

# 11141

Diag. Cht. Nos. 229, 1205, & 1205 Insert.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Ph-114 Office No. T-11141

### LOCALITY

State Maine - New Hampshire

General locality Portsmouth

Locality Piscataqua - Bellamy Rivers

1947 51-54

### CHIEF OF PARTY

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

### LIBRARY & ARCHIVES

DATE July 24, 1958

B-1870-1 (1)

# 11141

# DATA RECORD

T-11141

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

Field Office (II): Newburyport, Mass.

Chief of Party: E. H. Kirsch

Photogrammetric Office (III): Tampa, Florida

Officer-in-Charge: J. E. Waugh  
Ira R. Rubottom

Instructions dated (II) (III): 20 Feb. 1953  
Supplement No.1, 28 Mar. 1953  
" " 2, 30 Apr. 1953  
" " 3, 6 May 1953  
" " 4, 26 May 1953  
" " 5, 25 June 1953

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): SEP - 3 1954

Date reported to Nautical Chart Branch (IV): SEP - 3 1954

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): 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): FROST 1908<sup>v</sup>

Lat.: 43° 09' 44".392<sup>v</sup> (1369.9m.) Long.: 70° 47' 24".370<sup>v</sup> (550.6m.)

Adjusted  
2023/12/13

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.

[illegible]

## DATA RECORD

Field Inspection by (II):	None	Date:	
Planetable contouring by (II):		Date:	
Completion Surveys by (II):		Date:	
Mean High Water Location (III) (State date and method of location):	<del>Air Photo Compilation</del>		2 July 1952
Projection and Grids ruled by (IV):	S. Rose (W. O. )	Date:	14 Feb. 1953
Projection and Grids checked by (IV):	H. D. Wolfe (W.O.)	Date:	16 Feb. 1953
Control plotted by (III):	R. E. Smith	Date:	2 Mar. 1953
Control checked by (III):	I. I. Saperstein	Date:	2 Mar. 1953
Radial Plot <del>of State of Mass.</del>		Date:	
<del>Control checked by (III):</del>	M. M. Slavney	Date:	11 Mar. 1953
	Planimetry	Date:	
Stereoscopic Instrument compilation (III):	Inapplicable	Date:	
	Contours	Date:	
Manuscript delineated by (III):	R. Dossett	Date:	17 Mar. 1953 25 Feb. 1954
Photogrammetric Office Review by (III):	J. A. Giles	Date:	18 Mar. 1953 17 Mar. 1954
Elevations on Manuscript checked by (X) (III):	None	Date:	

Camera (kind or source) (III) ~~Single-lens~~

DEPARTMENT OF AGRICULTURE  
(Mark Hurd Mapping Co.)

Fairchild Cartographic Camera J & Wild camera  
PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
DQW-9K-175	2 July 1952	1050	1:10,000	3.05 ✓
" " 176	"	1050	"	"
" " 177	"	1050	"	"
" " 178	"	1050	"	"
" " 179	"	1051	"	"
" " 180	"	1052	"	"
" " 181	"	1053	"	"
" " 182	"	1055	"	"
" " 183	"	1055	"	"
" " 131	"	1030	"	"
" " 132	"	1030	"	"
51J-5980	2 NOV. 1951		"	
54W-1363	29 J <del>UN</del> 1954		"	- 0.2 -
1364	<i>Am.</i>		"	

Tide (III)

**FROM PREDICTED TIDES**

Reference Station: PORTLAND  
Subordinate Station: DOVER PT - SALMON FALLS RIVER ENT.  
Subordinate Station: (Mean)

