

T-12964

ORIGINAL

T-12964

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Office No. T-12964

LOCALITY

State Massachusetts

General locality Boston to Plum Island

Locality Sandy Bay

19 65-1969

CHIEF OF PARTY

Alfred C. Holmes, Director, AMC

LIBRARY & ARCHIVES

DATE

DESCRIPTIVE REPORT - DATA RECORD

T = 12964

PROJECT NO. (II):

PH-6601

FIELD OFFICE (III):

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

OFFICER-IN-CHARGE

Atlantic Marine Center

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 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):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

SEPT. 1975

GEOGRAPHIC DATUM (III):

N.A. 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 or mean lower low water

REFERENCE STATION (III):

Stonehaven (Rockport Town) 1939

LAT.:

42 39' 38.370"

LONG.:

70 35' 46.739"

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

Y = 606, 438.69 Ft.

X = 843, 083.15 Ft.

Massachussets

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): 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. 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 C. H. Bishop		DATE 5- --67 8-8-69
SCRIBING BY (II):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): Charles H. Bishop		DATE 8-8-69
REMARKS:		

DESCRIPTIVE REPORT - DATA RECORD

T-12964

CAMERA (KIND OR SOURCE) (III):

Wild RC-8 "S"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
65S(C) 7209	Aug. 31, 1965	0727	1:30,000	0.2 Ft. above M.L.W.*
65S(C) 7251-7252	Aug. 31, 1965	0748	1:30,000	0.2 Ft. below M.L.W.*
65S 6906R	Aug. 24, 1965	0832	1:30,000	8.5 Ft. above M.L.W.*
65S 6949R-6951R	Aug. 24, 1965	0853	1:30,000	8.6 Ft. above M.L.W.*

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Portland, ME		9.0	10.4
SUBORDINATE STATION: Rockport, MA		8.5	10.0
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): Bernard Kurs AMC

DATE:
Feb., 1974

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 19

RECOVERED:
14IDENTIFIED:
2

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

RECOVERED:

IDENTIFIED

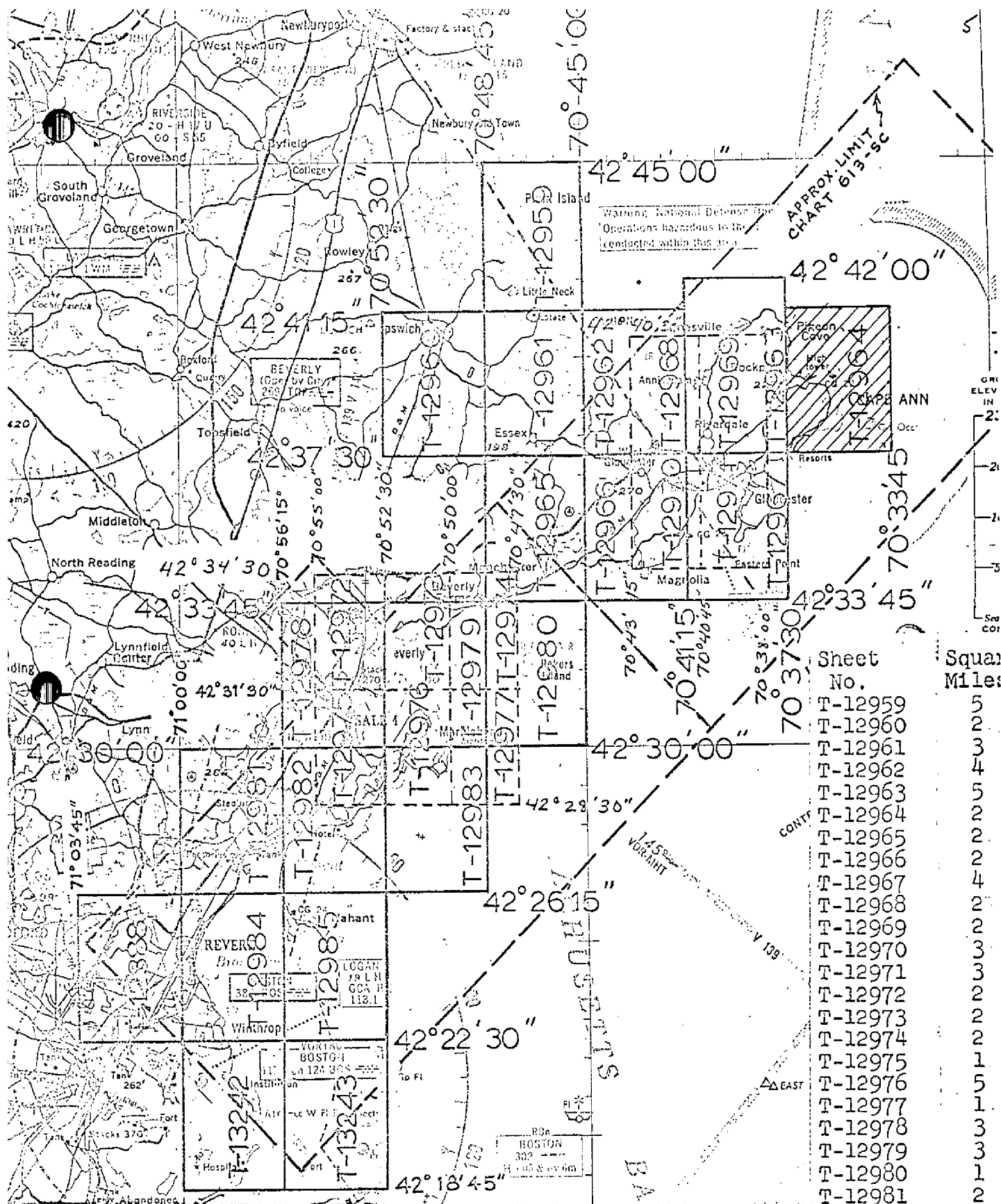
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

