

11163

Diag. Cht. No. 1205.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Ph-111 Office No. T-11163

LOCALITY

State Maine

General locality East Coast

Locality Cape Porpoise to Kennebunk
Beach

1953

CHIEF OF PARTY

E.H.Kirsch, Chief of Field Party

I.R.Rubottom, Tampa Photo. Office

LIBRARY & ARCHIVES

DATE August 26, 1958

11163

DATA RECORD

T - 11163

Project No. (II): Ph-114

Quadrangle Name (IV):

Field Office (II): Newburyport, Mass.

Chief of Party: E. H. Kirsch

Photogrammetric Office (III): Tampa, Florida

Officer-in-Charge: Ira R. Rubottom

Instructions dated (II) (III): 13 March 1953

Copy filed in Division of
Photogrammetry (IV)

Supplement No. 1 28 March 1953

Supplement No. 2 30 April 1953

Supplement No. 3 6 May 1953

Supplement No. 4 26 May 1953

Supplement No. 5 25 June 1953

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):

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): REDDEN, 1941

Lat.: $43^{\circ} 22' 17.777''$ (548.6m.) Long.: $70^{\circ} 26' 43.095''$ (970.2m.)

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): **J. C. Lajoye, H. R. Spies,
L. F. Beugnet.**

Date: **Mar-Oct 1953**

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

Date:

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

Date:

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

**Aug. 1953
Air photo compilation**

Projection and Grids ruled by (IV): **Austin Riley (W. O.)**

Date: **7 Aug. 1953**

Projection and Grids checked by (IV): **H. D. Wolfe (W. O.)**

Date: **14 Aug. 1953**

Control plotted by (III): **R. J. Pate**

Date: **8 Jan. 1954**

Control checked by (III): **M. M. Slavney**

Date: **8 Jan. 1954**

Radial Plot ~~or Stereoscopic~~

Date: **21 Jan. 1954**

~~Control extension~~ by (III): **M. M. Slavney**

Stereoscopic Instrument compilation (III):
Planimetry
Contours **Inapplicable**

Date:

Date:

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

Date: **Feb. 1955**

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

Date: **March 1955**

Elevations on Manuscript **Inapplicable**
checked by (II) (III):

Date:

Camera (kind or source) (III): Fairchild K-17 6" Metrogon lens USC&GS

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
53-J-355 to		10:29		
358 incl.	22 April 1953	10:30	1:10,000	2.2 -
53-J-336 to	"	10:11	"	
339 incl.	"	10:14	"	2.6 -
53-J-176 to	18 April 1953	low-water photography		0.45-0.6
189 incl.				

Tide (III)
From Predicted Tides

Reference Station: PORTLAND, MAINE
Subordinate Station: CAPE PORPOISE, MAINE
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
-	8.9	10.2
1.0	8.7	9.9

Washington Office Review by (IV): *Lana F. Stevens*

Date: 15 Nov. 1953

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 2
Shoreline (More than 200 meters to opposite shore) (III): 14
~~Shoreline (Less than 200 meters to opposite shore) (III):~~
Control Leveling, Miles (II):
Number of Triangulation Stations searched for (II): 13 Recovered: 9 Identified: 6
* Number of BMs searched for (II): 3 Recovered: 3 Identified: 1
Number of Recoverable Photo Stations established (III): None
Number of Temporary Photo Hydro Stations established (III): 41

Remarks:

* T.B.M.

Summary to Accompany T-11163

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 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.

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

* THE FIELD INSPECTION REPORT
WAS SUBMITTED AS A SEPARATE
REPORT

** Is Filed as a part
of Report T11148*

COMPILATION REPORT T-11163

PHOTOGRAMMETRIC PLOT REPORT.

* Submitted under separate cover.

* *Filed as a part of Report T11144*

31. DELINEATION.

The graphic method was used.

Photographs were clear but varied from poor to good scale.

Detail points that had to be located by two cuts have been shown with green ink.

Field inspection was adequate.

32. CONTROL.

Reference Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA.

None.

34. CONTOURS AND DRAINAGE.

Contours are inapplicable.

Drainage shown according to field inspector's notes and photo interpretation.

35. SHORELINE AND ALONGSHORE DETAILS.

Field inspector's notes were adequate for delineating all shoreline, alongshore details and low-water lines.

36. OFFSHORE DETAILS.

No unusual problems were encountered in compiling details offshore from the high-water line.

37. LANDMARKS AND AIDS.

Landmarks are to be submitted by the hydrographic party.

Six (6) nonfloating aids were submitted on Form 567 on 6 April 1955. *copy attached*

38. CONTROL FOR FUTURE SURVEYS.

There are no recoverable topographic stations.

A list of forty-one (41) photo-hydro stations with descriptions was prepared and submitted during April 1954.

39. JUNCTIONS.

A satisfactory junction has been made with Survey No. T-11160 to the north and T-11162 to the west.

There are no contemporary surveys to the east and south.

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement.

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with KENNEBUNKPORT Quadrangle, scale 1:25,000, 1944 edition. The two surveys are in good agreement.

