11148

Diag. Cht. No. 1206.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Ph-111 *Office No.* T-11148

LOCALITY

State New Hampshire

General locality Rye Ledge

Locality Rye Harbor to North Beach

1952-53

CHIEF OF PARTY

P. Taylor, Chief of Party
J.E.Waugh, Tampa Photo. Office

LIBRARY & ARCHIVES

DATE September 16, 1958

B-1870-1 (1)

11148

DATA RECORD

T - 11148

Project No. (II): Ph-114(53) B Quadrangle Name (IV):

Field Office (II): Newburyport, N.H. Chief of Party: Paul Taylor

Photogrammetric Office (III): Tampa, Fla. Officer-in-Charge: J. E. Waugh

Instructions dated (II) (III): 30 March 1953 (II)
20 Feb. 1953 (III)

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): JUL 31 1953 Date reported to Nautical Chart Branch (IV): AUG 10 1953

Applied to Chart No. Date: Date registered (IV): 4/10/58

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): RYE LEDGE 139, 1941

Lat.: 42° 58' 24".361 (751.8 m.) Long.: 70° 45' 56".639 (1283.5 m.) Adjusted
~~Unadjusted~~

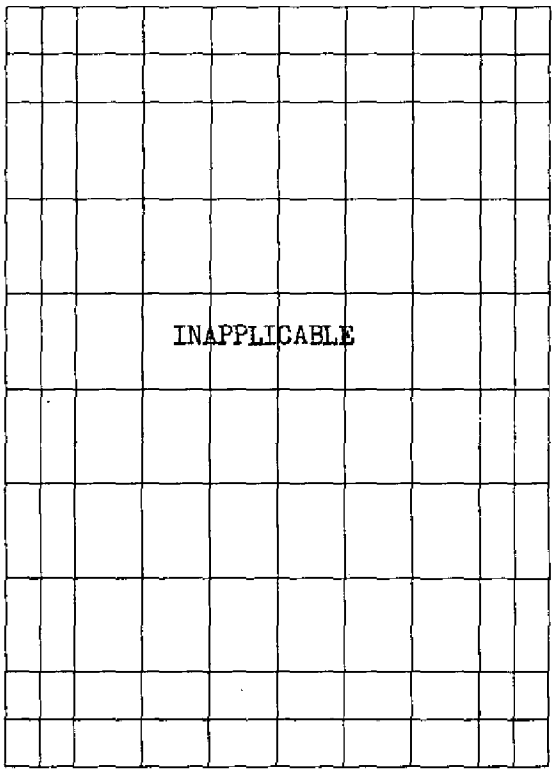
Plane Coordinates (IV): State: Zone:

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.

M-2618-12(4)



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

DATA RECORD

Field inspection by (II): L. F. Beugnet — Date: May 1953

Planetable contouring by (II): Inapplicable — Date:

Completion Surveys by (II): Inapplicable — Date:

Mean High Water Location (III) (State date and method of location):

Air Photo Compilation - March 1953

Projection and Grids ruled by (IV): S. Rose (W.O.) — Date: 15 Feb. 1953

Projection and Grids checked by (IV): H. D. Wolfe (W.O.) — Date: 17 Feb. 1953

Control plotted by (III): I. I. Saperstein — Date: 15 May 1953

Control checked by (III): R. J. Pate — Date: 15 May 1953

Radial Plot ~~or Stereoscopic Control extension~~ by (III): M. M. Slavney — Date: 30 June 1953

Stereoscopic Instrument compilation (III): Planimetry Inapplicable — Date:

Contours — Date:

Manuscript delineated by (III): W. W. Dawsey — Date: 22 July 1953

Photogrammetric Office Review by (III): I. I. Saperstein — Date: 23 July 1953

Elevations on Manuscript checked by (II) (III): Inapplicable — Date:

M-2618-12(4)

Camera (kind or source) (III): Mark Hurd Mapping Company - DQW.
Fairchild K-17 6" Metrogon Lens - J.

