

11140

Diag. Cht. Nos. 229 and 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-11140

LOCALITY

State New Hampshire

General locality Portsmouth

Locality Oyster River

1945

CHIEF OF PARTY

E.H.Kirsch, Chief of Party

I.R.Rubottom, Tampa Photo. Office

LIBRARY & ARCHIVES

DATE September 15, 1958

11140

ADVANCE

DATA RECORD

T -11140

Project No. (II): Ph-114(53)

Quadrangle Name (IV):

Field Office (II):

Chief of Party:

Photogrammetric Office (III): Tampa, Florida

Officer-in-Charge: J. E. Waugh

Instructions dated ~~4/4~~ (III): 20 February 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

APR 7 1953

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

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.

~~XXXXXXXXXX~~ except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

Reference Station (III): DURHAM, COMMUNITY CHURCH SPIRE, 1850-1908

Lat.: 43° 07' 58".330 (1800.0 m.) Long.: 70° 55' 22".824 (515.9 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.

ADVANCE
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):
Air Photo Compilation
(Office Inspection Only)

2 July 1952

Projection and Grids ruled by (IV): J. Allen (W.O.)

Date: 13 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: 26 Feb. 1953

Control checked by (III): I. I. Saperstein

Date: 27 Feb. 1953

Radial Plot ~~by (III):~~
~~by (III):~~

Date: 11 March 1953

by (III): M. M. Slavney

Stereoscopic Instrument compilation (III):
Planimetry
Contours

Date:

Date:

Manuscript delineated by (III): R. A. Reece

Date: 27 March 1953

Photogrammetric Office Review by (III): I. I. Saperstein

Date: 30 March 1953

Elevations on Manuscript
checked by *gy* (III): None

Date:

ADVANCE

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

DEPARTMENT OF AGRICULTURE
(Mark Hurd Mapping Company)

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
DQW-9K-130	2 July 1952	10:30	1:10,000	2.9 feet
" " -131	"	10:35	"	"
" " -132	"	10:35	"	"

Tide (III)

Reference Station: **FROM PREDICTED TIDES**
PORTLAND, MAINE
Subordinate Station: **DOVER POINT, NEW HAMPSHIRE**
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
-	8.9	10.2
0.7	6.4	7.4

Washington Office Review by (IV): *Lena T. Stevens*

Date: *30 Nov. 1955*

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III):

Shoreline (Miles) (III): *14*

~~Shoreline (Miles) (III):~~

Control Leveling - Miles (II): -

Number of Triangulation Stations searched for (II): - Recovered: - Identified: -

Number of BMs searched for (II): - Recovered: - Identified: -

Number of Recoverable Photo Stations established (III): -

Number of Temporary Photo Hydro Stations established (III): 8

Remarks:

Summary to Accompany T-11140

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 the survey was accomplished under instructions for C.S.-355, 6 March 1953, 29 January 1954, and 16 February 1955 - Gloucester Harbor, Massachusetts to Biddeford and Saco River, Maine. *

T-11140 is one of Part A of the project. This part was compiled without benefit of field inspection. Subsequent to the hydrographic work, the shoreline was revised to conform to information received from the hydrographic party.

CRONAR

A ~~cloth-backed lithographic~~ print of each map at manuscript scale and the descriptive report will be registered and permanently filed in the Bureau Archives.

* Identification of control and photo
inspection data was taken from
the prior quadrangle (topo) mapping
project scale 1:20000

ADVANCE

COMPILATION REPORT T-11140

PHOTOGRAMMETRIC PLOT REPORT.

This report will be submitted at a later date.

31. DELINEATION.

Submitted and filed in desc. report T 11144

The graphic method was used.

Photographs were of fair scale. There was no field inspection. There were insufficient photographs to get more than two cut intersections on a number of detail points. All two point cuts were shown with short ticks.

Only one photograph covered the area along the OYSTER RIVER from Longitude $70^{\circ} 54' 51''$ to Longitude $70^{\circ} 55' 24''$. The shoreline in this area was delineated by the projector method.