Ratio of Ranges	Mean Range	Spring Range
0.7	6.5	7.5

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

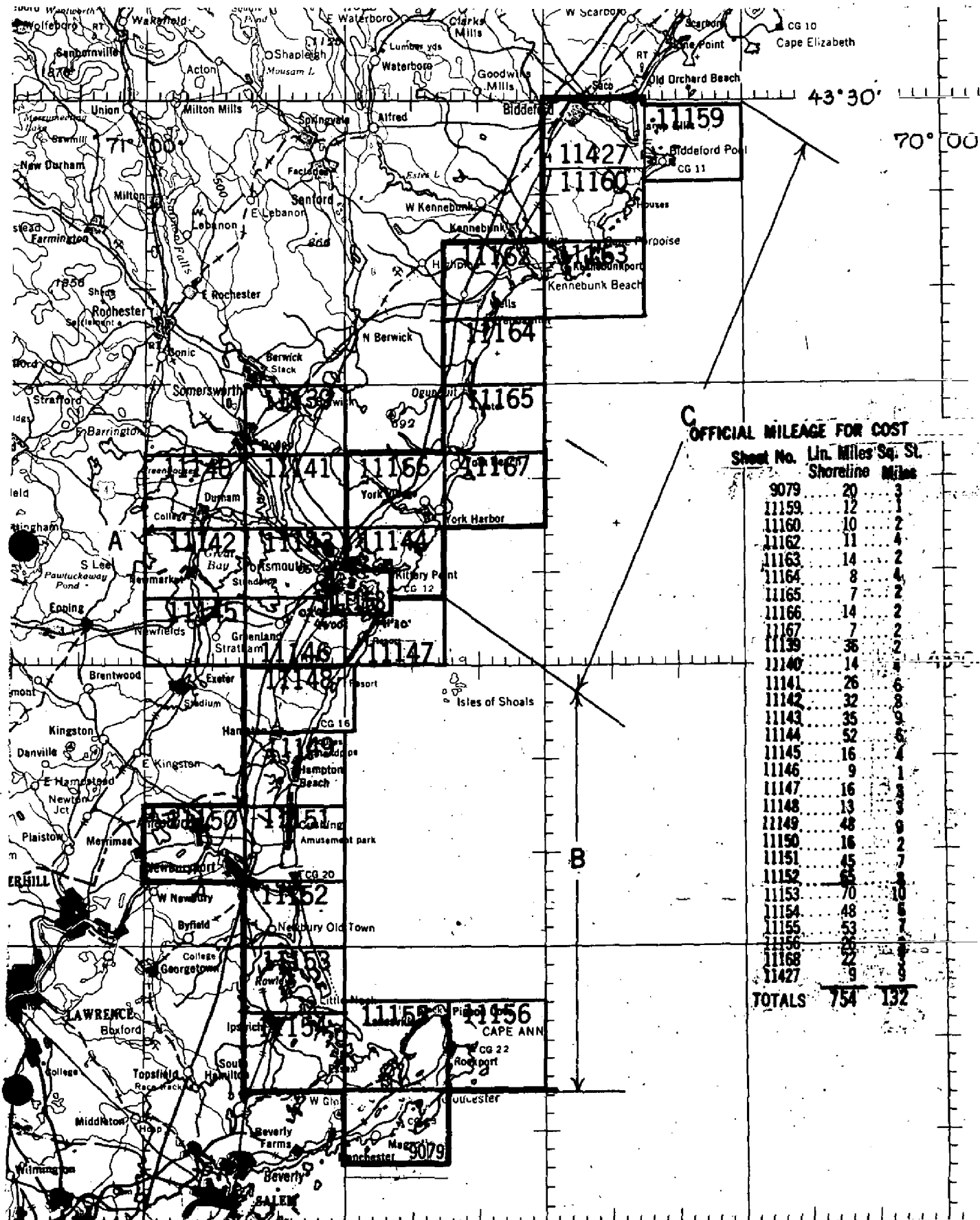
Land Area (Sq. Statute Miles) (III): 6  
Shoreline (More than 200 meters to opposite shore) (III): 26  
Shoreline (Less than 200 meters to opposite shore) (III):  
Control Leveling - Miles (II):  
Number of Triangulation Stations searched for (II): \* 4  
Number of BMs searched for (II): 0 \*  
Number of Recoverable Photo Stations established (III): \* 0  
Number of Temporary Photo Hydro Stations established (III): ~~#~~ 67

Recovered: \* 4 Identified: \* 4  
Recovered: - Identified: -

Remarks: Twenty four (24) of the temporary photo-hydro stations were established by the photogrammetric field party.

