

8161

Diag. Cht. No. 1205-2.

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ECFP-1554 Office No. H-8161

LOCALITY

State Maine

General locality Cape Neddick Harbor

Locality Cape Neddick to Ogunquit

194 54-55

CHIEF OF PARTY

C. R. Reed and M. T. Paulson

LIBRARY & ARCHIVES

DATE October 11, 1956

8-1870-1 (1)

8161

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-8161.

Field No. ECFP-1554

State MAINE

General locality CAPE NEDDICK HARBOR

Locality CAPE NEDDICK TO OGUNQUIT

Scale 1:10,000 Date of survey 23 Aug. to 4 Nov. 1954
and 13 June to 22 June 1955

Instructions dated 3/6/53 & 1/29/54

Vessel EAST COAST FIELD PARTY

Chief of party CLARENCE R. REED & M. T. Paulson

Surveyed by ROBERT B. NOBLE & CHARLES E. HORNE & C. W. Tupper

Soundings taken by ~~XXXXXXXX~~, graphic recorder, hand lead, ~~XXX~~

Fathograms scaled by PARTY PERSONNEL

Fathograms checked by NORFOLK DISTRICT OFFICE

Protracted by RICHARD D. LYNN

Soundings penciled by RICHARD D. LYNN

Soundings in ~~XXXXXXXX~~ feet at MLW ~~XXXXXX~~ and are true depths.

REMARKS: See attached descriptive report covering additional
work during the 1955 field season.

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782

NOTES FOR DESCRIPTIVE REPORT TO ACCOMPANY

Hydrographic Sheet H-8161, (FIELD NO. ECFP 1554)

Maine outer coast from Cape Neddick to Ogunquit

EAST COAST FIELD PARTY

CLARENCE R. REED, CHIEF OF PARTY

PROJECT CS-355

1954

SCALE 1:10,000

* * * * *

PROJECT This survey was accomplished under instructions dated 6 March 1953 and supplemental instructions dated 29 January 1954.

SURVEY LIMITS AND DATES The survey on this sheet covers the Maine outer coast from Cape Neddick to Ogunquit. The area surveyed is bounded as follows:

On the north by latitude $43^{\circ} 14.35'$, on the east by longitude $70^{\circ} 33.50'$, on the south by latitude $43^{\circ} 09.00'$ and on the west by the Maine coast. Junctions were made with prior surveys H-667, 1858, scale 1:40,000 on the north, H-7148, 1946, scale 1:40,000 on the east, H-376a, 1911, scale 1:10,000 on the south and with contemporary survey H-8160, (ECFP 1454) also on the south. Survey sheet ^{H-7177 (1947) E. No. 220} H-8254 was constructed but no hydrography was accomplished on that sheet. A junction will be made with that sheet on the north whenever the work is undertaken. Field work on this survey sheet commenced on 23 August and was terminated on 4 November 1954. Adverse weather and sea conditions greatly hampered progress of the work on this sheet. *(add. WK. June, 1955)*

Review, #4

H-8254 (ECFP 1664) North junc.
NOT IN OFFICE 7-19-57

VESSEL AND EQUIPMENT Launch CS-82 was used for all hydrography prior to 8 September 1954. After this date launch "ZIP", a 35 foot power launch leased for the work, was used for hydrography. Launch CS-82 operated from a mooring in York Harbor while launch "ZIP" operated from the same mooring and also a mooring in Perkins Cove, near the north end of the sheet. Graphic Recorders No. 77, 119S and 121S, with transducers mounted in the bilges, were used on launch CS-82. Graphic Recorder No. 121S, with transducers in a fish mounted over the starboard side, was used on launch "ZIP". Soundings other than echo soundings were taken with a hand lead.

TIDE AND CURRENT STATIONS The tide note is attached to this report. No current stations were observed.

SMOOTH SHEET The smooth sheet is to be plotted by the Norfolk Processing Office.

CONTROL STATIONS Control consisted of triangulation and Photo-hydro stations. The latter stations were transferred from Air-photo Compilation Sheets No. T-11164, T-11165, T-11166 and T-11167. (1953-55)

SHORELINE AND TOPOGRAPHY The shoreline and topographic features were transferred from Air-photo Compilation Sheets No. T-11165, T-11166 and T-11167. The notes to the Hydrographer which accompanied the Air-photo Compilation Sheet state that the charting of the ledge rock in latitude

1953-55

43° 10.90', longitude 70° 36.10' and the Air-photo interpretation are not consistent. Chart 228 shows several small islands here while Sheet No. T-11167 shows ledge rock extending eastward. The low water line does fall outside (eastward) of this ledge as shown on the Air-photo manuscript. The several small islands on Chart 228 are boulders which are bare at high water. see pg 1
Add'l Wk
1955

The low water line is not defined by the soundings in most areas due to the steep banks and rocky shoreline. ✓

SOUNDINGS Depths were measured with graphic recorders or hand leads. Bottom samples were obtained with an armed hand lead. ✓

CONTROL OF HYDROGRAPHY Hydrography was controlled by three-point-sextant-fixes on shore signals. Fixes were taken at 1 to 1½ minute intervals. No position jumps were noted when changing fixes. ✓