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.

COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore area for Hydrography	May 1967	Superseded
Compilation complete pending Field Edit	Dec. 1967	Superseded
Broken manuscript re-drafted, Field Edit applied, compilation complete	Aug. 1969	Superseded
Final Review	Feb. 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

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.

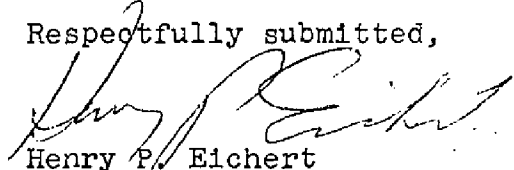
24. Supplemental Data

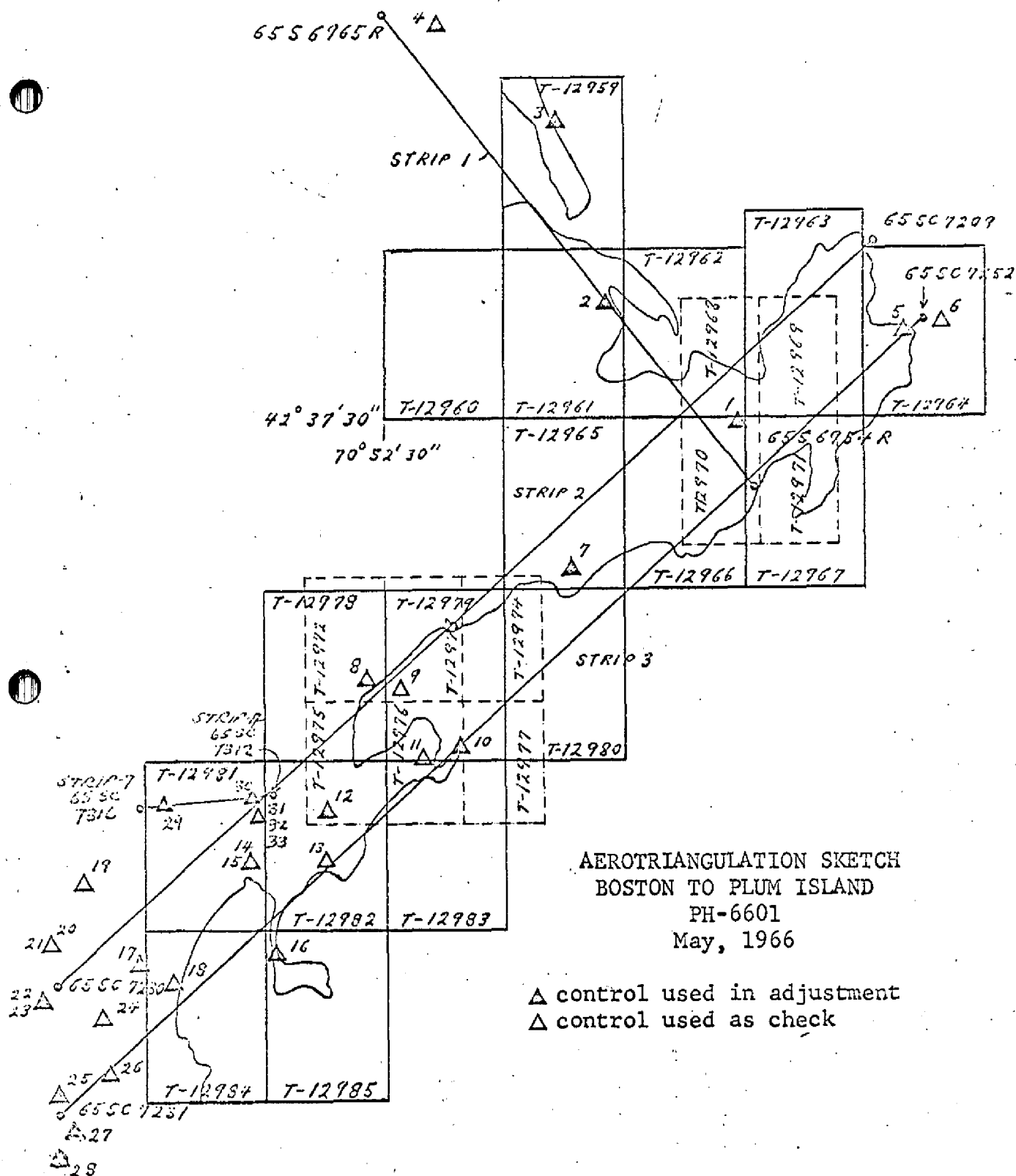
Vertical control points needed ^{as} ~~and~~ control for strip adjustments were taken from USGS quads.

25. Photography

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

Respectfully submitted,


Henry P. Eichert



Fit To control
(feet)

STRIP #1

1 MEAD 2 (MGS), 1934

target (+0.1, +0.1)

sub. pt. (-0.9, +1.7)

2 CHLOATE, 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 $(+1.8, -3.2)$

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

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

21 MEDFORD TV STATION WNAC TOWER, 1958

office identified $(+5.3, -1.0)$

12
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 GUPOLA, 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
COCKE 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 LODGE, 1934

(-1.29 +1.55)

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