32. CONTROL.

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

33. and 34.

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS.

The M. H. W. L. was determined by stereoscopic examination 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, mud, etc. have been delineated by a dashed line. It is requested that such areas be investigated and properly classified.

36. OFFSHORE DETAILS.

None observed.

ADVANCE

37. LANDMARKS AND AIDS.

To be located by the hydrographer.

38. CONTROL FOR FUTURE SURVEYS.

The recoverable topographic stations, (Form 524), located on T-8526 () were examined and none appeared to be usable as photo-hydro stations. Since the field photographs on which these stations were identified in 1943 were not available, no attempt was made to locate them on the current survey.

39. JUNCTIONS.

A satisfactory junction has been made with Survey T-11142 to the south. Survey T-11141 to the east does not have a shoreline which junctions with one on this manuscript. There are no contemporary surveys to the north and west.

40. HORIZONTAL AND VERTICAL ACCURACY.

Refer to Photogrammetric Plot Report relative to horizontal accuracy.

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with USC&GS Quadrangle T-8526 (). No shoreline differences of any importance 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. No outstanding differences were noted.

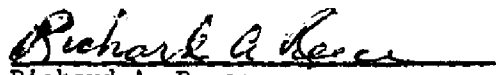
ADVANCE

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.


Richard A. Reece
Cartographic Photogrammetric Aid

APPROVED AND FORWARDED:


J. E. Waugh, Chief of Party

ADVANCE

48. GEOGRAPHIC NAME LIST.

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

ADVANCE

49. NOTES FOR THE HYDROGRAPHER.

A number of temporary photo-hydro stations were selected in the Tampa Photogrammetric Office for use by the hydrographer. 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.

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

<u>NUMBER</u>		<u>DESCRIPTION</u>
046	MIL	Bush in center of small island.
047	DAY	SW corner of pier, the longer of two piers, and most westerly.
048	HAT	East gable of house, about 75 m. west of inlet.
049	NAG	Lone tree, the most SW of two trees, about 10 m. apart.
050	ROY	Lone tree, the most easterly of two trees, about 10 m. apart, on point of land.
051	IVY	Small lone bush about 5 m. inshore.
052	ADE	NW corner of pier.
054		Large lone tree, about 60 m. east of small stream.

A cable crossing shown on Nautical Chart No. 229 at approximate Latitude $43^{\circ} 08' 03''$, approximate Longitude $70^{\circ} 54' 24''$ could not be identified on the office photographs.

N.M. 16, April 17, 1954. Cable removed.

ADVANCE

TIDE COMPUTATION

PROJECT NO. Ph. 114 T. 11140

Time and date of exposure 10:35 2 July 1952 Reference station FORTLAND, MAINE Mean range 6.4

Date of field inspection Subordinate station DOVER POINT, NEW HAMPSHIRE Ratio of ranges 0.7

	Time		Height feet	Height x Ratio of ranges		Time	
	h.	m.				h.	m.
High tide	7	31	7.5	5.0	High tide at Ref. Sta.	6	01
Low tide	13	34	1.3	0.9	Time difference	4	30
Duration of rise or fall	6	03	Range of tide		Corrected time at Subordinate station	7	31
					Corrected time at Subordinate station	13	34

	h.	m.		feet		feet	Photo. No.
Time HT/L L. T.	13	34	Ht. xxxxxx L. T.	0.9	Feature bares		DQM-9K-131
Required time	10	35	Tabular correction	2.0	Stage of tide above MLW		
Interval	2	59	Stage of tide above MLW	2.9	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		

50

PHOTOGRAMMETRIC OFFICE REVIEW

T- 11140

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

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) I.I.S. 7. Photo hydro stations I.I.S. 8. Bench marks XXX
9. Plotting of sextant fixes XX 10. Photogrammetric plot report i.f.s. 11. Detail points I.I.S.