ADEQUACY OF SURVEY This survey was not completed due to adverse weather and sea conditions and the closing of the field season. Additional development outside Perkins Cove and the location of the two buoys in the entrance to Perkins Cove, additional crosslines and further development of charted features as noted under COMPARISON WITH CHART are necessary for completion of this survey. Junctions with adjoining surveys is good. Depth curves can be drawn at the junction with survey H-8160, (ECFP 1454) but the soundings from prior surveys at junctions are too widely spaced to draw depth curves. see D.R.
Add'l Wk
1955

CROSSLINES Prescribed crosslines were run. Good agreement at see Addendum
and Approved
Sheet ings was obtained except on the crosslines run on b day, launch "ZIP". These soundings are shown in pencil on the boat sheet. No reason for this disagreement was found and it was intended to re-run these lines. However, closing of the field season prevented this. It is recommended that these lines be re-run whenever completion of this survey is undertaken (Not re-run in 1955) ✓

COMPARISON WITH PRIOR SURVEYS The general agreement with prior survey H-376a, 1911 is good as is the general agreement with prior survey H-3296, 1911. The other surveys in the area are old and it is felt that a detailed comparison with the chart would be of more value than a detailed comparison with the old surveys. Review,
P 5

COMPARISON WITH CHART Important soundings were transferred from Charts 228 and 1205 before beginning hydrography. These soundings are shown on the boat sheet in green. Present soundings and features which disagree with the charted information are discussed below;

Chart 228 shows a rock awash in latitude 43° 09.08', longitude 70°-37.28'. This survey disclosed several rocks awash in this area. The location of these rocks is recorded as positions 33 - 37a, launch CS-82. It is recommended that the new rocks located on this survey be added to the chart and the single charted rock approximately 35 meters north of position 36a be deleted as this rock is non-existent. Chart
revised

An uncharted shoal was found in latitude 43° 09.48', longitude 70°-36.83'. The least depth found was 14.0 feet on line between position 2 ft. Rk. on pres. survey in
same pos. as charted rk.
13.0'

26 and 27 f, launch "ZIP". Chart 228 shows 22 foot depths here. It is recommended that the present charted 22 foot sounding be replaced by the shoaler depth from this survey. (13 now charted)

There is an overhead cable between the eastern most tip of Cape Neddick and the small island to the east. This cable is shown on Air-photo Compilation Sheet T-11167. It is recommended that this feature be added to the chart. (cable now charted)

No evidence of the charted 4 foot rocky sounding in latitude $43^{\circ} 11.91'$, longitude $70^{\circ} 35.17'$ was found on this survey. The area was not closely developed due to closing of the field season. It is recommended that further investigation be given this feature, Review, P 5 Retain 4-ft. sdg.

PRELIMINARY REVIEW ITEMS The following items from the Preliminary Review by the Division of Charts were investigated with findings as follows:

Item 50 This item, a large undeveloped shoal area in latitude $43^{\circ} 09.10'$, longitude $70^{\circ} 36.70'$, was developed partly on survey sheet H-8160, (ECFP 1454) and partly on this sheet. The portion falling on sheet H-8160 is covered in the descriptive report for that sheet. The portion falling on this sheet was closely developed. The least depth found was 19.5 feet obtained on line between positions 17 and 18 e, launch "ZIP". It is recommended that the charted depths in this area be replaced by the shoaler soundings from this survey. (lesser depths, charted)

Item 49 The area in the vicinity of latitude $43^{\circ} 09.81'$, longitude $70^{\circ} 35.43'$ was closely developed during this survey. Depths of 26 feet were found where Chart 228 shows 14 feet and 51 foot depths where the chart shows 23. Since these charted soundings are in an area where it is very difficult to obtain a good fix it is probable that these soundings are charted out of position. It is recommended that these two charted soundings be replaced by soundings from this survey. Review, P 5

Item 47 The area in the vicinity of the charted 7 foot sounding in latitude $43^{\circ} 10.54'$, longitude $70^{\circ} 36.31'$ was not as closely developed as planned due to closing of the field season. However, it is very probable that this sounding is 1 fathom too shoal as soundings on adjacent lines indicate. The appearance of the fathogram also indicates this to be an area of smooth bottom. It is recommended that further investigation of this feature be carried out. Disregard 7 (Review, P 5)

Item 46 The investigation of the charted 41 foot sounding in latitude $43^{\circ} 10.58'$, longitude $70^{\circ} 35.42'$ was not completed. Soundings and the appearance of the fathogram indicate that this is an area of smooth bottom and 66 foot depths. It is probable that the sounding on the old survey was mistakenly taken as 7 fathoms instead of 11. However, more investigation is needed. Review, P 5

Item 48 The sunken rock in latitude $43^{\circ} 10.68'$, longitude $70^{\circ} 36.34'$ and the rock awash in latitude $43^{\circ} 11.16'$, longitude $70^{\circ} 36.23'$, shown on Chart 228 were searched for but not found. The sunken rock was searched for at a low stage of tide and closely spaced lines were run in the area. The fathogram showed a smooth bottom and no evidence of the rock was found. The rock awash was searched for from a skiff at nearly low water. This rock was not found although the other rocks found and located in this area agree exactly with the other charted

* sunken rk. may be disregarded (shown on ch. 1205 but not on 218)

rocks. It is recommended that both these rocks be deleted from the chart.