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
DQW 10K 4	2 July 1952	Unknown	1:10,000	-
5	"	"	"	-
6	"	"	"	-
7	"	"	"	-
8	"	"	"	-
53 J 304	22 April 1953	09:31	"	3.9
305	"	"	"	3.9
DQW 9K 193	2 July 1952	Unknown	"	-
194	"	"	"	-
195	"	"	"	-
196	"	"	"	-

Tide (III)

Ratio of Ranges	Mean Range	Spring Range
	8.9	10.2
1.0	8.7	10.0

Reference Station: PORTLAND
Subordinate Station: JAFFREY POINT
Subordinate Station:

Washington Office Review by (IV): Lena T. Stevens Date: 22 Sept. 1954

Final Drafting by (IV): O. C. Lach Date: Oct 4, 1954 Nov 16, 1954

Drafting verified for reproduction by (IV): W.O. Hellwin Date: 12-23-54

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 3
Shoreline (More than 200 meters to opposite shore) (III): 13
Shoreline (Less than 200 meters to opposite shore) (III): 4.5
Control Leveling - Miles (II): None
Number of Triangulation Stations searched for (II): 6* Recovered: 4 Identified: 5
Number of BMs searched for (II): None Recovered: 0 Identified: 0
Number of Recoverable Photo Stations established (III): 1
Number of Temporary Photo Hydro Stations established (III): 5

Remarks:

* One (1) new station established. Little Boar, 1953

M-2618-12(4)

Photogrammetry

MAP T- 11148 PROJECT NO. Pb-114B SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
RYE LEDGE 139, 1941	G.P.'s Pg 83	N.A. 1927	42 58 24.361 70 45 56.639			751.8 (1,099.8) 1,283.5 (76.2)	
HAMPTON MUNICIPAL STANDPIPE, 1941	" Pg 85	"	42 56 34.246 70 49 42.378			1,056.8 (794.7) 960.8 (399.5)	
FARRAGUT HOTEL WEATHERVANE, 1943	" Pg 88	"	42 58 21.294 70 46 08.317			657.1 (1,194.4) 188.5 (1,171.2)	
LITTLE BOAR, 1953	Field Comp.	"	42 57 28.698 70 46 33.788			885.6 (965.9) 765.8 (594.1)	
HAMPTON BAPTIST CHURCH, 1912	G.P.'s Pg 840	"	42 56 16.674 70 50 13.151			514.5 (1,337.0) 298.2 (1,062.0)	

