

11154

Diag. Cht. No. 1206.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Ph-114 Office No. T-11154

LOCALITY

State Massachusetts

General locality Ipswich Bay

Locality Essex River

1952-53

CHIEF OF PARTY

E.H.Kirsch, Chief of Field Party
I.R.Rubottom, Tampa Photo. Office

LIBRARY & ARCHIVES

DATE February 26, 1959.

11154

DATA RECORD

T - 11154

Project No. (II): **Ph-114**

Quadrangle Name (IV):

Field Office (II): **Newburyport, Mass.**

Chief of Party: **E. H. Kirsch**

Photogrammetric Office (III): **Tampa, Fla.**

Officer-in-Charge: **Ira R. Rubottom**

Instructions dated (II) (III): **Project Instructions dated 3/13/53**
Supplement No. 1 " 3/28/53
" No. 2 " 4/30/53
" No. 3 " 5/6/53
" No. 4 " 5/26/53
" No. 5 " 6/25/53

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): **Graphic**

Manuscript Scale (III): **1:10,000**

Stereoscopic Plotting Instrument Scale (III): **Inapplicable**

Scale Factor (III): **None**

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): **7/3/54**

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N. A. 1927**

Vertical Datum (III): **M.H.W.**

~~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): **CASTLE DOME, 1941**

Lat.: **42° 41' 06".880 (212.3 m.)** Long.: **70° 46' 46".407 (1956.5 m.)**

Adjusted
~~Unadjusted~~

Plane Coordinates (IV):

State:

Zone:

Y=

X=

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.

INAPPLICABLE

Areas contoured by various personnel
(Show name within area)
(II) (III)

DATA RECORD

Field Inspection by (II):	H. R. Spies,	Date:	March 1953 to October 1953
Planetable contouring by (II):	Inapplicable	Date:	
Completion Surveys by (II):		Date:	
Mean High Water Location (III) (State date and method of location): Air Photo Compilation - September 1953			
Projection and Grids ruled by (IV):	Jack Allen (W.O.)	Date:	13 April 1953
Projection and Grids checked by (IV):	H. D. Wolfe (W.O.)	Date:	14 April 1953
Control plotted by (III):	I. I. Saperstein	Date:	7 May 1953
Control checked by (III):	R. J. Pate	Date:	7 May 1953
Radial Plot on Stereoscopic	M. M. Slavney	Date:	2 June 1953
Control extension by (III):			
	Planimetry	Date:	
Stereoscopic Instrument compilation (III):	Inapplicable	Date:	
	Contours	Date:	
Manuscript delineated by (III):	I. I. Saperstein	Date:	11 May 1954
Photogrammetric Office Review by (III):	J. A. Giles	Date:	7 July 1954
Elevations on Manuscript checked by (II) (III):	Inapplicable	Date:	

Camera (kind or source) (III):

Dept. of Agriculture by Robinson Aerial Surveys, Inc.
USCGS Fairchild Cartographic Camera "J"

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
DPP-9K-80	26 Aug. 1952	11:09	1:10,000	3.6
-81 & 82	"	11:10	"	"
-83	"	11:11	"	"
-111-114, incl.	"	11:42-45, incl.	"	4.7
-134-137, incl.	"	12:03-06, incl.	"	5.5
53-J-265	22 Apr. 1953	08:29	"	5.6
-271 & 272	"	08:41	"	5.3
-273	"	08:42	"	5.3
-274	"	08:43	"	5.3

Tide (III)

Reference Station: **PORTLAND, MAINE**
 Subordinate Station: **IPSWICH RIVER ENTRANCE**
 Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
1.0	8.7	9.9

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): **6**Shoreline (More than 200 meters to opposite shore) (III): **48**~~Shoreline (Less than 200 meters to opposite shore) (III):~~Control Leveling - Miles (II): **None**Number of Triangulation Stations searched for (II): **8**Recovered: **8**Identified: **5**Number of BMs searched for (II): **-**Recovered: **-**Identified: **-**Number of Recoverable Photo Stations established (III): **None**Number of Temporary Photo Hydro Stations established (III): **44**

Remarks:

Summary to Accompany T-11154

Field instructions were issued for Ph-114 on 13 March 1953 to provide shoreline and control for inshore hydrographic surveys and to provide standard shoreline manuscripts for chart compilation. The hydrographic phase of this surveying was accomplished in the summer of 1953 under instructions for project CS-355 (Plum Island Sound to Portsmouth Harbor) and CS-361 (Cape Porpoise Harbor).