# SHORELINE MAPPING PROJECT PH-114

## BIDDEFORD POOL, MAINE TO CAPE ANN, MASS.



### OFFICIAL MILEAGE FOR COST

Sheet No. Lin. Miles Sq. St. Shoreline 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	3	
11153	70	10	
11154	48	6	
11155	53	7	
11156	26	4	
11168	22	4	
11427	9	8	
<b>TOTALS</b>	<b>754</b>	<b>132</b>	

Summary to Accompany T-11141

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).

*A preliminary compilation was prepared prior  
to hydrographic surveys. Later the final  
compilation was prepared  
h.c.h.*

ADVANCE COMPILATION REPORT T-11141

PHOTOGRAMMETRIC PLOT REPORT.

\* This report will be submitted at a later date.

\* *Filed as a part of Report T-11146*

31. DELINEATION.

The graphic method was used.

The photographs were of reasonably good scale. Part of the detail shown north of Latitude  $43^{\circ} 11'$  was uncontrolled. It was shown for the benefit of the hydrographer only. All detail points established by the intersection of two radial lines only have been indicated with ticks.

32. CONTROL.

Sufficient pass points were adequately located by the radial plot to accurately control each photograph.

33. THROUGH 34.

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS.

The high-water line was located by stereoscopic study of the photographs and delineated accordingly.

The limits of alongshore areas, outside of the M.H.W.L., which may be shallow, shoal, grass-in-water, marsh, grass-and-mud or mud have been delineated approximately by a black dashed line. In some areas, short stretches of what appeared to be the channel limits have also been indicated approximately by a dashed line. Unless such limits were sharp and clearly discernible on the photographs they were not shown. It is requested that these areas be investigated and properly classified.

All piers apparent on the photographs have been delineated.



36. OFFSHORE DETAILS.

None noted.

37. LANDMARKS AND AIDS.

To be located by the hydrographer.

38. CONTROL FOR FUTURE SURVEYS.

Recoverable topographic stations, Forms 524, located on T-8527 ( ) were examined; however, none appeared to be usable as photo-hydro stations and since the field photographs on which these stations were identified were not available no attempt was made to locate them on this survey.

Forty-three (43) temporary photo-hydro stations are shown. These have been listed under Item 49.

39. JUNCTIONS.

No junction could be made with T-11139 on the north due to a lack of photographic coverage. Satisfactory junction was made with T-11143 on the south. Although this survey joins T-8528 (York Har.) ( ) on the east and T-11140 on the west, no detail extends to either neat line.

40. HORIZONTAL AND VERTICAL ACCURACY.

Reference Item 31 and Photogrammetric Plot Report relative to horizontal accuracy.

41. OVERHEAD CABLE.

There is a cable crossing at Latitude  $43^{\circ} 10' 15''$  Longitude  $70^{\circ} 49' 05''$ . This is shown on Nautical Chart No. 229 as "OVHD. CAB." but no clearance is given. The transmission towers are temporary photo-hydro stations Nos. 003 and 004 respectively.

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with USC&GS Quadrangle T-8527 ( ). *Dover East*

No outstanding shoreline differences were noted.

47. COMPARISON WITH NAUTICAL CHARTS.

Comparison was made with USC&GS Nautical Chart No. 229, scale 1:30,000, published November 1914 and corrected to 26 January 1953.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.


None.

ITEMS TO BE CARRIED FORWARD.

None.