47. COMPARISON WITH NAUTICAL CHARTS.

A comparison was made with USC&GS Nautical Chart No. 1205, scale 1:80,000, published in June 1950 and bearing a print date of 28 July 1952. There are no differences of note.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

Richard A. Reece
Richard A. Reece
Carto Photo Aid

APPROVED AND FORWARDED:

Ira R. Rubottom
Ira R. Rubottom, Chief of Party

48. GEOGRAPHIC NAME LIST.

BASS ISLAND
BICKFORD ISLAND
BUMPKIN ISLAND

CAPE ISLAND
CAPE PORPOISE
CAPE PORPOISE (TOWN)
CAPE PORPOISE HARBOR
CAPE ROCKS
CASINO HILL

FISHING ROCK
FOLLY ISLAND

GOAT ISLAND
GREEN ISLAND
GULF OF MAINE

KENNEBUNK BEACH
KENNEBUNKPORT
KENNEBUNK RIVER

LITTLE FISHING ROCK
LITTLE STAGE ISLAND
LOWER KENNEBUNK

MAINE

NORTH KENNEBUNKPORT

OAKS REEF
OLD ROAD
OLD ROAD FORKS
OCEAN AVENUE
PETTY CREEK
PORPOISE COVE

REDIN ISLAND

*Names approved
10-17-55
a.j.w.*

SHACKFORD POND
*SHRINE OF ST. ANTHONY
STAGE ISLAND
STAGE ISLAND HARBOR
STATE 1
STATE 9
STATE 35
ST MARTHA'S CHURCH
TROTT ISLAND
TURBATT CREEK
TURBATT VILLAGE

VAUGHN ISLAND

WALKERS POINT
WYLD'S VILLAGE
WEBB HANNET GOLF CLUB

*Under construction

*Names approved
10-17-55
A.L.W.*

49. NOTES FOR THE HYDROGRAPHER.

The required information was submitted 6 April 1954.

STRIKE OUT ONE

Tampa Photogrammetric Office, Tampa, Fla. 6 Apr. 1951

The positions given have been checked after listing by

Richard A. Reece
Carto Photo Aid

Ira R. Rubottom, *Chief of Party.*

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 sailing masters.

50.

PHOTOGRAMMETRIC OFFICE REVIEW

T- 11163

1. Projection and grids J.G. 2. Title J.G. 3. Manuscript numbers J.G. 4. Manuscript size J.G.~~Is Classification label~~ Unclassified

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 J.G. 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 J.G. 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 J.G. 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:

TIDE COMPUTATION

PROJECT NO. Ph-114 T-11163

Reference station

Mean range 8.7

Subordinate station CAPE PORPOISE, ME ✓

Date of field inspection

Subordinate station

Ratio of ranges 1.0

	Time	
	h.	m.
High tide	5	01
Low tide	11	02
Duration of rise or fall	6	01

	Height feet	Height x Ratio of ranges	Time	
			h.	m.
High tide	7.9	7.9	5	01
Low tide	7.0	1.0	0	00
Range of tide		6.9	5	01

	Time	
	h.	m.
Low tide at Ref. Sta.	11	02
Time difference	0	00
Corrected time at Subordinate station	11	02

h. m.	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	feet	Feature bares Stage of tide above MLW Feature above MLW	feet	Photo. No.
11 02 10 00 1 02	Ht. H. T. L. T. Tabular correction Stage of tide above MLW	1.0 0.5 1.5	Feature bares Stage of tide above MLW Feature above MLW	0.0 1.5 1.5	53-J-180 (2)
11 02 9 50 1 12	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	1.0 0.7 1.7	Feature bares Stage of tide above MLW Feature above MLW	1.0 1.7 2.7	53-J-182 (3)
11 02 10 15 1 47	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	1.0 0.3 1.3	Feature bares Stage of tide above MLW Feature above MLW	6.0 1.3 7.3	53-J-183 (7)
11 02 9 35 1 27	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	1.0 0.9 1.9	Feature bares Stage of tide above MLW Feature above MLW	2.5 1.9 4.4	(4)
11 02 9 35 1 27	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	1.0 0.9 1.9	Feature bares Stage of tide above MLW Feature above MLW	1.0 1.9 2.9	?? (3)
11 02 10 20 1 42	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	1.0 0.3 1.3	Feature bares Stage of tide above MLW Feature above MLW	2.0 1.3 3.3	53-J-189 (3)

1.0	1.0	4.0	1.0	5.0
Computed by	Computed by	Checked by	Checked by	Checked by
<i>P. L. R.</i>	<i>P. L. R.</i>	<i>P. L. R.</i>	<i>P. L. R.</i>	<i>P. L. R.</i>

M-2617-12 (5)

TIDE COMPUTATION

PROJECT NO. Ph-114 T. 11163

Time ~~and date of observation~~ 0830 S.T.
0930 EDT

Reference station

PORTLAND, MAINE

Mean range

8.7

Date of field inspection

14 AUG 1953

Subordinate station

CAPE PORPOISE, ME

Ratio of ranges

1.0

	Time	
	h.	m.
High tide	13	50
Low tide	7	38
Duration of rise or fall	6	12

	Height		Height x Ratio of ranges
	feet		
High tide	8.7	✓	8.7
Low tide	0.5	✓	0.5
Range of tide			8.2 ✓

	Time	
	h.	m.
High tide at Ref. Sta.	13	50
Time difference	0	00
Corrected time at Subordinate station	13	50