THE "FIELD INSPECTION REPORT"

~~IS SUBMITTED SEPARATELY~~

FOR THE ENTIRE

PROJECT

Filed with Report T11148

COMPILATION REPORT T-11154RADIAL PLOT REPORT.

Filed with Report T11147
~~Submitted separately.~~

31. DELINEATION.

The graphic method was used. The field inspection was good and no difficulty was encountered in the interpretation of the photographs or in the delineation of the manuscript. Topographic details were delineated as nearly as possible according to the layout furnished by the Washington Office, with the exception that the upper reaches of drainage were shown.

There was no field inspection of roads on HOG ISLAND or LONG ISLAND. As a consequence, no roads were delineated.

32. CONTROL.

Reference photogrammetric plot report.

33. SUPPLEMENTAL DATA.

None.

34. CONTOURS AND DRAINAGE.

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline inspection was generally good and no difficulty was encountered in its delineation. All piers, bulkheads and alongshore features have been shown.

The low-water line was delineated according to the field notes. The M. H. W. L. and low-water line along IPSWICH BEACH were taken from the field inspection notes shown on photograph 53-J-126.

36. OFFSHORE DETAILS.

No unusual offshore details were encountered.

37. LANDMARKS AND AIDS.

One aid is shown and its position submitted on Form 567.

38. CONTROL FOR FUTURE SURVEYS.

No topographic stations were established.

Forty-four (44) hydro stations are shown on the manuscript. A list of these stations with a short description for each is included under Item 49.

39. JUNCTIONS.

A junction was made with T-11153 to the north and T-11155 to the east. There are no contemporaneous surveys to the west and south.

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement

46. COMPARISON WITH EXISTING MAPS.

Comparison has been made with Army Map Service topographic quadrangle IPSWICH, MASSACHUSETTS, scale 1:25,000, edition of 1947. The greatest difference appears in the M. H. W. L. along IPSWICH BEACH.

47. COMPARISON WITH NAUTICAL CHARTS.

Comparison has been made with USC&GS Nautical Chart 243, scale 1:20,000, published July 1938 corrected to 25 May 1953, and Chart 1206, scale 1:80,000, published October 1948 corrected to 14 July 1952.

The manuscript supersedes both charts in the area covered.

The most noteworthy change in the mean high-water line appears at IPSWICH BEACH.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

I. I. Saperstein
Carto Photo Aid

APPROVED AND FORWARDED:

Ira R. Rubottom, Chief of Party

Review Report T-11154
Shoreline Map
4 November 1954

61. General

Stick-up was applied to the map manuscripts in this project as a part of the compilation process, i.e., prior to review. The map manuscripts at this phase are labeled "Advance Print".

These map manuscripts were not altered during review. Any addition, alterations, or deletions recommended by the reviewer were recorded on review correction overlays to be used by the drafting section for application of the called-for revisions on black line impressions on vinylite. These positives on vinylite with corrections applied serve as the final map manuscripts.

62. Comparison with Registered Surveys

T-467, a,b, - 1:10,000 1853, 1910, 1912 North Shore of Cape Ann, including Ipswich River and Vicinity.

T-556, a 1:10,000 1852-3, 1910 North Shore of Cape Ann.

T-11154 supersedes the older surveys for charting the shoreline and adjacent culture and planimetry.

63. Comparison with Maps of other Agencies

USE Ipswich, Mass. 1:25,000 1953 (a copy of USGS
1:31,680 1951)

Because of changes and greater detail of shoreline, and additional cultural data, T-11154 replaces these features on the quadrangle for charting purposes.

64. Comparison with Contemporary Hydrographic Surveys

H-8095 (ECFP 1153) 1:10,000 1953

A black-and-white print of the boat sheet was available for comparison.