✓ Items Not Numbered An investigation of the Charted 27 foot sounding in latitude $43^{\circ} 10.44'$, longitude $70^{\circ} 35.79'$ revealed shoaler depths. ✓
A 22.7⁴ foot sounding, on line between positions 25, and 26 e, launch ✓
CS-82, was found approximately 30 meters SW and a ~~25.5~~ 23.5 foot sounding, ✓
on line between positions 10 and 11 a, launch "ZIP", was found approximately
20 meters NE. It is recommended that the present charted 27 foot sound-
ing be replaced by the shoaler depths from this survey. ✓ *23 now charted*

✓ Development of the area in the vicinity of the charted 1 and 3 *See add'l*
foot soundings in latitude $43^{\circ} 10.75'$, longitude $70^{\circ} 36.25'$ was not *Wk. 1955*
completed. It is recommended that additional work be done in this area.

✓ No evidence of the charted 9 foot sounding in latitude $43^{\circ} 11.11'$,
longitude $70^{\circ} 36.15'$ was found although the area was closely developed. ✓
It is recommended that this 9 foot sounding be deleted from the chart. ✓

✓ The area in the vicinity of red nun buoy 2A in latitude $43^{\circ} 11.05'$,
longitude $70^{\circ} 36.65'$ was closely developed during this survey. Depths ✓
in this area are in reasonably good agreement with charted depths. It
is recommended that the soundings in this area be revised as necessary
to agree with this survey. ✓

DANGERS AND SHOALS Dangers and shoals have been covered under ✓
COMPARISON WITH CHART.

COAST PILOT INFORMATION Coast Pilot information will be made the subject ✓
of a special report.

LANDMARKS FOR CHARTS There are no new or additional landmarks to report.
However, it was noted that the cupola charted as a landmark on Chart 228
in latitude $43^{\circ} 09.53'$, longitude $70^{\circ} 37.35'$ is marked P.A. indicating
that the charted position is approximate. The description for triangulation
station YORK BEACH ANCHORAGE HOTEL FLAGSTAFF, 1943 states that the ✓
flagstaff is located atop the cupola, in the center. It is recommended
that the cupola continue to be charted as a landmark using the triangulation
position and the P.A. be removed from the chart. (*P.A. deleted from chart*) ✓

GEOGRAPHIC NAMES There are no changes or additions to geographic names ✓
to report.

Respectfully submitted,

Robert B. Noble

Robert B. Noble
ENS., USC&GS

Approved and forwarded,

Clarence R. Reed

Clarence R. Reed
CDR, USC&GS
Chief of Party

TIDE NOTE TO ACCOMPANY

Hydrographic Survey Sheet H-8161, (FIELD NO. ECFP 1554)

A portable automatic tide gage was maintained at York Harbor, Maine. No difference in time or height was applied to the observed tides. Planes of reference were computed from known elevations of previous tidal bench marks.

<u>STATION</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>MLW ON STAFF</u>
York Harbor, Maine	43° 07.88'	70° 38.54'	3.4

FATHOMETER CORRECTIONS

Hydrographic Survey Sheet H-8161, (FIELD NO. ECFP 1554)

The corrections tabulated below are based on an initial set at zero on the fathogram for soundings taken from launch CS-82 and at zero and 1.0 for launch "ZIP" as noted in the sounding volumes. Where the initial varies from its proper setting on the fathogram INDEX CORRECTIONS must be entered in the sounding volumes.

LAUNCH CS-82
 FATHOMETER NO. 77
 23 August - 25 August 1954 (part day only)

CORRECTIONS	DEPTH	
	From	To
A RANGE		
0.0	0.0	5.0
+0.2	5.2	18.0
0.0	18.2	27.0
-0.2	27.2	36.0
-0.4	36.2	45.0
-0.6	45.2	55.0
B RANGE		
+0.6	35.0	39.0
+0.4	39.2	47.0
+0.2	47.2	56.0
0.0	56.2	72.0
-0.5	72.2	90.0
C RANGE		
0.0	70.0	83.0
-0.5	83.2	104.0
-1.0	104.2	125.0
D RANGE		
0.0	105.0	110.0
-0.5	111.0	131.0
-1.0	132.0	160.0

LAUNCH CS-82
 FATHOMETER 119S
 25 August (part day only) - 8 September and 18 Oct. 1954

CORRECTIONS	DEPTH	
	From	To
A RANGE		
0.0	30.0	30.0
-0.4	37.5	43.0
-0.6	43.5	49.0
-0.8	49.5	55.0

(CONT'D)

FATHOMETER CORRECTIONS CONT'D

LAUNCH CS-82
FATHOMETER 119S

25 August (part day only) - 8 September and 18 Oct. 1954

CORRECTIONS	DEPTH	
	From	To
B RANGE		
-0.2	35.0	42.0
0.0	42.5	49.0
-0.2	49.5	55.0
-0.4	55.5	61.0
-0.6	61.5	66.0
-1.0	67.0	85.0
-1.5	86.0	90.0
C RANGE		
+1.5	70.0	75.0
+1.0	76.0	85.0
+0.5	86.0	96.0
0.0	97.0	107.0
-0.5	108.0	117.0
-1.0	118.0	125.0
D RANGE		
+2.0	105.0	111.0
+1.5	112.0	121.0
+1.0	122.0	131.0
+0.5	132.0	141.0