	Time	
	h.	m.
Low tide at Ref. Sta.	7	38
Time difference	0	00
Corrected time at Subordinate station	7	38

	h.	m.		feet		feet	Photo. No.
Time High L. T.	7	38	Ht. High or L. T.	0.5	Feature bares	4.0	Contact
Required time Interval	8	30	Tabular correction	0.3	Stage of tide above MLW	0.8	53-V-176
	9	52	Stage of tide above MLW	0.8	Feature above MLW	4.8	(5)
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares	3.0	"
Required time Interval			Tabular correction		Stage of tide above MLW	0.8	(4)
			Stage of tide above MLW		Feature above MLW	3.8	
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares	1.0	"
Required time Interval			Tabular correction		Stage of tide above MLW	0.8	(2)
			Stage of tide above MLW		Feature above MLW	1.8	
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares	0.0	(1)
Required time Interval			Tabular correction		Stage of tide above MLW	0.8	
			Stage of tide above MLW		Feature above MLW	0.8	
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time Interval			Tabular correction		Stage of tide above MLW		
			Stage of tide above MLW		Feature above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time Interval			Tabular correction		Stage of tide above MLW		
			Stage of tide above MLW		Feature above MLW		

M-2617-12

Computed by P. A. Reese Checked by P. E. Smith

1425 EAST ✓
 1325 ST ✓
 1345 EAST ✓
 1245 ST ✓

1300 EAST ✓
 1200 ST ✓

TIDE COMPUTATION

PROJECT NO. Ph. 114 T. 11163

Reference station PORTLAND, MAINE

Mean range 8.7

Time and date of exposure 1200 ST
 Date of field inspection 19 Aug 53
 Subordinate station CAPE PORPOISE, ME.
 Ratio of ranges 1.0

	Time		Height feet	Height x Ratio of ranges	High tide at Ref. Sta. Time difference	Time	
	h.	m.				h.	m.
High tide	17	50	8.4	8.4		17	50
Low tide	11	27	1.8	1.8		0	00
Duration of rise or fall	6	23		6.6	Corrected time at Subordinate station	17	50
					Corrected time at Subordinate station	11	27

	h.	m.	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	feet	Feature bares Stage of tide above MLW Feature above MLW	feet	Photo. No.
Time H. T. or L. T. Required time Interval	11 27	12 00	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	1.8 0.2 2.0	Feature bares Stage of tide above MLW Feature above MLW	2.0 2.2 4.0	53-J-178 (4)
Time H. T. or L. T. Required time Interval	11 27	12 45	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	1.8 0.6 2.4	Feature bares Stage of tide above MLW Feature above MLW	4.0 2.4 6.4	53-J-179 (6)
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	2.0 2.4 4.4	" (4)
Time H. T. or L. T. Required time Interval	11 27	13 25	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	1.8 1.3 3.1	Feature bares Stage of tide above MLW Feature above MLW	0.0 3.1 3.1	53-J-180 (3)
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		

Computed by P. A. Moore Checked by P. A. Moore M 2617-12

TIDE COMPUTATION

PROJECT NO. Ph. 114 T. 11163

1495 EPST ✓

Time and date of exposure 1395 SI ✓

Reference station

PORTLAND, MAINE ✓

Mean range

8.7 ✓

Date of field inspection

13 Aug 1953

Subordinate station

CAPE PORPOISE, MAINE ✓

Ratio of ranges

1.0 ✓

	Time		Height feet	Height x Ratio of ranges	Range of tide
	h.	m.			
High tide	13	13	8.7 ✓	8.7 ✓	8.1 ✓
Low tide	19	23	0.6 ✓	0.6 ✓	
Duration of rise or fall	6	10			

Time		High tide at Ref. Sta.	Time difference	Corrected time at Subordinate station
h.	m.			
13	13			
0	00			
13	13			

Time		Low tide at Ref. Sta.	Time difference	Corrected time at Subordinate station
h.	m.			
19	23			
0	00			
19	23			

Time H. T. or L. T. Required time Interval	h.	m.	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Height feet	Height x Ratio of ranges	Range of tide
Time H. T. or L. T. Required time Interval	13	13	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	8.7 ✓	8.7 ✓	8.1 ✓
Time H. T. or L. T. Required time Interval	13	45	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	0.2 ✓	0.2 ✓	
Time H. T. or L. T. Required time Interval	13	32	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	8.5 ✓	8.5 ✓	
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			

Time H. T. or L. T. Required time Interval	h.	m.	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Height feet	Height x Ratio of ranges	Range of tide
Time H. T. or L. T. Required time Interval	13	13	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	8.7 ✓	8.7 ✓	8.1 ✓
Time H. T. or L. T. Required time Interval	13	45	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	0.2 ✓	0.2 ✓	
Time H. T. or L. T. Required time Interval	13	32	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	8.5 ✓	8.5 ✓	
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			

M-2617-12

Computed by

R. A. Lacey

Checked by

F. E. Smith

TIDE COMPUTATION

PROJECT NO. Ph. 114 T. 11163

Time and date of exposure

1200 EDT

Reference station

1100 ST PORTLAND, MAINE

Mean range

8.7

Date of field inspection

20 Aug 1953 Subordinate station CAPE PORPOISE, ME.

Ratio of ranges

1.0

	Time	
	h.	m.
High tide	13	21
Low tide	7	11
Duration of rise or fall	6	10

	Height		Height x Ratio of ranges
	feet		
High tide	10.6	✓	10.6
Low tide	-1.2	✓	-1.2
Range of tide			11.8 ✓