  
Rudolph Dossette  
Cartographic Photogrammetric Aid

APPROVED AND FORWARDED:

  
J. E. Waugh, Chief of Party

48. GEOGRAPHIC NAME LIST.

Only base map names have been shown. They were taken  
from USC&GS Nautical Chart No. 229. *See page 14.*

49. NOTES FOR THE HYDROGRAPHER.

A number of temporary photo-hydro stations were selected in the Tampa Office for use by the hydrographer. The stations selected and pricked on the photographs consist principally of lone trees, bushes, gables of houses, tanks, chimneys, transmission towers, piers and the like. An effort was made to select stations about one-quarter of a mile apart; however, it was impossible in certain areas to prick any object whatsoever which could be positively recovered in the field. In small coves and inlets, wherever possible, photo-hydro stations were pricked at closer intervals in order that a fix might be obtained readily.

The number and description of each temporary photo-hydro station follows:

<u>NUMBER</u>	<u>DESCRIPTION</u>
001 HIT	Large tree, the most southerly on point.
002 - MAX	Lone tree, on SE side of small cove.
003 - GIN	Center of transmission tower, on west shore of river, about 45 m. inshore, in cleared area.
004 - NAY	Center of transmission tower on east shore of river.
005 - PAL	West gable of house at offshore end of pier.
006 —	Low tree at waters edge, on west shore.
007	NW corner of pier on east side of river.
008	Large bush in cleared area, about 25m. inshore.
009 - VAL	Lone bush near point of land at south entrance of stream.
010 -	Lone bush in cleared area, near small point of land about 15 m. inshore.
011 -	West gable of large building, about 70 m. south of shoreline.

49. NOTES FOR THE HYDROGRAPHER (CONTINUED)

<u>NUMBER</u>	<u>DESCRIPTION</u>
012 - PIG ✓	East gable of house, on west shore of river.
013 - KAD ✓	Center of west end of house on east shore of river.
014 —	NE corner of pier, the most northerly and longer of 2 piers.
015 - JAY ✓	Large lone tree about 70 m. SW of point.
016 —	SW corner of pier.
017 - PUG ✓	East gable of large house about 30 m. inshore. (H-8094 = E gable red roof barn)
018 - NUL ✓	Small tree, the most southerly of 2 trees near point.
019 —	Largest bush of 4 in row, on causeway in west center of cove.
102 —	The largest and most westerly tree in row of 3 trees.
055 NIL	SW corner of pier (H-8094 Wh. flag on rock)
056 FIX	Center of west end of pier.
<del>118</del>	<del>The most westerly of 3 large trees on island</del>
024 YAP	SW corner of pier.
025 IKE	SW corner of pier.
026 HIM	SW corner of pier
027 —	Center of southern tip of fender, south side of bridge.
028 WAG	Center of northern tip of fender, north side of bridge.



49. NOTES FOR THE HYDROGRAPHER (CONTINUED)

<u>NUMBER</u>	<u>DESCRIPTION</u>
029 RIP :	West gable of <sup>green</sup> house about 20 m. inshore. (74)
030 TOY	Center of west end of pier.
031 RAY	Center of west end of pier.
032	Large tree at waters edge.
033 JAM	Tall <sup>cedar</sup> tree on knoll.
034 STA	Center of cross arm, transmission tower.
035 GUS	Northeastern most of two bushes about 10 m. apart, near beach.
036 HOG	Northernmost of two trees on rounded point of land.
037 ZAG	North gable of <sup>lone</sup> house, about 10 m. inshore.
038 -	SW corner of pier.
039 NIC	SW corner of pier.
040	Center of southern end of pier.
041	Lone tree, on round point of land, near shore.
042 --	West gable of large building, about 200 m. north of shoreline.
043 --	Lone tree, on waters edge, on north side of island.
149 -	Center of offshore end of pier.

## PHOTOGRAMMETRIC OFFICE REVIEW

T. 11141

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 XX 14. Rocks, shoals, etc. J.G. 15. Bridges J.G. 16. Aids to navigation XX 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 XX 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 XX 28. Buildings XX 29. Railroads XX 30. Other cultural features XX

## 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 XX 39. Forms J.G.40. Jesse A. Giles  
ReviewerWilliam 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-2523-12

COMPILATION REPORT T-11141PHOTOGRAMMETRIC PLOT REPORT

\* This report submitted separately.