LAUNCH "ZIP"
FATHOMETER 121S

22 September and 7 October 1954 (part day only)

CORRECTION	DEPTH	
	From	To
A RANGE		
+1.0	0.0	8.0
+0.8	8.5	16.0
+0.6	16.5	23.0
+0.4	23.5	31.0
+0.2	31.5	38.0
0.0	38.5	45.0
-0.2	45.5	53.0
-0.4	53.5	55.0
B RANGE		
+0.8	35.0	47.0
+0.6	47.5	60.0
+0.4	60.5	66.0
+0.5	67.0	77.0
0.0	78.0	90.0
C RANGE		
-0.5	ALL DEPTHS	

FATHOMETER CORRECTIONS CONT'D

LAUNCH "ZIP"
FATHOMETER 121S

7 October 1954 (part day only) and 19 October - 29 October 1954
(New phasing head installed on this fathometer on 7 October)

CORRECTIONS	DEPTH	
	From	To
A RANGE		
0.0	0.0	14.0
-0.2	14.5	27.0
-0.4	27.5	40.0
-0.6	40.5	55.0
B RANGE		
+0.2	35.0	45.0
0.0	45.5	55.0
-0.2	55.5	66.0
-0.5	67.0	90.0
C RANGE		
-1.0	70.0	100.0
-1.5	101.0	125.0

STATISTICS TO ACCOMPANY

Hydrographic Sheet H-8161, (Field No. BOFP 1554)

LAUNCH 05-82

DATE 1954	DAY LTR	VOL. NO.	LEAD LINES	NO. OF POSITIONS	STAT. MI. SDG.
23 Aug.	a	1	--	96	15.9
24 "	b	1	--	8	2.7
25 "	c	1&2	--	162	27.4
26 "	d	2	--	60	9.4
27 "	e	2&3	1	149	25.6
30 "	f	3	1	139	26.2
2 Sept.	g	4	--	149	24.5
7 "	h	4	--	63	10.7
8 "	j	5	--	107	16.1
4 Nov.	k	8	<u>14</u>	<u>14</u>	<u>0.0</u>
TOTALS			<u>2</u> 12	<u>933</u> 747	158.5

LAUNCH #ZIP#

22 Sept.	a	5	--	66	6.9
7 Oct.	b	6	1	88	13.3
8 "	c	6&7	--	148	20.2
18 "	d	7	--	11	0.9
19 "	e	7	1	87	7.1
28 "	f	7	1	44	3.9
29 "	g	7	2	18	1.3
4 Nov.	k	8	14	13	0.0
TOTALS			19	475	53.6

Area surveyed 9.2 square statute miles

LAUNCH 82 (1955) SEASON

13 June	a	9	-	44	3.2
14 June	b	9		90	8.6
22 June	c	9	<u>4</u>	<u>4</u>	<u>-</u>
TOTAL			4	138	11.8
GRAND TOTAL			25	1547	223.9

FLOATING AIDS TO NAVIGATION

H-8161

<u>NAME</u>	<u>LAT.</u>	<u>LONG.</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
CAPE NEDDICK HARBOR					
Weare Pt. Outer Buoy 2A	43-11.04 [✓]	70-35.68 [✓]	25' 30' [✓]	127e (purple) ^{L#82}	8/27/5
Weare Pt. Buoy 2	43-11.02 [✓]	70-35.88 [✓]	25' [✓]	76b (red) ^{21P}	10/7/54
Barn Pt. Buoy 1	43-10.96 [✓]	70-36.01 [✓]	20' 28' [✓]	64f (purple) ^{L#82}	8/30/54
Perkins Cove Bell Buoy	43-14.44 [✓]	70-34.25 [✓]	74' [✓]	53b (blue)	6/14/55

Note: Two buoys at entrance to Perkins Cove were not located.

APPROVAL SHEET FOR
HYDROGRAPHIC SURVEY H-8161 (ECFP-1554)

The boat sheet and records for Hydrographic Survey H-8161 (ECFP-1554) have been inspected by me and are approved.

The field season was ended before this survey could be completed. The area south of Cape Neddick is considered to be complete. North of Latitude $43^{\circ} 10'$ desirable additional development is indicated on the boat sheet in red. The two navigational buoys off Perkins Cove should be located. Other work mentioned in the descriptive report text should be accomplished.

Not located in 1955

No depth recorder "B-C" scale comparison was made on 7 October ("b" day, Launch ZIP) although it was necessary to change phasing heads on the depth recorder to make it operate. "C" scale soundings appear to be "wild" and therefore have been rejected in the sounding volume on this date. Portions of these lines should be re-run. (See also -note under CROSSLINES in text.)