	Time	
	h.	m.
High tide at Ref. Sta.	13	21
Time difference	0	00
Corrected time at Subordinate station	13	21

	Time	
	h.	m.
Low tide at Ref. Sta.	7	11
Time difference	0	00
Corrected time at Subordinate station	7	11

	h. m.		feet		feet	Photo. No.
Time H. T. or L. T. Required time Interval	13 21 11 00 2 21	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	10.6 8.1 8.5	Feature bares Stage of tide above MLW Feature above MLW	9.0 8.5 11.5	53-V-255
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		
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

R. A. Reese
P. E. Smith

TIDE COMPUTATION

10 12
10 29

PROJECT NO. Ph-114 T. 11163

Time and date of exposure 22 April 1953 Reference station PORTLAND, MAINE Mean range 8.7
Date of field inspection Subordinate station CAPE PORPOISE, ME. Ratio of ranges 1.0

	Time		Height feet	Height x Ratio of ranges	High tide at Ref. Sta. Time difference Corrected time at Subordinate station	Time	
	h.	m.				h.	m.
High tide	5	54	7.9	7.9	High tide at Ref. Sta.	5	54
Low tide	12	23	0.8	0.8	Time difference	0	00
Duration of rise or fall	6	29		7.1	Corrected time at Subordinate station	5	54

	h. m.		Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	feet	feet	Photo. No.
	h.	m.				
Time H. T. L. T. Required time Interval	12	23	Ht. H. T. L. T. Tabular correction Stage of tide above MLW	0.8 1.4 2.2		53-J-355
Time H. T. L. T. Required time Interval	12	23	Ht. H. T. L. T. Tabular correction Stage of tide above MLW	0.8 1.8 2.6		53-J-337
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			

Computed by R. A. Kersa Checked by P. E. Smith M-2617-12

TIDE COMPUTATION

PROJECT NO. Ph-114 T. 11163

Time and date of exposure

1400 EDST
1300 ST

Reference station

PORTLAND, MAINE

Mean range

8.7 ✓

Date of field inspection

18 Aug 1953

Subordinate station

CAPE PORPOISE, MAINE

Ratio of ranges

1.0 ✓

	Time	
	h.	m.
High tide	16	52
Low tide	10	31
Duration of rise or fall	6	21

	Height		Height x Ratio of ranges
	feet		
High tide	8.3	✓	8.3
Low tide	1.7	✓	1.7
Range of tide			6.6

	Time	
	h.	m.
High tide at Ref. Sta.	16	52
Time difference	0	00
Corrected time at Subordinate station	16	52

	Time	
	h.	m.
Low tide at Ref. Sta.	10	31
Time difference	0	00
Corrected time at Subordinate station	10	31

	h.	m.		feet		feet	Photo. No.
Time High L. T.	10	31	Ht. High L. T.	1.7	Feature bares <i>Bridge</i>	8.8	<i>Bridge</i>
Required time	13	00	Tabular correction	2.2	Stage of tide above MLW	3.9	53-J-337
Interval	2	29	✓ Stage of tide above MLW	3.9	Feature above MLW	12.7	
Time H. T. or L. T.			Ht. H. T. or L. T.		<i>above MLW</i>	4.0	
Required time			Tabular correction		Feature bares		
Interval			Stage of tide above MLW		Stage of tide above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature above MLW		
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		

Computed by

R. H. L. L. L.

Checked by

R. E. L. L. L.

M-2617-12

Photo

CONTROL STATION IDENTIFICATION

Photogrammetry

STATION Photo Pt "D" (To locate Aids
to navigation)STATE Maine COUNTY YorkIDENTIFIED BY LFB DATE 8/27/53MAP NO. 11163PHOTO NO. 53-J-355

SKETCH

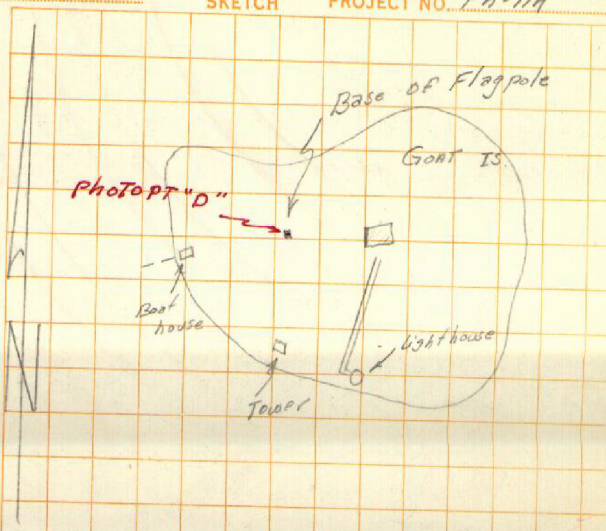
PROJECT NO. Ph-114ACCURACY OF IDENTIFICATION Pos.CHIEF OF PARTY EH HirschREMARKS: Photo Pt. "D"is the concrete baseof flagpole, showingwhite

INFORMATION REQUIRED FOR SUBSTITUTE STATION

INST. STA. See Form 251AZ. STA. for directions

< TO STA. R DISTANCE { FT.
L { M.

M-2226-12



Station: Ken

State: Maryland

Chief of party: C. V. H.

Date: 1917

Computed by: O. P. S.