MAP T- 12964 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)
STRAITSMOUTH LIGHTHOUSE, 1902	G.P. Vol. 1 Page 280	NA 1927	42° 39' 43". 786 70° 35' 19". 173	1351.1 (500.3) 436.7 (929.5)
THATCHERS ISLAND SOUTH LIGHT, 1940	G.P. Vol. 1 Page 280	NA 1927	42° 38' 12". 226 70° 34' 31". 830	377.3 (1474.1) 725.2 (641.7)
CAPE ANN NORTH LIGHTHOUSE, 1902	G.P. Vol. 1 Page 281	NA 1927	42° 38' 20". 654 70° 34' 31". 100	637.3 (1474.1) 708.6 (658.4)
ROCKPORT, ORTHODOX CHURCH, 1902	G.P. Vol. 1 Page 835	NA 1927	42° 39' 28". 213 70° 37' 09". 728	870.6 (1980.8) 221.6 (1145.0)
ROCKPORT COAST GUARD CUPOLA 1940	G.P. Vol. 1 Page 280	NA 1927	42° 39' 32". 174 70° 35' 54". 239	992.8 (850.4) 1235.3 (131.2)
ROCKPORT COAST GUARD STATION IRON TOWER, 1916	G.P. Vol. 1 Page 858	NA 1927	42° 39' 32". 44 70° 35' 53". 66	1001.0 (850.4) 1222.2 (144.4)
ROCKPORT METHODIST CHURCH SPIRE, 1916	G.P. Vol. 1 Page 858	NA 1927	42° 39' 22". 98 70° 37' 13". 20	709.1 (1142.3) 1300.7 (1065.9)
STONEHAVEN (ROCKPORT TOWN) 1939	G.P. Vol. 1 Page 278	NA 1927	42° 39' 38". 370 70° 35' 46". 739	1184.0 (667.4) 1064.5 (302.0)
ROCKPORT UNIVERSALIST CHURCH SPIRE 1916	G.P. Vol. 1 Page 856	NA 1927	42° 39' 27". 425 70° 37' 13". 459	846.3 (1005.1) 306.5 (1060.0)
LONDONER BEACON 1849	G.P. Vol. 1 Page 832	NA 1927	42° 38' 05". 664 70° 33' 59". 368	174.8 (1676.6) 135.6 (14.5)
B 9 S 9 1943 6 6 6	G.P. Vol. 1 Page 394	NA 1927	42° 38' 22". 403 70° 35' 56". 578	691.3 (1160.1) 1289.0 (77.9)