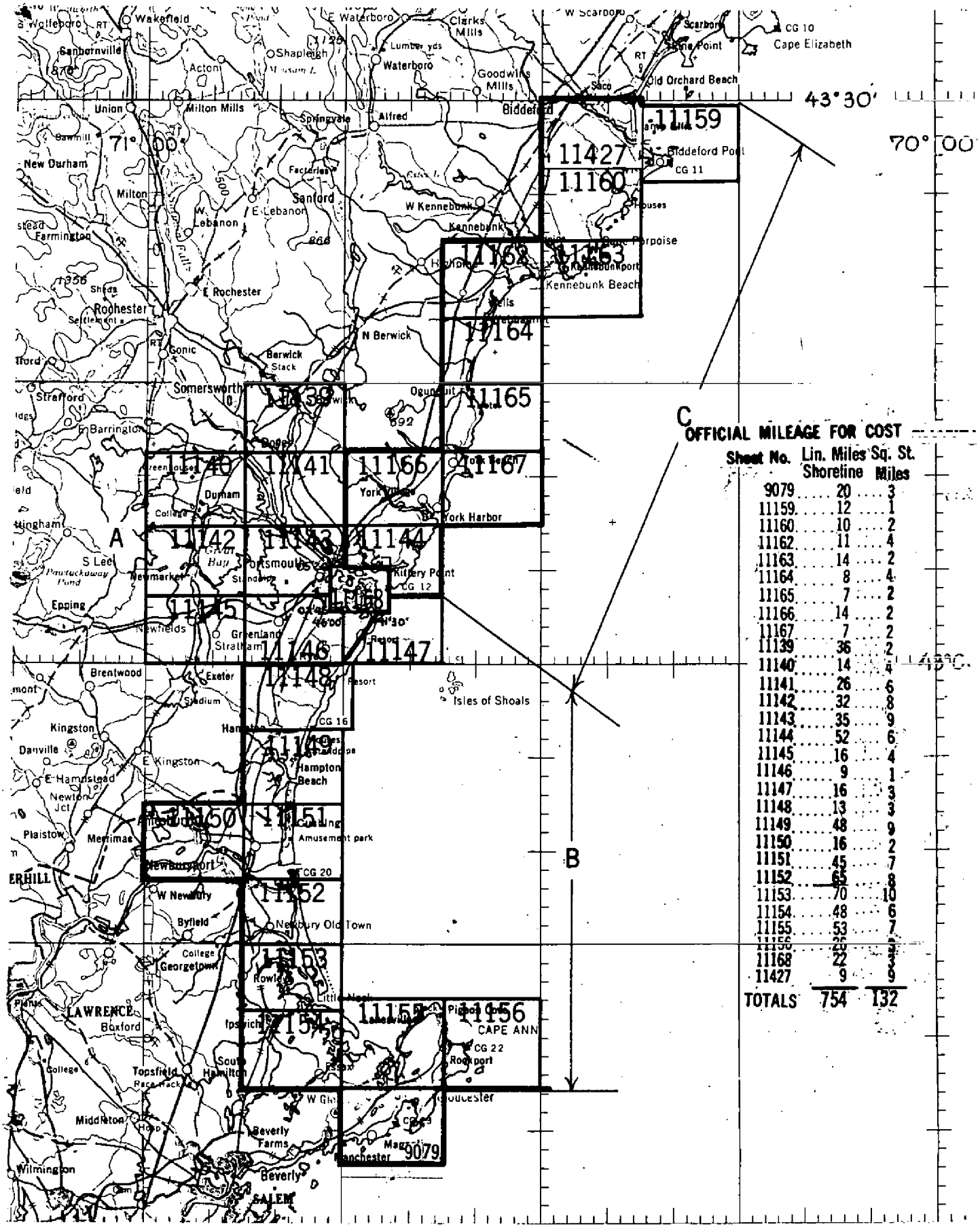
1 FT. = .3048006 METER

M-2388.12

COMPUTED BY: I. I. Saperstein DATE 5 May 1953 CHECKED BY: R. J. Pate DATE 12 May 1953

SHORELINE MAPPING PROJECT PH-114

BIDDEFORD POOL, MAINE TO CAPE ANN, MASS.



OFFICIAL MILEAGE FOR COST

Sheet No.	Lin. Miles Shoreline	Sq. St. Miles
9079	20	3
11159	12	1
11160	10	2
11162	11	4
11163	14	2
11164	8	4
11165	7	2
11166	14	2
11167	7	2
11139	36	2
11140	14	4
11141	26	6
11142	32	8
11143	35	9
11144	52	6
11145	16	4
11146	9	1
11147	16	3
11148	13	3
11149	48	9
11150	16	2
11151	45	7
11152	65	8
11153	70	10
11154	48	6
11155	53	7
11156	[illegible]	[illegible]
11168	22	[illegible]
11427	9	9
TOTALS	754	132

Summary to Accompany T-11148

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).

FIELD INSPECTION REPORT

Project Ph-114
Areas B and C

2. Areal Field Inspection.

The area embraced by the project is thickly populated with towns and summer resorts, except at the Southerly end of Plum Island and at Castle Neck.

The principal towns and cities are Gloucester, Rockport, Ipswich, Newburyport, Ogunquit, Wells and Kennebunk Port.

The main industries are fishing, farming and manufacturing. Salt hay is harvested from the marshes along Hampton River, Plum Island Sound, Parker River and Ipswich Rivers.

Gloucester is the principal seaport, catering to the greater portion of the fishing industry on the New England coast. The harbor offers excellent shelter in storms for large fishing craft, and there are adequate facilities to service and repair vessels up to 600 tons displacement. The numerous smaller harbors along the coast are of minor commercial importance, as they can accommodate only small fishing and pleasure craft.

The entire area is adequately served by U.S. Highway No. 1, primary and secondary state highways, and the Boston and Maine Railroad.

3 Horizontal Control.

A complete list of all horizontal control within the

project, and its disposition, has been submitted in accordance with paragraph 6 of Project Instructions, dated 13 March 1953 and the Directors Letter of 26 May 1953.

Area A
Area B

4. Vertical Control.

All tidal bench marks were searched for and reported on Form 685.

5. Contours and Dnainage.

Inapplicable.