Observer: C. V. H.

Instrument: No. 168

Checked by: W. F. R.

OBSERVED STATION	Observed direction	Eccentric reduction	Sea level reduction	Corrected direction with zero initial	Adjusted direction
Chevy.....	0 00 00.00	- 7.31	"	0 00 00.00	" "
Tank west of Δ Dulce.....	29 03 37.0	-1 09.8		29 02 34.5	
Ken (center), 3.469 meters.....	176 42				
Forest Glen standpipe.....	313 24 53.0	+3 01.2		313 28 01.5	
Home.....	326 31 30.21	+ 31.93		326 32 09.45	
Bureau of Standards, wireless pole..	352 17 20.8	+ 5.7		352 17 33.8	
Reno.....	357 28 48.63	- 1.16		357 28 54.78	
Reference mark, 16.32 m.....	358 31 20				

This form, with the first three and fifth columns properly filled out and checked, must be furnished by field parties. To be acceptable it must contain every direction observed at the station.

It should be used for observations with both repeating and direction theodolites.

The directions at only one station should be placed on a page.

If a repeating theodolite is used, do not abstract the angles in tertiary triangulation. The local adjustment corrections (to close horizon only) are to be written in the Horizontal Angle Record, and the List of Directions is to be made from that record directly.

Choose as an initial for Form 24A some station involved in the local adjustment, and preferably one which has been used as an initial for a round of directions on objects not in the main scheme. Use but one initial at a station. Call the direction of the initial $0^{\circ} 00' 00.00''$, and by applying the corrected angles to this, fill in opposite each station its direction reckoned *clockwise* around the whole circumference regardless of the direction of graduation of the instrument. The clockwise reckoning is necessary for uniformity and to make the directions comparable with azimuths.

If a station has been occupied eccentrically, reduce to the center and enter in this form, in ink, the resulting corrections to the observed directions in the column provided for them. If an eccentric reduction is necessary, but not made in the field, leave the column blank. If the station was occupied centrally, and no eccentric reduction is required, put dashes in the column to show that no corrections are necessary.

Directions in the main scheme should be entered to hundredths of seconds in first-order triangulation; otherwise to tenths only. Points observed upon but once, direct and reverse, should be carried to tenths in first-order and second-order triangulation, and to even seconds only in third-order triangulation. In general, but two uncertain figures should be given.

It is recommended that the following simple plan of observing be used with a repeating instrument: Measure each single angle in the scheme at each station and the outside angle necessary to close the horizon. Measure no sum angles. Follow each measurement of every angle immediately by a measurement of its supplement. Six repetitions are to constitute a measurement. The local adjustment will consist simply of the distribution of the error of closure of the horizon.

Station: Ken

State: Maryland

Chief of party: C. V. H.

Date: 1917

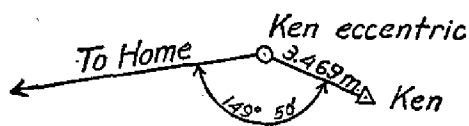
Computed by: O. P. S.

Observer: C. V. H.

Instrument: No. 168

Checked by: W. F. R.

OBSERVED STATION	Observed direction	Eccentric reduction	Sea level reduction	Corrected direction with zero initial	Adjusted direction
Chevy	0 00 00.00	- 7.31	"	0 00 00.00	" "
Tank west of Δ Dulce	29 03 37.0	-1 09.8		29 02 34.5	
Ken (center), 3.469 meters	176 42				
Forest Glen standpipe	313 24 53.0	+3 01.2		313 28 01.5	
Home	328 31 30.21	+ 31.93		326 32 09.45	
Bureau of Standards, wireless pole	352 17 20.8	+ 5.7		352 17 33.8	
Reno	357 28 48.63	- 1.16		357 28 54.78	
Reference mark, 16.32 m	358 31 20				



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Choose as an initial for Form 24A some station involved in the local adjustment, and preferably one which has been used as an initial for a round of directions on objects not in the main scheme. Use but one initial at a station. Call the direction of the initial $0^{\circ} 00' 00."$ 00, and by applying the corrected angles to this, fill in opposite each station its direction reckoned *clockwise* around the whole circumference regardless of the direction of graduation of the instrument. The clockwise reckoning is necessary for uniformity and to make the directions comparable with azimuths.

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Photo

CONTROL STATION IDENTIFICATION

Photogrammetry

STATION Photo PT "C" (To locate Aids to Navigation)

STATE Maine

COUNTY York

MAP NO. 11163

IDENTIFIED BY L.F.B.

DATE 8/27/52

PHOTO NO. 53-J-356

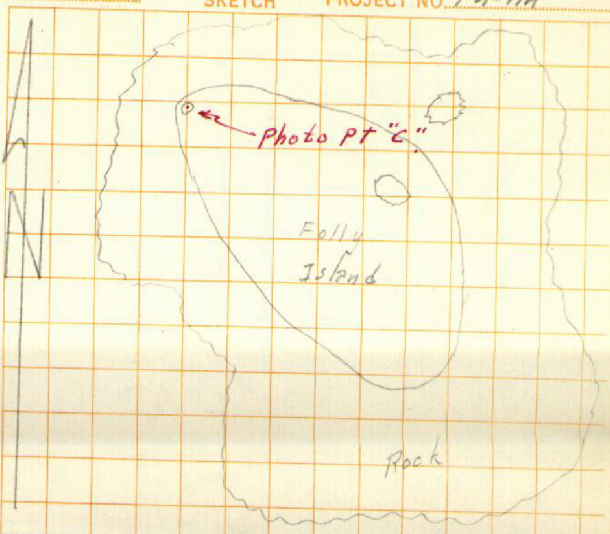
ACCURACY OF IDENTIFICATION Pos.