\* *Filed as a part of Report T11148*

31. DELINEATION.

Reference Item 31 of advance report.

There was no field inspection.

Since the preliminary report was written, the radial plot has been extended to cover the area mentioned in the second paragraph of Item 31 of the advance report.

Subsequent changes made since receiving additional photographic coverage are shown in red (including temporary photo-hydro stations). These changes only occur near the northern limits of the manuscript where junction is made with T-11139.

32. CONTROL.

Reference Item 32 of advance report.

33 THROUGH 34.

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS.

Reference Item 35 of advance report.

The alongshore areas mentioned as "shallow, shoal, etc.," have been changed to marsh. This change was made after recommendations by a member of the hydrographic party and is shown in red.

The low-water line has been taken from the boat sheet and is shown on the map manuscript in black pencil lines. Corresponding lines in most instances were not discernible on the photographs.

36. OFFSHORE DETAILS.

Reference Item 36 of advance report.

37. LANDMARKS AND AIDS.

Reference Item 37 of advance report.



38. CONTROL FOR FUTURE SURVEYS.

Reference Item 38 of advance report.

Twenty four (24) additional temporary photo-hydro stations, established by the field party, are listed under Item 49.

39. JUNCTIONS.

Reference Item 39 of advance report.

Junction has been made with T-11139 on the north and T-11140 on the west. The junction with T-11143 on the south has been completed by the addition of woodland cover symbol (stickup). There is no contemporaneous survey on the east.

40. HORIZONTAL AND VERTICAL ACCURACY.

Reference Item 40 of advance report.

41. OVERHEAD CABLE.

Reference Item 41 of advance report.

Vertical clearance for subject cable is given in N.M. No.42, October 17, 1953 as 65 feet above mean high-water.

46. COMPARISON WITH EXISTING MAPS.

Reference Item 46 of advance report.

47. COMPARISON WITH NAUTICAL CHARTS.

Reference Item 47 of advance report.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

  
Rudolph Dossett  
Cartographic Photogrammetric Aid

APPROVED AND FORWARDED:

  
Ira R. Rubottom, Chief of Party

48. GEOGRAPHIC NAME LIST.BACK RIVER ROADBACK ROADBELLAMYBELLAMY RIVERCEDAR POINTCLEMENTS POINTCOCHECO RIVERCUSHINGSEAST SIDE STATE ROADFRESHFRESH CREEKFORT HILLGOAT ISLANDHILL ROADHILTONHUCKLEBERRY HILLKENNADECORNERLITTLE BAYLORD BROOKMAINENEW HAMPSHIRENEW SAINT MARYS CEMETERYPISCATAQUA RIVERQUAMPHEGAN BROOKRIVER ROADROYALLS COVESALMON FALLS RIVERSCAMMEL BRIDGESTACY CREEKSTATE ROAD 16STURGEON CREEKSUNSET HILLTIDY ROADUPPER NECK SCHOOLU.S. 4.VARNEY BROOK

Names approved  
1-7-55. L. Heck.

50.

## PHOTOGRAMMETRIC OFFICE REVIEW

T-11141

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) XXX 7. Photo hydro stations J.G. 8. Bench marks XXX  
9. Plotting of sextant fixes XXX 10. Photogrammetric plot report J.G. 11. Detail points J.G.

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(Nautical Chart Data)

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

## BOUNDARIES

31. Boundary lines J.G. 32. Public land lines XXX

## MISCELLANEOUS

33. Geographic names J.G. 34. Junctions J.G. 35. Legibility of the manuscript J.G. 36. Discrepancy overlay J.G. 37. Descriptive Report J.G. 38. Field inspection photographs XXX 39. Forms J.G.  
40. for Jesse A. Giles William A. Rasura  
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:

49. NOTES FOR THE HYDROGRAPHER.

Reference Item 49 of advance report.