6. Woodland Cover.

Woodland cover was classified in accordance with paragraph 5433 of the Topographic Manual- Part II

7. Shoreline and alongshore features.

(a) The mean high-water-line was inspected either by walking along the shore or from a small boat run close to the shore. Along the sand beaches the mean high-water-line was located by measurements from natural or cultural features. Along the rocky shore it was impracticable to secure measurements; therefore, the mean high-water-line was interpretated by visual inspection and found to follow closely a change in the tone of the rocks.

The shoreline along the inland waters is for the most part apparent and has been so delineated on the photographs.

In numerous instances it was difficult to distinguish between 'grass in water' and apparent shoreline on the

photographs. It is believed that sufficient notes have been made in these areas to enable the compiler to delineate them accurately.

(b) The low water line was located by visual inspection at the time of low water, and by measurements where practicable. The low water line along the rocky coast is very irregular and follows the line of breakers which are evident on the April 1953 low water photographs.

(c) The foreshore is predominately rock with stretches of sand and gravel beaches. These have been labeled on the photographs.

(e) All docks, wharves and piers have been delineated on the photographs. Landing floats have been indicated on the photographs; where these are of a temporary nature, they have been deleted.

(f) All submarine cable areas within the project were investigated and where cable crossings were found they were located on the photographs.

8. Offshore features.

All offshore rocks and their elevations were indicated on the photographs with the time and date of inspection. Where these rocks were visited at the time of low water their actual elevations above this plane were noted.

The bare portion of Sandy Bay breakwater is evident on the photographs. It was impossible for the field inspector to locate the submerged portions. It will be necessary for

these to be located by the hydrographic party.

The entire south jetty and the outer portion of the North jetty at the mouth of the Saco River are submerged at mean high water. However these are visible on the photographs, and noted as such. T-11159 T-11575

9. Landmarks and aids.

Aids to Navigation were located in accordance with project instructions.

All lighted aids were located by 3rd. order triangulation or variations thereof, with the exception of York River Entrance Leading Light, and lights in Annisquam River, which were located photogrammetrically, in accordance with permission obtained in letters from the Chief, Division. T-11116 T-11157 T-11156

The daybeacons in Gloucester Harbor were located by sextant fixes from triangulation positions. All other daybeacons were located photogrammetrically. T-10079

Jaffrey Point Light and Jaffrey Point daybeacon were located by traverse from STARK 145, 1941. The distances from STARK were obtained by measuring a base line, occupying both ends of the base and measuring the angles to the aids, then computing the distances. An azimuth was obtained from WHALE BACK LIGHTHOUSE, 1878. T-11144

Merrimack River Entrance Leading Light was located by traverse from SABE (MGS) 1935, RM. T-11157

All aids were reported on Form 567.

10. Boundaries, monuments, and lines.

Inapplicable.

11. Other control.

The following stations were located as Topographic Stations, and are described on Form 524.

Hampton Beach C.G. Flagpole, 1953

Salisbury Beach Water Tank, 1953

Hampton Beach Water Tank, 1953

Stielman Rock Beacon (Located by the Hydrographic party)

Redden Az. Mk., 1953

Week, 1953

Moody Point 153, AZ. Mk., 1953 T-11164

Photo hydro stations were selected in accordance with project instructions.

12. Other interior features.

All roads, buildings, etc. have been classified in accordance with the Topographic Manual, Part II

Clearances on all cables and bridges over navigable waters were measured and noted on the photographs.

13. Geographic Names

Inapplicable.

14. Special Reports and Supplemental Data.

The following data has been submitted previous to this report. Letter to The Director, dated 15 May 1953 subject: Instructions Ph-114 (53) B dated 13 March 1953.

List of Horizontal Control.

Respectfully Submitted
John C. Lajoye
John C. Lajoye

COMPILATION REPORT T-11148

PHOTOGRAMMETRIC PLOT REPORT.

This report ~~to be submitted at a later date~~ filed with T11147.

31. DELINEATION.

The graphic method was used. No difficulty was encountered in the interpretation of the photographs which were of fairly good scale and clarity.

The field inspection was adequate.

32. CONTROL.

The control was good. The density and placement was such that no difficulty was encountered in the establishment of detail points.

33. SUPPLEMENTAL DATA.

None used.