SKETCH

PROJECT NO. PA-114

CHIEF OF PARTY E.H. Kirsch

REMARKS: Photo PT "C" is the center of Bush on NW. end of island



INFORMATION REQUIRED FOR SUBSTITUTE STATION

INST. STA. See Faxon 251

AZ. STA. for directions

< TO STA. R
L DISTANCE { FT.
M.

M-2226-12

Station: Ken

State: Maryland

Chief of party: C. V. H.

Date: 1917

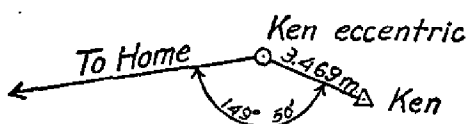
Computed by: O. P. S.

Observer: C. V. H.

Instrument: No. 168

Checked by: W. F. R.

OBSERVED STATION	Observed direction	Eccentric reduction	Sea level reduction	Corrected direction with zero initial	Adjusted direction
Chevy.....	0 00 00.00	- 7.31	"	0 00 00.00	" "
Tank west of Δ Dulce.....	29 03 37.0	-1 09.8		29 02 34.5	
Ken (center), 3.469 meters.....	176 42				
Forest Glen standpipe.....	313 24 53.0	+3 01.2		313 28 01.5	
Home.....	326 31 30.21	+ 31.93		326 32 09.45	
Bureau of Standards, wireless pole.....	352 17 20.8	+ 5.7		352 17 33.8	
Reno.....	357 28 48.63	- 1.16		357 28 54.78	
Reference mark, 16.32 m.....	358 31 20				



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The directions at only one station should be placed on a page.

If a repeating theodolite is used, do not abstract the angles in tertiary triangulation. The local adjustment corrections (to close horizon only) are to be written in the Horizontal Angle Record, and the List of Directions is to be made from that record directly.

Choose as an initial for Form 24A some station involved in the local adjustment, and preferably one which has been used as an initial for a round of directions on objects not in the main scheme. Use but one initial at a station. Call the direction of the initial $0^{\circ} 00' 00." 00$, and by applying the corrected angles to this, fill in opposite each station its direction reckoned *clockwise* around the whole circumference regardless of the direction of graduation of the instrument. The clockwise reckoning is necessary for uniformity and to make the directions comparable with azimuths.

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CONTROL STATION IDENTIFICATION

Photogrammetry

STATION Photo PT "A" (To locate Aids to Navigation)
 STATE Maine COUNTY York
 IDENTIFIED BY L.F.B. DATE 8/13/52

MAP NO. 11162
 PHOTO NO. 53-J-336
 PROJECT NO. PA-114

ACCURACY OF IDENTIFICATION pos.
 CHIEF OF PARTY E.H. Kiisch

REMARKS:
Photo pt "A" is the
South end of Bald

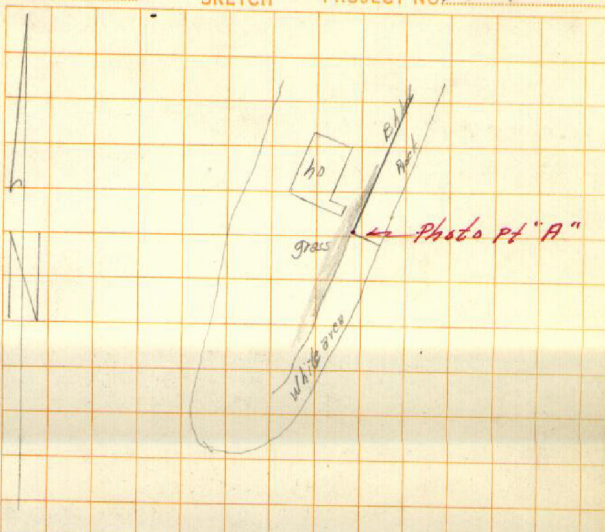
INFORMATION REQUIRED FOR SUBSTITUTE STATION

INST. STA. Photo PT "A"
 AZ. STA. BRENNWATER COURT CUPOLA, 1941

< TO STA. R DISTANCE { FT.
L DISTANCE { M.

M-2226-12

SKETCH

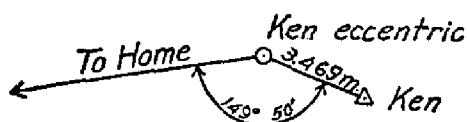


Station: Ken
 Chief of party: C. V. H.
 Observer: C. V. H.

State: Maryland
 Date: 1917
 Instrument: No. 168

Computed by: O. P. S.
 Checked by: W. F. R.