The following temporary photo-hydro stations were established by the photogrammetric field party and their positions checked in the Tampa Office with no changes noted: (Descriptions from H-8094)

RED *sw gable bo. ho.*  
 POP *poplar tree*  
 TIP pole on bridge  
 SIL *w. gable silver barn*  
 020 WED *tree*  
 END *S end bulk head*  
 SIC *S. cor. bulk head*  
 VEX *wh. cloth in bush*  
 BUD *wh. sig. ard. bush*  
 \* JOE *end tree (of hedge row along fence)*  
 EVA *E gable bo. ho. west shore*  
 SAM *w. gable of boat house*  
 USE *yel sig. on bush*  
 --- *center small bush (w side river)*  
 --- *w. gable barn (E side river)*  
 BUS *red & wh banner in bush*  
 ROB *S gable of red ho.*  
 OWL *str. green roof of shed*  
 --- *east gable red garage (between Sturgeon Cr & Salmon Falls R.)*  
 --- *east gable yellow barn (E side Salmon Falls R & S. of Stacy Cr)*  
 MUG *end pier*  
 ASH *E gable barn*  
 LEG *yel. cloth ard. bush*  
 PIN *red & wh. banner on pine*

\* H-8094 JOE = "white chimney gray house". There is no house at the end of the hedgerow.

LTS Jan. 14 54



Review Report T-11141  
Shoreline Map  
6 January 1955

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-2511 & a	1:10,000	1900, 1909
T-2903	1:10,000	1908-9
T-2958	1:10,000	1909

The older surveys are superseded by T-11141 for charting shoreline and planimetry.

63. Comparison with Maps of Other Agencies:

USE Dover East	1:25,000	1950
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T-11141 supersedes the quadrangle for planimetry and shoreline for charting the area of T-11141.

64. Comparison with Contemporary Hydrographic Surveys:

H-8094 (ECFP 1753)	1:10,000	1953
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A black-and-white print of the boat sheet was available during review. The shoreline on the boat sheet was that of a preliminary compilation and is a fast-land line.

During final compilation much of the shoreline was advanced to include a marsh fringe. This advanced shoreline was delineated after the hydrographic party had worked in the area and found that the fast land did not represent the limit of MHW. No photogrammetric field inspection was made in this map area either for shoreline, interior, bridges, or cables.

At the time of final compilation a line of 1954 photographs were available (54-W 1363, 1364, 1365). They were taken at -0.2 tide, so that the clearly defined channels in Bellamy River and Piscataqua River nearly

represent approximate low-water line. In Piscataqua River this channel or "shallow" boundary does not greatly conflict with the LWD on the boat sheet, but Bellamy River channel seems to have changed considerably between the summer of 1953 and April, 1954. No low water photographs cover the area south of  $43^{\circ} 08' 15''$ ; therefore, the channel line ends at that point on the manuscript.

65. Comparison with Nautical Charts: *The hydrography in Bellamy was adjusted during unification to harmonize with the channel on the 1954 Photographs R.E.E. 2-13-57*

229 1:30,000

ed. Nov. 1914

corr. May 1948

The shoreline and planimetry on T-11141 supersedes that of the chart in their common areas.

66. Accuracy:

This map area is well controlled and interior delineation meets the National Standards of Accuracy. Shoreline is delineated as accurately as office interpretation permits. (See 64, above.)

Reviewed by:

*Lena T. Stevens*

Lena T. Stevens

APPROVED:

*L. C. Lande*  
\_\_\_\_\_  
Chief, Review Section  
Div. of Photogrammetry

*Max B. Kellett*  
\_\_\_\_\_  
Chief, Nautical Chart Branch  
Div. of Charts

*J. Zull*  
\_\_\_\_\_  
Chief, Div. of Photogrammetry  
*1957*

*J. B. Russell*  
\_\_\_\_\_  
Chief, Div. of Coastal Surveys