34. CONTOURS AND DRAINAGE.

No difficulty was encountered in the delineation of the drainage.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline and alongshore details were delineated without any difficulties. The shoreline inspection was adequate. The low water line was delineated as identified by the field inspector. The rock ledges were generalized and delineated as viewed on the photographs.

36. OFFSHORE DETAILS.

No statement.

37. LANDMARKS AND AIDS.

Landmarks will be submitted by the hydrographic party. There are no nonfloating aids.

38. CONTROL FOR FUTURE SURVEYS.

Photo-hydro stations with descriptions have been listed under Item 49. One Form 524 has been listed under Item 49 for use by the hydrographer and is submitted with this report. where ? Additional photo-hydro stations are to be located at a later date by the field party. The additional stations located by the field party have been listed under Item 49. W.A.R.

39. JUNCTIONS.

To the north - T-11146 - in agreement.
To the south - T-11149 - junction could not be checked as no print of T-11149 is available.
No contemporary surveys to the east or west - open water area on the east.

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement.

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with U. S. Corps of Engineers Map, HAMPTON, N. H., scale 1:25,000, edition of 1944, and was in good agreement.

47. COMPARISON WITH NAUTICAL CHARTS.

Comparison was made with USC&GS Nautical Chart No. 1206, scale 1:80,000, October 1948, with last correction date of 14 August 1952. This chart appears to be in good agreement with the map manuscript.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

W. W. Dawsey
Carto Photo Aid

APPROVED AND FORWARDED:

J. E. Waugh, Chief of Party

48. GEOGRAPHIC NAME LIST.

All names shown are Base Map Names. No additions or deletions were submitted by the field party.

ATLANTIC AVENUE
ATLANTIC OCEAN

BASS BEACH

CABLE ROAD (COMMUNITY)
CABLE ROAD (STREET)
CENTRAL ROAD
CHAPEL ROAD

EEL POND

FOX HILL POINT

GODFREYS LEDGE

HIGH STREET

JENNESS BEACH

LITTLE BOARS HEAD
LITTLE RIVER
LITTLE RIVER SWAMP

MEADOW POND

NEW HAMPSHIRE
NORTH BEACH
NORTH ROAD
NORTH SIDE ROAD

OLD MILL POND

PERKINS ROAD
PHILBRICK POND
PLAICE COVE (this applies to settlement, not to a body of water)

RYE BEACH
RYE LEDGE
RYE HARBOR

SMITH COLONY
STATE 1A
STATE 101C
STATE 101D
STRAW POINT

UNION CHAPEL

Names approved 9-22-5;
L. Heck.

49. NOTES FOR THE HYDROGRAPHER:

Recoverable topographic station:

TIM ~~HAMPTON BEACH COAST GUARD~~ FLAGPOLE, 1953.

Photo-hydro stations:

4801 - Flagpole about 0.6 mile south of Rye Harbor, on Straw Point about 400 feet inshore and about 60 feet high. DQW 10K 7. 4mm h HAY

4802 - East chimney on red brick house about 1.0 mile south of Farragut Hotel. DQW 10K 6.

4803 - South gable of small green house about 1.4 miles north of Hampton Beach Coast Guard Station. DQW 10K 5.

4804 - Chimney on long white house with black roof about 1.0 mile north of Hampton Beach Coast Guard Station. DQW 10K 5.

4805 - Chimney on white house with blue roof, about 0.8 mile north of Hampton Beach Coast Guard Station. DQW 10K 4.

The field party radially located additional photo-hydro stations on an acetate print of the manuscript. They were recut on the original map manuscript and the final position should be taken from the map manuscript in all cases. They are listed as follows:

COW - Chimney, center gray house, red roof
SAM - Green cupola
MAN - Chimney, north end, main dwelling
COB - East gable, green building, middle of three
HOW - Chimney, gray building
YEL - East gable, tan stucco house
GRA - North gable, gray shed
TOP - Black top, white chimney
GAB - Chimney, white house, black roof, south gable
~~JOE~~ - North gable, white house
- Building on wharf

TIDE COMPUTATION

PROJECT NO. Ph-114 T-11148

Time and date of exposure 09:31 4/22/53 Reference station PORTLAND Mean range 8.7

Date of field inspection May 1953 Subordinate station JAFFREY POINT Ratio of ranges 1.0