The Ipswich Bay shoreline on T-11154 differs greatly from the preliminary shoreline on the boat sheet. In the vicinity of 70°45'-46' the 6-foot sounding line lies a hundred feet inland.

The final shoreline in this area was delineated on the final compilation of T-11154 from field photograph 53-J-126 was a result of inspection made 1 Sept. 1953. The shoreline had advanced as much as 350 feet.

The hydrographic signal HOG (Five Obsv. Twr.) was recommended by the hydrographer for charting as a landmark. No field inspection was made on the interior of Hog Island so that neither the tower nor the roads were described. During review roads and the tower were added to the manuscript. Tower identification was made possible by noting the position of HOG on the boat sheet. The point was cut in by three radials (on photographs DPP-IK-135, 136, 137) which gave an excellent intersection point. No form 567 was submitted by the reviewer, so that the symbol represents merely a recoverable object.

65. Comparison with Nautical Charts

243 1:20,000 July 1938, corr. July 1951 Ipswich Bay to Gloucester Harbor.

1208 1:80,000 Oct. 1948, corr. March 1954, Portsmouth and Cape Ann.

T-11154 supercedes the charts for shoreline and culture in their common area. Off shore data is covered by H-8095 (ECFP-1153). (See also heading 64 above).

66. Bridges

There are three bridges in this map area. Only one is listed in the Bridge List, and the measurements are not in agreement with current field inspection.

<u>Bridge List</u>	<u>Field Inspection, 1953</u>
Essex, Mass. Hwy. F Hor. Cl. 30.0 Ft	Hor. Cl. - 27.0 Ft.
Vert. Cl. 14.1 MLW	
5.6 MHW	6.5 MHW

67. Accuracy

This map manuscript is the most southern of Radial Plot No. 1 for Part B. There was no control for the southeastern two-thirds of the map area so that its accuracy here was probably sub-standard until the plot was extended through Radial Plot No. 2 for Part B.

When Radial Plot No. 2 for Part B was laid (T-11155, T-11156, T-9079) the eastern part of T-11154 was included in order to tie the control in T-11154 to that in T-11155. The delineation for T-11154 was then completed. The map meets the National Standards of Accuracy as well as Charting accuracy for shoreline and interior detail. Off-shore features are covered by H-8095.

Reviewed by:

K. N. Maki
for Lena T. Stevens

Approved by:

L. C. Lande
Chief, Review & Drafting Sec.
Div. of Photogrammetry

Max Brinkley
Chief, Nautical Chart Branch
Division of Charts

W. E. Swanson
Chief, Division of Photogrammetry
20 February 1959

J. R. Russell
Chief, Division of Coastal
Surveys

48. GEOGRAPHIC NAME LIST.

Names were taken from the IPSWICH quadrangle and Chart 243.

BULL ISLAND

CASTLE HILL

CASTLE NECK

CASTLE NECK RIVER

CHOATE HILL

CROSS ISLAND

DEAN ISLAND

EASTERN AVENUE

EBBEN CREEK

ESSEX

ESSEX RIVER

FOX CREEK

GREAT BANK

HOG ISLAND

HOG ISLAND CHANNEL

IPSWICH

IPSWICH BAY

IPSWICH BEACH

IPSWICH RIVER

JOHN WISE AVENUE

LABOR IN VAIN CREEK

LABOR IN VAIN ROAD

LONG ISLAND

LOWE ISLAND

LUFKIN CREEK

LUFKIN STREET

MAIN STREET

MASSACHUSETTS

MASSACHUSETTS 121

NEWMARCH STREET

ROUND ISLAND

48. GEOGRAPHIC NAME LIST (CONTINUED)

SOGINESE CREEK

SOUTH ESSEX

SPRING STREET

TREADWELL ISLAND CREEK

49. NOTES FOR THE HYDROGRAPHER.

Forty-four (44) hydro stations are listed below:

- 5401 - Chimney at north gable of easterly of two buildings.
- 5402 - Chimney of white modernistic house.
- 5403 - Easterly gable, large white house, gray roof with dormers.
- 5404 - Apex of roof of white house.
- 5405 - Southeast gable of easterly of two white houses.
- 5406 - Southwest corner of pier.
- 5407 - Brick chimney of brown house with porch.
- 5408 - Northeast corner of pier platform on marsh.
- 5409 - Easterly gable of large weatherbeaten building.
- 5410 - East edge of pier at marsh line.
- 5411 - Northeast gable of red-brown house, shingled roof, white trim.
- 5412 - Chimney in center of roof, ranch type house.
- 5413 - Northeast corner of camp.
- 5414 - Northeast corner of camp.
- 5415 - Northerly gable, highest wing of chicken house.
- 5416 - East gable, tan chicken house, red roof,
- 5417 - North gable white cottage, blue trim.
- 5418 - East gable of small shingled barn.
- 5419 - North gable of yellow house, green trim.
- 5420 - West gable brown shingled cottage, red roof.
- 5421 - Apex of roof, small stone building at top of hill.
- 5422 - Northeast gable, large barn.
- 5423 - Northeast gable white house.
- 5424 - Chimney of old house.
- 5425 - West gable of old house.
- 5426 - Center of lone oak tree.
- 5427 - Center of farthest west, small tree.
- 5428 - Apex of roof, small green shed.
- 5429 - Southerly gable of house.
- 5430 - Chimney at northerly gable of house.
- 5431 - Southwest gable tan and brown cottage.
- 5432 - Southwest gable of house ruins.
- 5433 - Cupola, white barn, gray roof.
- 5434 - Northeast gable of shed.
- 5435 - Front gable of yellow house.
- 5437 - Northerly gable, shingle house, gray roof.
- 5438 - Chimney large white house, dark roof.
- 5439 - East gable white house, red roof.
- 5440 - North gable shingled building.
- 5441 - Southwest gable green roof house, with two chimneys.
- 5442 - Flagpole at north gable of cottage.
- 5443 - Center of large boulder.
- 5444 - South gable brown house, yellow trim.
- 5445 - First Congregational Church spire.

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

~~TO BE DELETED:~~

STRIKE OUT ONE

Tampa Photogrammetric Office, Tampa, Fla. 23 July

61

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

The positions given have been checked after listing by

I. I. Saparstein, Carto Photo Aid

Mr. B. Hubbard *Chief of Party.*

STATE TEACHERS

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. 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

50.

PHOTOGRAMMETRIC OFFICE REVIEW

T- 11154

1. Projection and grids J.G. 2. Title J.G. 3. Manuscript numbers J.G. 4. Manuscript size J.G.

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy M.M.S. 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) XX 7. Photo hydro stations J.G. 8. Bench marks XX 9. Plotting of sextant fixes XX 10. Photogrammetric plot report J.G. 11. Detail points J.G.

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline J.G. 13. Low-water line J.G. 14. Rocks, shoals, etc. J.G. 15. Bridges XX 16. Aids to navigation J.G. 17. Landmarks XX 18. Other alongshore physical features J.G. 19. Other along-shore cultural features J.G.

PHYSICAL FEATURES

20. Water features J.G. 21. Natural ground cover J.G. 22. Planetable contours XX 23. Stereoscopic instrument contours XX 24. Contours in general XX 25. Spot elevations XX 26. Other physical features J.G.

CULTURAL FEATURES

27. Roads J.G. 28. Buildings J.G. 29. Railroads XX 30. Other cultural features J.G.

BOUNDARIES

31. Boundary lines XX 32. Public land lines XX

MISCELLANEOUS

33. Geographic names J.G. 34. Junctions J.G. 35. Legibility of the manuscript J.G. 36. Discrepancy overlay XX 37. Descriptive Report J.G. 38. Field inspection photographs J.G. 39. Forms J.G.40. Jesse A. Giles William A. Rasure
Reviewer Supervisor, Review Section or Unit

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_____
Supervisor

43. Remarks:

NAUTICAL CHARTS BRANCH

SURVEY NO. T-11154

Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

applied to Ch 213 (Photostat of MS) - JFWalsh, 1/25/57