OBSERVED STATION	Observed direction	Eccentric reduction	Sea level reduction	Corrected direction with zero initial	Adjusted direction
Chevy	0 00 00.00	- 7.31	"	0 00 00.00	" "
Tank west of Δ Dulce	29 03 37.0	-1 09.8		29 02 34.5	
Ken (center), 3.469 meters	176 42				
Forest Glen standpipe	313 24 53.0	+3 01.2		313 28 01.5	
Home	326 31 30.21	+ 31.93		326 32 09.45	
Bureau of Standards, wireless pole	352 17 20.8	+ 5.7		352 17 33.8	
Reno	357 23 48.63	- 1.16		357 28 54.78	
Reference mark, 16.32 m	358 31 20				



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Choose as an initial for Form 24A some station involved in the local adjustment, and preferably one which has been used as an initial for a round of directions on objects not in the main scheme. Use but one initial at a station. Call the direction of the initial $0^{\circ} 00' 00''$, and by applying the corrected angles to this, fill in opposite each station its direction reckoned *clockwise* around the whole circumference regardless of the direction of graduation of the instrument. The clockwise reckoning is necessary for uniformity and to make the directions comparable with azimuths.

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Photo

CONTROL STATION IDENTIFICATION

Photogrammetry

STATION Photo PT "B" (To locate pids to navigation)
STATE Utah COUNTY York
IDENTIFIED BY LFB DATE 8/13/53

MAP NO. 11/63
PHOTO NO. 53-J-337
PROJECT NO. Ph-114

ACCURACY OF IDENTIFICATION Poc.CHIEF OF PARTY Ed. Kirsch

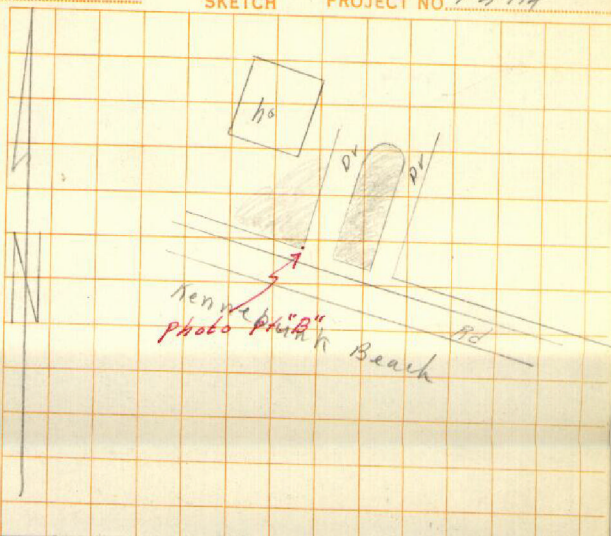
REMARKS: Photo pt "B"
is the southeastern
edge of lawn at
drive way

INFORMATION REQUIRED FOR SUBSTITUTE STATION

INST. STA. Photo pt. "B"
AZ. STN. WENDEBUNK BEACH ATLANTIS
HOTEL ROOF 1943
TO STA. L DISTANCE { FT.
M.

M-2226-12

SKETCH



Station: Ken

State: Maryland

Chief of party: C. V. H.

Date: 1917

Computed by: O. P. S.

Observer: C. V. H.

Instrument: No. 168

Checked by: W. F. R.

OBSERVED STATION	Observed direction	Eccentric reduction	Sea level reduction	Corrected direction with zero initial	Adjusted direction
Chevy	0 00 00.00	- 7.31	"	0 00 00.00	" "
Tank west of Δ Dulce	29 03 37.0	-1 09.8		29 02 34.5	
Ken (center), 3.469 meters	176 42				
Forest Glen standpipe	313 24 53.0	+3 01.2		313 28 01.5	
Home	326 31 30.21	+ 31.93		326 32 09.45	
Bureau of Standards, wireless pole	352 17 20.8	+ 5.7		352 17 33.8	
Reno	357 28 48.63	- 1.16		357 28 54.78	
Reference mark, 16.32 m	358 31 20				

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LIST OF DIRECTIONS

11163

Station KENNEBUNK PORT PIER LIGHT State MAINE

Chief of party E. H. Mizell Date 8/19/53 Computed by LFB

Observer LFB Instrument W. K. T-2, No 26314 Checked by RSD

OBSERVED STATION	Observed direction	Eccentric reduction	Sea level reduction*	Corrected direction with zero initial	Adjusted direction*
KENNEBUNK PORT, ORTHODOX CHURCH SPIRE, 1851	0 00 00.00			0 00 00.00	
Fishing Rock Daybeacon	198° 10' 57.2"				
Oak Reef outer Rock Daybeacon	237° 04' 51.5"				
Angles on Pg 4 - Vol. "Location of Aids" - Sheets 11163 & 11159					

* These columns are for office use and should be left blank in the field.

Station: Ken

State: Maryland

Chief of party: C. V. H.

Date: 1917

Computed by: O. P. S.

Observer: C. V. H.

Instrument: No. 168

Checked by: W. F. R.

OBSERVED STATION	Observed direction	Eccentric reduction	Sea level reduction	Corrected direction with zero initial	Adjusted direction
	° ' "	' "	"	° ' "	' "
Chevy	0 00 00.00	- 7.31	"	0 00 00.00	' "
Tank west of Δ Dulce	29 03 37.0	-1 09.8		29 02 34.5	
Ken (center), 3.469 meters	176 42				
Forest Glen standpipe	313 24 53.0	+3 01.2		313 28 01.5	
Home	326 31 30.21	+ 31.93		326 32 09.45	
Bureau of Standards, wireless pole..	352 17 20.8	+ 5.7		352 17 33.8	
Reno	357 28 48.63	- 1.16		357 28 54.78	
Reference mark, 16.32 m	358 31 20				

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Choose as an initial for Form 24A some station involved in the local adjustment, and preferably one which has been used as an initial for a round of directions on objects not in the main scheme. Use but one initial at a station. Call the direction of the initial 0° 00' 00." 00, and by applying the corrected angles to this, fill in opposite each station its direction reckoned *clockwise* around the whole circumference regardless of the direction of graduation of the instrument. The clockwise reckoning is necessary for uniformity and to make the directions comparable with azimuths.