	Time h.	Time m.
High tide	5	54
Low tide	12	23
Duration of rise or fall	6	29

	Height feet	Height x Ratio of ranges
High tide	7.9	7.9
Low tide	0.8	0.8
Range of tide		7.1

	Time h.	Time m.
High tide at Ref. Sta.	5	54
Time difference	+ 0	05
Corrected time at Subordinate station	5	59

	Time h.	Time m.
Low tide at Ref. Sta.	12	23
Time difference	+ 0	05
Corrected time at Subordinate station	12	28

	h.	m.		feet		feet	Photo. No.
Time XXXXX L. T.	12	28	Ht. XXXXX L. T.	0.8	Feature bares		
Required time	9	31	Tabular correction	3.1	Stage of tide above MLW		
Interval	2	57	Stage of tide above MLW	3.9	Feature above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time			Tabular correction		Stage of tide above MLW		
Interval			Stage of tide above MLW		Feature above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time			Tabular correction		Stage of tide above MLW		
Interval			Stage of tide above MLW		Feature above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time			Tabular correction		Stage of tide above MLW		
Interval			Stage of tide above MLW		Feature above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time			Tabular correction		Stage of tide above MLW		
Interval			Stage of tide above MLW		Feature above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time			Tabular correction		Stage of tide above MLW		
Interval			Stage of tide above MLW		Feature above MLW		

M-2617-12

Computed by W. W. Dawsey Checked by W. A. Rasure

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T- 11148

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

CONTROL STATIONS

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

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

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

CULTURAL FEATURES

27. Roads IIS 28. Buildings IIS 29. Railroads XXX 30. Other cultural features IIS

BOUNDARIES

31. Boundary lines IIS 32. Public land lines XXX

MISCELLANEOUS

33. Geographic names IIS 34. Junctions IIS 35. Legibility of the manuscript IIS 36. Discrepancy overlay XXX 37. Descriptive Report IIS 38. Field inspection photographs IIS 39. Forms IIS

40. I. M. Saperstein — Reviewer
William A. Rasure
W. A. Rasure — 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:

M-2623-12

After the manuscript was completed the boat sheets were made available to this office and the low-water line was transferred in red pencil. In most cases the low-water line agrees favorably with that as originally shown on the manuscript. Both lines are being retained on the manuscript for possible use of the processing office.

William A. Rosure

REVIEW REPORT T-11148
Shoreline Map
22 September 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 additions, 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-1023 1:10,000 1866 Great Boars Head to Rye Harbor

T-11148 supersedes the older survey for charting purposes.

63. Comparison with Maps of Other Agencies:

U.S.E. Hampton, N.H. 1:62,500 1944

The shoreline is in good agreement.

64. Comparison with Contemporary Hydrographic Surveys:

H-8091 (ECFP-1453) 1:10,000, 1953 Portsmouth Entrance to Godfrey Ledge.

* Only field notes were available for use during review. Page 4 of these notes calls attention to the islet on chart 1206 and the ledge on T-11148 at 42° 57.35'/70° 46.15'. They are incorrect and should be charted as shown on H-8091.

* Because H-8091 is not available for correct delineation, the ledge symbol has been deleted from T-11148 and replaced by a broken line enclosure to a "shoal" to indicate a possible or probable hazard.

65. Comparison with Nautical Charts: * This comparison has been made and there are no conflicts 6-15-58 L.a.k.

1206 1:80,000 Oct. 1948, Corr. March 1954

Not all rocks specifically located on the chart are delineated on T-11148, but they fall within the approximate LWL of the shoreline survey. The hydrographic surveys are not available so that no check could be made of rocks outside the LWL. (See heading 64 regarding islet and/or ledge southeast of Little Boars Head.)

66. Accuracy: See report T-H147 Lic 8

The radial plot report was not available so that the strength of the plot is unknown to the reviewer.

The field inspection notes were faithfully followed and the delineation is well executed so that the shoreline meets charting needs.

Reviewed by:

Lena T. Stevens
Lena T. Stevens

Approved by:

L C Lunde
Chief, Review Section
Div. of Photogrammetry

Max B Kuhlthau
Chief, Nautical Chart Branch
Division of Charts

H W Swanson
Chief, Div. Photogrammetry
14 Aug. 1958

Chief, Div. Coastal Surveys