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

20. Water features XX 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 XX

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 I.I.S. 34. Junctions XX 35. Legibility of the manuscript I.I.S. 36. Discrepancy overlay XX 37. Descriptive Report I.I.S. 38. Field inspection photographs XX 39. Forms I.I.S.
40. I. I. Saperstein 99 Saperstein William A. Rasure 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:

M-2623-12

DATA RECORD

T - 11110

REFERENCE ADVANCE REPORT FOR ALL DATA NOT SHOWN

Project No. (II): **Ph-111(53)** 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 ~~/~~ (III): **13 March 1954**

Copy filed in Division of
Photogrammetry (IV)

Supplement No. 1 - 28 March 1953

" **No. 2 - 30 April 1953**

" **No. 3 - 6 May 1953**

" **No. 4 - 26 May 1953**

" **No. 5 - 25 June 1953**

Method of Compilation (III):

Manuscript Scale (III):

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III):

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III):

Vertical Datum (III):

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):

Lat.:

Long.:

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.

SHORELINE

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

DATA RECORD
REFERENCE ADVANCE REPORT FOR ALL DATA NOT SHOWN

Field Inspection by (II):

Date:

Planetable contouring by (II): **Inapplicable**

Date:

Completion Surveys by (II): **Inapplicable**

Date:

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

Projection and Grids ruled by (IV):

Date:

Projection and Grids checked by (IV):

Date:

Control plotted by (III):

Date:

Control checked by (III):

Date:

Radial Plot or Stereoscopic
Control extension by (III):

Date:

Stereoscopic Instrument compilation (III):
Planimetry
Contours

Date:

Date:

Manuscript delineated by (III): **R. A. Reece**

Date: **19 February 1954**

Photogrammetric Office Review by (III): **J. A. Giles**

Date: **30 March 1954**

Elevations on Manuscript
checked by **W** (III):

Date:

NO FIELD INSPECTION REPORT WAS SUBMITTED

COMPILATION REPORT T-11140

PHOTOGRAMMETRIC PLOT REPORT.

This report will be submitted separately.

31. DELINEATION.

See Item 31 of the Advance Report.

All points with only two cuts have been shown with green circles.

Only those features that could be clearly seen on the photographs have been delineated.

32. CONTROL.

See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA.

None.

34. CONTOURS AND DRAINAGE.

Contours are inapplicable.

The drainage has been delineated from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS.

Reference Item 35 of the advance report. The areas described in paragraph two have been - almost without exception - delineated as marsh as a result of information from a member of the hydrographic party.

The low-water line, where located by the hydrographic party, has been shown with red pencil on the manuscript.

36. OFFSHORE DETAILS.

Reference Item 36 of the advance report.

37. LANDMARKS AND AIDS.

Reference Item 37 of the advance report.

38. CONTROL FOR FUTURE SURVEYS.

Reference Item 38 of the advance report.

One (1) more photo-hydro station was identified and out in by the field party. It has been listed with a short description under Item 49. Its position was checked in the compilation office and found to be correct.


39. JUNCTIONS.

Reference Item 39 of the advance report.

40. HORIZONTAL AND VERTICAL ACCURACY.


Refer to Photogrammetric Plot Report relative to horizontal accuracy.

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with the map manuscript for USC&GS topographic survey T-8526 (, scale 1:20,000, and with Corps of Engineers quadrangle DOVER WEST, scale 1:25,000, 1944 edition. The maps are in good agreement.

47. COMPARISON WITH NAUTICAL CHARTS.

Reference Item 47 of the advance report.


Richard A. Reece,
Carto Photo Aid

APPROVED AND FORWARDED:


Ira R. Rubottom, Chief of Party

48. GEOGRAPHIC NAME LIST.

Reference Item 48 of the advance report.

The following names were taken from the Corps of Engineers quadrangle DOVER WEST.