COMPUTED BY

K. Boyle

DATE

SEPT. 20, 1966

CHECKED BY

L. O. Neterer Jr.

DATE

SEPT. 20, 1966

9

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

Charles H. Bishop
Cartographer
August 7, 1969

Approved For Forwarding:

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

Approved:

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

Approved:

Chief, Photogrammetric Branch Chief, Coastal Mapping Division

Sept. 24, 1973

GEOGRAPHIC NAMES

FINAL NAME SHEETS

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

T-12964

Atlantic Ocean	Sandy Bar Ledge
Back Harbor	Sandy Bay
Bearskin Neck	Straitsmouth Island
Cape Ann	Thacher Island
Cape Hedge	The Headlands
Cape Hedge Beach	Whale Cove
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	Pebbly Beach
Pigeon Cove (locality)	
Pigeon Cove	
Rockport	
Rockport Harbor	
Rowe Point	

Prepared by:

C. E. Harrington
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

1. PROJECTION AND GRIDS CHB	2. TITLE CHB	3. MANUSCRIPT NUMBERS CHB	4. MANUSCRIPT SIZE CHB
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 X	9. PLOTTING OF SEXTANT FIXES X	10. PHOTOGRAMMETRIC PLOT REPORT CHB	11. DETAIL POINTS CHB
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE CHB	13. LOW-WATER LINE CHB	14. ROCKS, SHOALS, ETC. CHB	15. BRIDGES
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	30. OTHER CULTURAL FEATURES
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 NONE	39. FORMS CHB
40. REVIEWER Charles H. Bishop C.H. Bishop		SUPERVISOR, REVIEW SECTION OR UNIT Albert C. Rauck Jr. A.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 C.H. Bishop 8-8-69		SUPERVISOR Albert C. Rauck Jr. 8-8-69	
43. REMARKS Field Edit applied from: Field Edit Valid, 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 compilers 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 Thatcher 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 Straitsmouth 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:
Erwest W. Hartford
 Erwest W. Hartford
 Surveying Technician
 July 11, 1969



HOW TO SET UP AND/OR LANDMARKS FOR CHARTS

STRIKE OUT TWO

August 7, 1969

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

[illegible]

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

TO BE CHARTED
TO BE REVISED
TO BE DELETED

STRIKE OUT TWO

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Atlantic Marine Center August 7 19 69

I recommend that the following objects which have ~~(been removed)~~ 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

Charles H. Bishop

Allen L. Powell

Director, A.M.C. Chief of Party.

STATE MASSACHUSETTS				POSITION						METHOD OF LOCATION AND SURVEY NO.	DATE OF MODIFICATION Verifi	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE #		LONGITUDE #				DATUM						
			° ' "	D.M. METERS	° ' "	D.P. METERS									
DAYBEACON	SANDY BAY Dodge Rock Daybeacon (Dodge Rock Beacon 1916)		42 40	03.435	70 37	07.535	NA	Tri	T-12964	6-23-69x				243	
				106.0		171.6	1927								
** LIGHT	Rockport Breakwater Light		42 39	38.37	70 36	44.74	"	Photo	T-12964	6-23-69x				243	
				1184		1019									
LIGHT	SEACOAST Straitsmouth Light (Straitsmouth Lighthouse 1902)		42 39	43.786	70 35	19.173	"	Tri	T-12964	6-23-69x				243	
				1351.1		436.7									
LIGHT	Cape Ann Light (Thatchers Island South Light 1940)		42 38	12.226	70 34	31.830	"	Tri	T-12964	6-23-69x				243	
				377.3		725.2									
DAYBEACON	Londoner Rock Daybeacon (Londoner Beacon 1849)		42 38	05.664	70 33	59.368	"	Tri	T-12964	6-23-69x				243	
				174.8		1352.6									
* 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

