:24,000 scale. The visual comparison indicates general agreement with some minor changes of grass in water and marsh mean high water line.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with final Boat Sheet H-8942 at 1:5,000 1969, with excellent agreement, two (2) boat sheets from the explorer (no H-number) dated 1967 at 1:5,000 scale. Comparison is good except for minor changes made during the 1968 field edits.

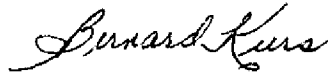
65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 233 at 1:10,000 scale dated Jan. 6, 1973. There was good agreement except for items as mentioned under Par. 62. The only significant difference is an extensive marina at the bend in the Blyman Canal at Lat. 42°36' 45" on the eastern edge of the sheet. The area west of "Normans Woe," was visually compared with Chart 243 at 1:20,000 scale dated Oct. 6, 1973 and appears to be in good agreement.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

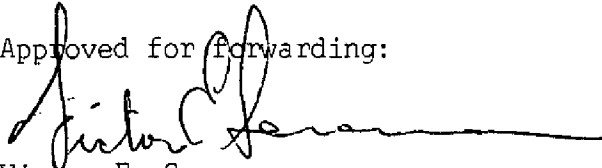
This survey complies with project instructions and meets the National Standards of Map Accuracy.

Reviewed by:



Bernard Kurs
Cartographer

Approved for forwarding:



Victor E. Serena
Chief, Photogrammetric Branch, AMC

Approved:



Chief, Photogrammetric Branch  for Chief, Coastal Mapping Division

CESTER LE PAGE GLUE
RY CHIMNEY 1928
k) ht = 155 (165)

70°41'15"

37'

y = 590.000

T
T-12970

40°45'

submerged pipeline

ESSEX AVE

ANNISQUAM RIVER CHANNEL
LIGHT 46 1968

Wreck (S)

36°45"

-Chart 233

y = 588.000 FT.

133

Pond

42°

36°30"

127

Washington
Cemetery

Bond Hill

y = 586.000 FT.