BACK RIVER ROAD

BEARDS CREEK

BUNKER CREEK

HORSEHIDE BROOK

JOHNSON CREEK

NEW HAMPSHIRE

STATE 108

OYSTER RIVER

SMITH CREEK

U. S. 4

*Names approved
11-30-55
G. J. W.*

49. NOTES FOR THE HYDROGRAPHER.

Reference Item 49 of the advance report.

The following photo-hydro station was identified in the field and is in addition to those identified in the compilation office:

COD - Lone bush on point

PHOTOGRAMMETRIC OFFICE REVIEW

T-11110

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 H.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 XX 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 XX

CULTURAL FEATURES

27. Roads J.G. 28. Buildings J.G. 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 Jesse A. Giles William A. Rasure 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:

M-2623-12

TIDE COMPUTATION

PROJECT NO. PH-114 T-11140 /

Time and date of exposure	10:35 26/4/53	Reference station	PORTLAND, ME ✓	Mean range	6.4 ✓
Date of field inspection	---	Subordinate station	DOVER PT., N.H.	Ratio of ranges	0.7 ✓

	Time	
	h.	m.
High tide	7	31
Low tide	13	34
Duration of rise or fall	6	03

	Height feet	Height x Ratio of ranges	Time	
			h.	m.
High tide	7.5	5.0	6	01
Low tide	1.3	0.9	1	30
Range of tide		4.1	7	31

	Height at Ref. Sta.	Time difference	Time	
			h.	m.
High tide at Ref. Sta.			12	04
Time difference			1	30
Corrected time at Subordinate station			13	34

	h. m.		feet		feet	Photo. No.
Time H. T. or L. T. Required time Interval	13 34 10 35 2 59	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	0.9 2.0 2.9	Feature bares Stage of tide above MLW Feature above MLW		DQW-9K-131
Time H. T. or L. T. Required time Interval		Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW		
Time H. T. or L. T. Required time Interval		Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW		
Time H. T. or L. T. Required time Interval		Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW		
Time H. T. or L. T. Required time Interval		Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW		

M-2617-12

Computed by

Checked by

511

Review Report for T-11140
Shoreline Map
30 November 1955

62. Comparison with Registered Surveys:

T-2903 1:10,000, 1908-09, Oyster River and parts of Great and Little Bays

Differences are due to natural cultural and shoreline changes. The shoreline has advanced in the former grass-in-water areas, which are now real marshes.

Aside from the low bluff symbol and the contours, the present survey supersedes T-2903 for charting purposes.

63. Comparison with Maps of Other Agencies:

USE Dover West, N. H., 1:25,000, 1952, from C&GS T-8526, 1942-43.

The maps are in good general agreement, except for additional piers and the removal of the cable over the river about a half mile east of the junction of U. S. Hwy 4 and State Hwy 108.

64. Comparison with Contemporary Hydrographic Surveys:

H-8094 (ECFP 1753) 1:10,000, 1953

The shoreline is that of T-11140. A change was made just east of hydro-station IVY, but it is inside the MLWL. A road giving access to the pier at hydro-station ADE was added.

65. Comparison with Nautical Charts:

229 1:30,000 Nov. 1914, corr. May 1948, Portsmouth to Dover and Exeter

Except for the low bluff symbol and the contours, T-11140 supersedes the chart in its area.

66. Accuracy:

~~Interior delineation meets the National Standards of Accuracy.~~
Shoreline is delineated as accurately as office interpretation permits.)

Reviewed by:

Lena T. Stevens
Lena T. Stevens

See next page.

APPROVED BY:

L. C. Landy
Chief, Review Section
Photogrammetry Division

Max E. Little
Chief, Nautical Chart Branch
Charts Division

L. W. Swanson
Chief, Photogrammetry Division
14 Aug 1958 *ms*

J. B. Linnell
Chief, Coastal Surveys Division

Summary The photogrammetric plot
of the area of this map was relatively
weak compared to usual standards.
However, the sheet viewed satisfactorily
for hydrography and the accuracy of
plotting is adequate for application
to nautical charts
Bgg. 7/14/58