Clarence R. Reed

Clarence R. Reed
CDR, USCGS
OinC, East Coast Field Party

LIST OF SIGNALS
H-8161

TRIANGULATION STATIONS

CAPE CAPE NEDDICK LIGHTHOUSE, 1903-41
CLIFF CLIFF HOUSE CUPOLA, 1903-41
POLA COW POINT CUPOLA, 1943
QUIT OGUNQUIT STANDPIPE, 1941
RAGE YORK BEACH, ANCHORAGE HOTEL FLAGPOLE, 1943
YORK YORK BEACH, UNION CONGREGATIONAL CHURCH SPIRE, 1943

TOPOGRAPHIC STATIONS

SOURCE T-11164

Bat

SOURCE T-11165

Ash	Bet	Big	Blu	Cab	Can	Cop	Cut	Dim
Dip	Don	Edd	Fag	Far	Him	Hug	Lit	Mal
Mix	New	Pie	Rib	Sat	Sup	Ten	Tip	Ton
Ump	Win	Yel	Zip	Zoo				

SOURCE T-11166

Mar Wit

SOURCE T-11167

Ant	Axe	Bag	Bob	Boy	Bum	Cup	Doe	Dom
Ebb	End	Fix	Gab	Gal	Hot	Guy	Joe	Lag
Led	Lot	Low	Mid	Nil	Nor	Oaf	Ola	One
Own	Pat	Pex	Ray	Red	Rim	Rut	Sow	Tar
Tim	Top	Tow	Vet	Won				

HYDROGRAPHIC STATIONS

Gay Pg. 39, Vol. 9

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-8161

Field No. ECFP-1554

State MAINE

General locality MAINE OUTER COAST

Locality CAPE NEDDICK TO OGUNQUIT

Scale 1:10,000 Date of survey 13 June to 22 June 1955
(Add'l work)

Instructions dated 3/6/53; 1/29/54 & 2/16/55

Vessel EAST COAST FIELD PARTY

Chief of party MARVIN T. PAULSON

Surveyed by C.W. TUPPER

Soundings taken by ~~hydrographer~~, graphic recorder, hand lead, ~~etc~~

Fathograms scaled by PARTY PERSONNEL

Fathograms checked by NORFOLK DISTRICT OFFICE

Protracted by RICHARD D. LYNN

Soundings penciled by RICHARD D. LYNN

Soundings in ~~XXXXXX~~ feet at MLW ~~XXXXXX~~

REMARKS: *See Title Sheet in front of Desc. Report*

ADDITIONAL SURVEY
PROJECT 1355

Appendix to Hydrographic Descriptive Report
Sheet H-8161 (ECFP 1554)
Cape Neddick to Ogunquit, Maine

Additional Survey 1955
by

EAST COAST FIELD PARTY

MARVIN T. PAULSON, CHIEF OF PARTY

* * * * *

Additional surveys on boat sheet H-8161, as indicated after preliminary review, was accomplished under the following instructions:
Supplemental Instructions - Project 1355
Ipswich Bay, Mass. to the Saco River, Maine
Letter Reference - 22/MEK-FP-East Coast, dated 16 Feb. 1955
Addressed to: CinC, East Coast Field Party

On sheet H-8161 the areas indicated were investigated thoroughly on 13, 14, and 22 June 1955 and results plotted on the boat sheet. In each area the soundings were in agreement with, and made junction with those obtained in 1954.

It should be noted that additional hydrography was begun with a-day using the same launch as in 1954. The two seasons hydrography are differentiated by blue and purple inks. Also throughout the sounding records after a line turned right or left about it is shown that the line begins. This is an error and should be stated as line resumes.

Launch CS-82 was used for the survey. An 808 type graphic recorder No. 121-S having transducer units mounted inboard aft of the engine was the sounding apparatus used.

Velocity corrections were obtained from a curve using mean values of the bar checks, an abstract of which is included as appendix B. A folder labeled "Bar Check Tabulations Project 1355" is a separate report and shown tabulated values of all bar checks. The velocity corrections have been entered and checked in the sounding volumes.

Tide corrections were obtained from the Washington Office for the sounding times involved. These were also entered and checked in the sounding volumes.

Index corrections were entered and checked in the volumes when the initial reading varies from the zero foot setting.

All splits were run as requested and all junction with hydrography completed in 1954 was satisfactory.

✓ In latitude $43^{\circ}-10.9'$ longitude $70^{\circ}-36.1'$ the ledges as shown on sheet H-8161 are correct. The entire area shown is bare at MLW but at high water only one lone boulder (Signal ONE) bares 2 ft.

✓ In latitude $43^{\circ}-10.8'$ longitude $70^{\circ}-36.25'$ the 3 foot sounding transferred from the chart and shown in green ink was verified. This is located and described by a note in sounding volume 19 page 12.

✓ In latitude $43^{\circ}-14.3'$ longitude $70^{\circ}-35.35'$ - 3 rocks were located. Results and location are as follows:

Sounding volume No. ~~9~~⁷ page 31 pos. 45¹-b Rock bares $\frac{1}{2}$ ft. MLW ✓
Sounding volume No. ~~9~~⁷ page 34 pos. 51-b Rock bares 1 ft. MLW *Elev. from B. sheet*
Sounding volume No. ~~9~~⁷ page 34 pos. 52-b Rock awash MLW ✓

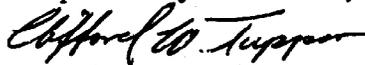
In latitude $43^{\circ}-14.07'$, longitude $70^{\circ}-35.18'$ a 7^4 foot shoal was located. The information is recorded in sounding volume ~~3~~⁹ page 28 and sounding volume ~~2~~⁹ page 48. (*close to ledge*) ✓

In latitude $43^{\circ}-14.5'$, longitude $70^{\circ}-35'$. Additional hydrography had to be run to make junction with sheet H-8254 (ECFP 1654). ✓

Three rocks were located and recorded in the volumes for H-8254. It was found that the signals used did not fall on that sheet so they were plotted on H-8161 and transferred. For information and angles refer to volume ~~2~~⁹, page 40, sheet H-8254. (*Transferred in pencil from boat sheet*)
(*H-8254 not in office as of 10-2-57*)

There is no additional information regarding Coast Pilot, aids to navigation, landmarks for charts, or geographic names to report.