/ C/H/13

USCOMMA-DC 18294-P81

~~TO BE CHARTERED~~
~~TO BE REVISED~~
~~TO BE DELETED~~

STRIKE OUT TWO

NON-TEACHING AIDS OR LANDMARKS FOR CHARTS

Atlantic Marine Center

August 7 1969

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

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 be individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

✓ = NTB

USCOMM-DC 10234261

TO BE CHARTED
TO BE REVISED
TO BE DELETED

STRIKE OUT TWO

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

August 7, 1969

Atlantic Marine Center

I recommend that the following objects which have ~~(been 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

Charles H. Bishop

Charles H. Bishop

Allen L. Powell

Director, A.M.C.

Chief of Party.

STATE MASSACHUSETTS														POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION Verifi	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE		LONGITUDE		DATUM																
			D. M. METERS	"	D. M. METERS	"																	
								D. M. METERS	"														
SANDY BAY																							
STACK CHURCH SPIRE	Concrete, round, white ht= 120 (135)		42 40	39.28	70 37	28.15	1927	NA	Photo	6-23-69x				243									
	Black spire, gold knob ht= 95 (145)		42 39	27.425	70 37	13.459	"	Tri	T-12964	6-23-69x				243									
	(Rockport Universalist Church Spire 1916)																						
CLOCK TOWER	Wood, white, hexagonal ht= 85 (115)		42 39	28.213	70 37	09.728	"	Tri	12964	6-23-69x				243									
	(Rockport Orthodox Church 1902)																						
RADIO TOWER	Skelton, steel, red and white ht= 155 (170)		42 39	30.98	70 35	54.49	"	Photo	T-12964	6-23-69x				243									
SEACOAST																							
N. TOWER (Aband. Lt. No)	Gray stone L.H., N'ly of two ht= 166 (205)		42 38	20.654	70 34	31.100	"	Tri	T-12964	6-23-69x				243									
	(Cape Ann North Lighthouse 1902)																						
STANDPIPE OBS TOWER	Round, green, steel ht= 115 (235)		42 38	26.64	70 36	26.56	"	Photo	T-12964	6-23-69x				243									
	Round concrete ht= 50 (110) (B 2 S 6 1943)		42 38	22.403	70 35	56.578	"	Tri	T-12964	6-23-69x				243									

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.

✓ C 476

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., 1960 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.

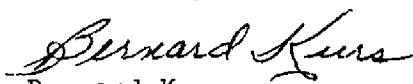
65. COMPARISON WITH NAUTICAL CHARTS:

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:


Bernard Kurs
Cartographer

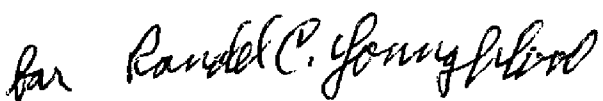
Approved For Forwarding:


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

Approved:


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

Approved:


Chief, Photogrammetric Branch \ Chief, Coastal Mapping Division

38' 30"

Loblolly Pt

Thatcher Island

CAPE ANN LIGHT
(THATCHERS ISLAND SOUTH LIGHT 1940)

Londoner

38

Milk Island

— Quad Rockport, Mass., 1960
1,24,006

 $42^{\circ} 37' 30''$
$$x = 850,000 \text{ FT}$$

34'30"

35'00"

 $x = 845,000 \text{ FT}$

35'30"

34'00"

70° 3'

T-12964

INTERNATIONAL OCEANOGRAPHIC SURVEY

Wreck (FA)

Not visible
Not visible
Not visible

Breakwater

Rocks Uncover
(1) to (10) ft MLW

Subm breakwater

Dry Salvages

Little Salvages

Not visible
on photos

65-S-6951R

65-S-7252

- Chart 243
- Inad Rockport, Mass, 1960

T-12964

1/2" = 610,000 FT

42° 40'30"

40'00"

34° 30' EE

34° 30' EE

70° 35'