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Station: Ken

State: Maryland

Chief of party: C. V. H.

Date: 1917

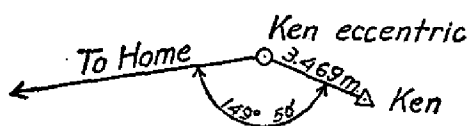
Computed by: O. P. S.

Observer: C. V. H.

Instrument: No. 168

Checked by: W. F. R.

OBSERVED STATION	Observed direction	Eccentric reduction	Sea level reduction	Corrected direction with zero initial	Adjusted direction
Chevy	0 00 00.00	- 7.31	"	0 00 00.00	" "
Tank west of Δ Dulce	29 03 37.0	-1 09.8		29 02 34.5	
Ken (center), 3.469 meters	176 42				
Forest Glen standpipe	313 24 53.0	+3 01.2		313 28 01.5	
Home	326 31 30.21	+ 31.93		326 32 09.45	
Bureau of Standards, wireless pole	352 17 20.8	+ 5.7		352 17 33.8	
Reno	357 28 48.63	- 1.16		357 28 54.78	
Reference mark, 16.32 m.	358 31 20				



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Choose as an initial for Form 24a some station involved in the local adjustment, and preferably one which has been used as an initial for a round of directions on objects not in the main scheme. Use but one initial at a station. Call the direction of the initial $0^{\circ} 00' 00.00''$, and by applying the corrected angles to this, fill in opposite each station its direction reckoned *clockwise* around the whole circumference regardless of the direction of graduation of the instrument. The clockwise reckoning is necessary for uniformity and to make the directions comparable with azimuths.

If a station has been occupied eccentrically, reduce to the center and enter in this form, in ink, the resulting corrections to the observed directions in the column provided for them. If an eccentric reduction is necessary, but not made in the field, leave the column blank. If the station was occupied centrally, and no eccentric reduction is required, put dashes in the column to show that no corrections are necessary.

Directions in the main scheme should be entered to hundredths of seconds in first-order triangulation; otherwise to tenths only. Points observed upon but once, direct and reverse, should be carried to tenths in first-order and second-order triangulation, and to even seconds only in third-order triangulation. In general, but two uncertain figures should be given.

It is recommended that the following simple plan of observing be used with a repeating instrument: Measure each single angle in the scheme at each station and the outside angle necessary to close the horizon. Measure no sum angles. Follow each measurement of every angle immediately by a measurement of its supplement. Six repetitions are to constitute a measurement. The local adjustment will consist simply of the distribution of the error of closure of the horizon.

Review Report T-11163
Shoreline Map
15 November, 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 recommended revisions on black-line impressions on vinylite. The positives on vinylite, with corrections applied, serve as the final map manuscripts.

62. Comparison with Registered Surveys:

T- 761 1:10,000, 1859 Cape Porpoise and Vicinity.
T-1159 1:10,000, 1870, rev. 1912 Kennebunkport and Cape
 Porpoise to Hoyts Neck.

T-11163 supersedes the older surveys for charting the shoreline and adjacent culture and planimetry within the comparable area.

The older surveys delineate more rocks separately, but they fall either within the ledge symbol on T-11163 or within the low-water line.

63. Comparison with Maps of Other Agencies:

USE Kennebunkport, Maine 1:25,000, 1949

This quadrangle was mapped by the C&GS from 1943 photographs. Because of greater detail of shoreline and cultural changes, T-11163 supersedes these features on the quadrangle for charting purposes.

A rock on the quadrangle at $43^{\circ} 20\frac{1}{2}'/70^{\circ} 29'$ (approx.) is not on T-11163. It was not located by 1953 field inspection, and is not evident on the 1953 photographs. No concurrent hydrographic survey was available for this area.

64. Comparison with Contemporary Hydrographic Surveys:

H-8163(?) BP. 52155 1:5,000, 1955 Porpoise Harbor area.

The hydrographic survey disproved the extent of ledge in four places between Vaughn Island and Stage Island. These changes were applied to T-11163. The additional rocks on H-8163 were not transferred to T-11163 so that H-8163 supplements T-11163 in this report.

65. Comparison with Nautical Charts:

1205 1:80,000, ed. June 1950, corr. Oct. 1954 (Insert: Porpoise Harbor, 1:10,000)

Two charted islets on the ledge, extending from the southern point of Vaughn Island, are not mapped on T-11163 (Bea-Sheet). The low-water photographs do not give evidence of the islets.

A reef and a rock east of the Walker Point peninsula are not charted.

The shoreline of the chart in this area is from the Kennebunk quadrangle. Differences in shoreline are particularly noteworthy with respect to the islands.

66. Accuracy:

This map complies with project instructions and meets the National Standards of Accuracy.

Reviewed by:

Lena T. Stevens
Lena T. Stevens

APPROVED BY:

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