Respectfully submitted,



Clifford W. Tupper
LTJG., C&GS

Attachments

- Appendix A List of Signals
- B Velocity Corrections
- C Approval Sheet

APPENDIX B

ABSTRACT OF VELOCITY CORRECTIONS

LAUNCH 82

SHEET H-8161

FATHOMETER 121-S

Group 1 27 May thru 22 June 1955

A-range

Corr. from to
0.0 entire range

B-range

Corr. from to
0.0 entire range

C-range

Corr. from to
-1.4 entire range

D-range

Corr. from to
-2.4 entire range

APPENDIX C

APPROVAL SHEET

The records and boat sheets for additional hydrographic surveys on H-8161 have been inspected, approved and are being transmitted this date.

Your attention is invited to the fact that the time shown in the hydrographic records is 60th meridian time.

Marvin T. Paulson
Marvin T. Paulson

LCDR., C&GS
OinC, East Coast Field Party

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8161 (Field No. ECFP-1554)

GENERAL

Other than the exceptions listed below, this appears to be an excellent basic survey and no unusual conditions were encountered during the smooth plot.

SOUNDINGS

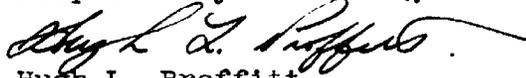
All soundings, taken from lch. 82 during the 1954 season, were reduced with a template. The remaining soundings were check scanned and reduced in the conventional manner. Agreement at crossings was considered good considering the irregular character of the bottom.

Soundings between positions 4 and 7a (blue), lch. 82, 1955 season, were not smooth plotted. The fixes are weak and the soundings do not agree.

All soundings on "c" scale, "b" day, Lch. ZIP, were not smooth plotted as they do not agree with surrounding hydrography. This disagreement is probably caused by faulty fathometer time altho this condition is not indicated on the fathograms.

Norfolk, Va.
5 October 1956

Respectfully submitted,


Hugh L. Proffitt
Cartographer

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens:

9 November 1956

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 8161

Locality Cape Neddick to Ogunquit, Maine

(C. R. Reed in 1954
Chief of Party: (M. T. Paulson in 1955

Plane of reference is mean low water, reading

3.4 ft. on tide staff at York

27.0 ft. below B.M. 1 (1911)

Height of mean high water above plane of reference is 8.6 feet.

NOTE: Tide reducers for the positions listed below have been revised in red and verified:

Volumes

1
3
5

Positions

52a-96a ✓
1f-64f ✓
1j-57j ✓

Condition of records satisfactory except as noted below:

signature

Chief, Tides Branch

GEOGRAPHIC NAMES

Survey No. H-8161

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
Maine			(see title)							RGN	1
Cape Neddick ✓											2
York Beach ✓											3
Barn Point ✓											4
Cape Neddick Harbor ✓											5
Weare Point ✓											6
Bald Head cliff ✓											7
Perkins Cove ✓											8
Ogunquit ✓											9
											10
											11
											12
											13
York Harbor			(tide station, off sheet)								14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names approved
10-23-56
L. Heck

(Charts 228, 1205)

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8161...

Records accompanying survey:

Boat sheets ..1...; sounding vols.⁹...; wire drag vols.;
 bomb vols.; graphic recorder rolls ~~6~~ Envelopes
 special reports, etc. ~~1~~ Descriptive report and ~~1~~ Smooth sheet.

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet		1547
	
Number of positions checked		86
	
Number of positions revised		4
	
Number of soundings revised (refers to depth only)		*1300
	
Number of soundings erroneously spaced		0
	
Number of signals erroneously plotted or transferred		0
	
Topographic details	Time	40
	
Junctions	Time	24
	
Verification of soundings from graphic record	Time	20
	

Verification by *F.P. SAULSBURY*.....Total time 252 Date 2-18-57

Reviewed by *J.A. Dinsmore*..... Time 40 Date 10/9/57
 *Majority of these were Tide Corrections to a day - Vol. 2, Pday Vol. 3 & jday Vol. 5

DIVISION OF CHARTS
REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8161

FIELD NO. ECFP-1554

Me., Cape Neddick Harbor, Cape Neddick to Ogunquit

PROJECT NO. CS-355

Surveyed - Aug.-Nov. 1954 & June 1955

Scale 1:10,000

Soundings:

Control:

808 Depth Recorder
Hand lead

Sextant fixes on
shore signals

Chief of Party - C. R. Reed & M. T. Paulson

Surveyed by - R. B. Nobel, C. E. Horne & C. W. Tupper

Protracted by - R. D. Lynn

Soundings plotted by - R. D. Lynn

Verified and inked by - F. P. Saulsbury

Reviewed by - T. A. Dinsmore

Date: 9 Oct. 1957

Inspected by- R. H. Carstens

1. Shoreline and Signals

The shoreline and signals originate with reviewed air-photographic surveys T-11165, T-11166 and T-11167 of 1953-55.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. Where not otherwise shown, the low-water line is represented by the outer limits of the ledge symbolization. The 90-ft. curve has been added to define the bottom configuration in the offshore depths.

The bottom is moderately irregular. Ledge, reefs and rocky shoals fringe much of the inshore area.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H -7148 (1946) on the east, H-7127 (1947) on the southeast and H-8160 (1954-55) on the south.

The junction with H-8254 (1954) on the north will be considered in the review of that survey.

5. Comparison with Prior Surveys

a. H-366 (1853) 1:20,000	H-3032 (1909) 1:20,000
H-376 (1853) 1:10,000	H-3296 (1911) 1: 2,500
<u>H-667 (1858) 1:40,000</u>	

These prior surveys taken together cover the area of the present survey. A comparison of the prior and present surveys reveals no appreciable changes in bottom. However, the old sounding lines which are widely spaced failed to reveal much critical information disclosed by the closer development on the present survey.

The following discrepancies are noted:

(1) The 14-ft. sounding charted in lat. $43^{\circ}09.82'$, long. $70^{\circ}35.42'$, and the 23-ft. sounding 100 meters eastward originate with H-376. Falling in depths of 24 and 46 ft., respectively, on the present survey, the prior soundings are considered to be out of position because of weak control and should actually fall about 75 meters inshore where comparable depths were obtained on the present survey. The present development is adequate to discredit the prior depths which should be disregarded.

(2) The 41-ft. sounding charted in lat. $43^{\circ}10.58'$, long. $70^{\circ}35.42'$, should be disregarded. Originating with H-3296, the prior sounding is an unsupported sounding at the offshore end of a line and is preceded by a sounding of 10 fms. 5 ft. Falling in smooth-bottom depths of 65-66 ft. on the present survey, it appears that the sounding was erroneously

*deleted
del 228
bms
9-4-59*

*deleted
del 228
bms 9-4-59*

recorded as 7 fms. instead of 11.

(3) The 7-ft. sounding charted in lat. $43^{\circ}10.54'$, long. $70^{\circ}36.31'$, from H-3296 should be disregarded. Falling in smooth-bottom depths of 13 ft. on both the prior and present survey, the prior sounding is considered to be 1 fm. in error. A 7-ft. depth obtained about 40 meters inshore on the present survey is adequate for charting.

(4) The sunken rock charted in lat. $43^{\circ}10.65'$, long. $70^{\circ}36.34'$, on chart 1205 from H-3296 should be disregarded. The sunken rock is plotted in 11-ft. depths on H-3296 but none of the prior soundings indicate a shoaling. Development and drift sounding on the present survey is considered adequate to disprove its existence.

(5) The rock awash charted in lat. $43^{\circ}11.16'$, long. $70^{\circ}36.24'$, from H-3296 should be disregarded. Falling in 7-ft. depths on H-3296, the rock was apparently plotted during the planetable survey of the area as no record pertaining to it is found in the sounding volumes. Drift sounding and a search of the locality at low tide on the present survey failed to reveal a rock in the above position. The three other rocks found, however, adequately reveal the dangers to navigation in the locality.

(6) The 4-ft. sounding charted in lat. $43^{\circ}11.94'$, long. $70^{\circ}35.17'$, from H-667 should be retained on the chart. Falling on an 8-ft. shoal on the present survey, present development is not considered adequate to disprove the prior depth which has been carried forward to the present survey.

With the retention of several bottom characteristics and the prior sounding noted in the preceding paragraph, the present survey is adequate to supersede the prior surveys within the common area.

b. H-3974 (1917-19) W. D. H-4087 (1919) W. D.

Present survey depths are in harmony with the effective wire-drag depths in the common area. A few critical soundings have been retained from the wire-drag surveys to supplement the present survey coverage.

6. Comparison with Chart 228 (Drwg. No. 6 of 9/23/57),
11205 (Latest print date 7/23/56.)

A. Hydrography

Charted hydrography originates principally with the previously discussed surveys which need no further consideration. The present survey has been partially applied to the charts after verification but prior to review.

Charted inshore ledge and rock detail should be brought into agreement with the present survey. The present survey entirely supersedes the charted information.

B. Aids to Navigation

The two buoys (charted) marking the entrance to Perkins Cove in lat. $43^{\circ}14.1'$, long. $70^{\circ}35.15'$, were not located on the present survey. The charted buoys adequately serve the purpose intended.

Except as noted, the aids to navigation located on the present survey are in substantial agreement with the charted aids and adequately mark the features intended.

7. Condition of Survey

- a. The sounding records are complete; the Descriptive Report covers all matters of importance.
- b. The smooth plotting was accurately done.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

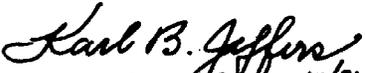
9. Additional Field Work

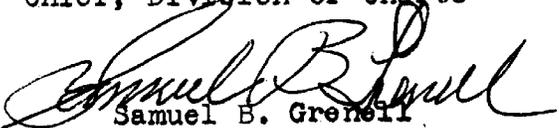
With the retention of several soundings from the prior wire-drag surveys, the present survey is considered to be basic and no additional field work is necessary.

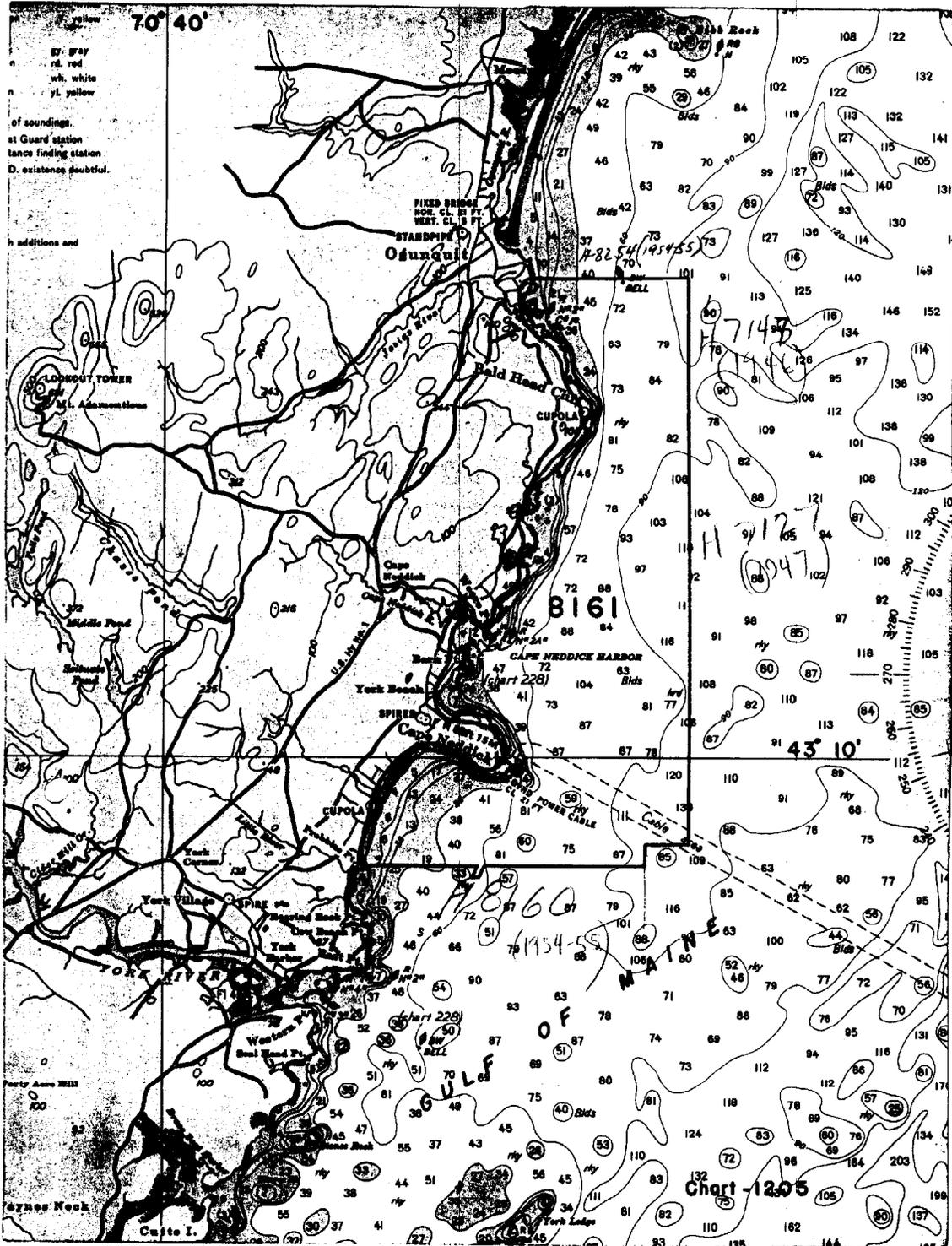
Examined and Approved:


Max G. Ricketts
Chief, Nautical Chart Branch


Charles A. Schanck
Chief, Division of Charts


Karl B. Jeffers ^{10/21/57}
Chief, Hydrography Branch


Samuel B. Grenell
Chief, Division of Coastal Surveys



yellow
 87. gray
 rd. red
 wh. white
 yl. yellow
 of soundings,
 at Guard station
 tance finding station
 D. existence doubtful.

h additions and

York River

York Neck

70° 40'

43° 10'

Chart - 1205

8161

60

1954-55

WATNE

GULF

OF

MAINE

Chart 228

Chart 229

Chart 230

Chart 231

Chart 232

Chart 233

Chart 234

Chart 235

Chart 236

Chart 237

Chart 238

Chart 239

Chart 240

Chart 241

Chart 242

Chart 243

Chart 244

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Chart 487

✓ T-8529 - (1943-44)

✓ T-8528 - (1944)

T-440 da (1853 & 1911)

T-459 da (1854 & 1912)

H-3296 - (1911)