

# 8178

Diag. Cht. No. 1203-3.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. GI-2354 Office No. H-8178

### LOCALITY

State Maine

General locality West Penobscot Bay

Locality Stand-In Point to Lang Island

1954

CHIEF OF PARTY

H. C. Fortin

LIBRARY & ARCHIVES

DATE January 12, 1956

USCOMM-DC 5087

# 8178

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-8178

Field No. G1-2354

State MAINE

General locality WEST PENOBSCOT BAY

Locality STAND - IN POINT TO LONG ISLAND

Scale 1:20,000 Date of survey 24 May to 17 Oct. 1954

Instructions dated 16 & 25 FEBRUARY 1954

Vessel GILBERT

Chief of party HENRY O. FORTIN

Surveyed by HENRY O. FORTIN, DALE E. WESTBROOK & R.T. KOOPMAN

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

Fathograms scaled by SHIP PERSONNEL & NORFOLK PROCESSING OFFICE

Fathograms checked by SHIP PERSONNEL & NORFOLK PROCESSING OFFICE

Protracted by A.K. SCHUGELD

Soundings penciled by A.K. SCHUGELD

Soundings in ~~fathoms~~ fathoms feet at MLW ~~MLW~~ MLW and are true depths.

REMARKS: This survey was smooth plotted in the Hydrographic Section of the Norfolk Processing Office.

1051

8178

D E S C R I P T I V E   R E P O R T

PROJECT CS-265

BOAT SHEET NOS. GI-2154, GI-2254 & GI-2354

VICINITY OF PENOBSCOT BAY, COAST OF MAINE

24 MAY 1954 TO 17 OCTOBER 1954

COMMANDER HENRY O. FORTIN - COMMANDING

A. PROJECT

Revised instructions, Project CS-265(Ref. 22/MEK S-2-GI, S-2-ST) dated 16 February 1954, to Commanding Officers Ships GILBERT & STIRNI. Supplemental instructions, dated 25 February 1954, consisted of general Instructions for Combined Operations Surveys, addressed to Commanding Officers of all ships, and officers in charge of hydrographic field parties.

B. SURVEY LIMITS AND DATES

This report will encompass all work done on three ship sheets, GI-2154(H-8176), GI-2254(H-8177), and GI-2354(H-8178) since they were adjoining sheets and all were accomplished in the same relative manner with the same equipment. Field work began 24 May 1954, and ended 17 October 1954.

Sheet GI-2154(H-8176); located in vicinity of W. Penobscot Bay, Maine:

Approximate limits:

Lat.  $43^{\circ}-52'$  on the south to Lat.  $43^{\circ}-58'$  on the north.  
Long.  $69^{\circ}-00'$  on the east to Long.  $69^{\circ}-14'$  on the west.

Junctions with prior surveys:

H-6982, 1944, 1:20,000 and H-7054, 1945, 1:10,000 on south.  
H-6984, 1944, 1:10,000 on the west.

Junctions with 1954 surveys:

GI-1154(H-8175), 1:10,000 on the north.  
GI-2254(H-8177), 1:20,000 on the east.

Sheet GI-2254(H-8177); located in vicinity of W. Penobscot Bay, Maine:

Approximate limits:

Lat.  $43^{\circ}-57'$  on the south to Lat.  $43^{\circ}-05'-30''$  on the north.  
Long.  $68^{\circ}-44'$  on the east to Long.  $69^{\circ}-03'$  on the west.

Junctions with prior surveys:

H-7056, 1945, 1:20,000 on the south.  
H-7150, 1946, 1:10,000 on the east.  
H-7832, 1950, 1:20,000 on the west.  
H-7831, 1950, 1:10,000 on the north.

Junctions with 1954 surveys:

ST-2154(H-8168), 1:20,000 on the south.  
GI-2154(H-8176), 1:20,000 on the west.  
GI-2354(H-8178), 1:20,000 on the north.

Sheet GI-2354(H-8178); located in vicinity of W. Penobscot Bay, Maine:

Approximate limits:

Lat.  $44^{\circ}-05'-30''$  on the south to Lat.  $44^{\circ}-18'-30''$  on the north.  
Long.  $68^{\circ}-50'$  on the east to Long.  $69^{\circ}-01'-30''$

Junctions with prior surveys:

H-7832, (1950), 1:20,000 and H-7830, (1950), 1:10,000 on the west.

Junctions with 1954 surveys:

GI-2254(H-8177), 1:20,000 on the south.

Not Applicable

Review,  
par. 4.

Two small areas were developed by the ship in the vicinity of Rockland, Maine on this sheet. One is approximately bounded by Lat.  $44^{\circ}-06.3'$  to Lat.  $44^{\circ}-06.6'$  and Long.  $69^{\circ}-05.0'$  to Long.  $69^{\circ}-05.7'$ . The other is approximately bounded by Lat.  $44^{\circ}-05.9'$  to Lat.  $44^{\circ}-06.3'$  and Long.  $69^{\circ}-02.5'$  to Long.  $69^{\circ}-03.2'$ .

Review,  
par. 5c.

Although there was dense fog on a good many days which hampered the progress of actual hydrography, on those days signals were built and temperature and salinity data were obtained. The actual progress on the sheets was considered good. A very small amount of lost time was attributed to fathometer or equipment breakdowns.

### C. VESSEL AND EQUIPMENT

The Ship GILBERT was used exclusively for the work on all three sheets. Much of the work was comparatively close to the town of Rockland, Maine so the ship was operated out of the Coast Guard Base in Rockland Harbor.

One 808 type fathometer, No. 161-SPX, was used for all work on these three sheets. The transducer and receiver units were placed in the bilges next to the hull of the ship.

Bottom samples were taken with an armed lead attached to a wire which ran through a registering sheave, and from there to a hand operated sounding machine. The wire soundings at these points cannot be considered accurate, since the wire was very seldom in a truly vertical position when the soundings were taken. In each case, a check fathometer sounding was taken and should be used as the true soundings on bottom sample positions.

### D. TIDE AND CURRENT STATIONS

#### GI-2154(H-8176):

A portable automatic tide gage was in operation throughout this survey at PORT CLYDE, MAINE (Lat.  $43^{\circ}-55.49'$ , Long.  $69^{\circ}-15.55'$ ). The records from this gage were applied to all sounding records on this sheet.

#### GI-2254(H-8177):

A portable automatic tide gage was in operation throughout this survey at VINALHAVEN on VINALHAVEN ISLAND, MAINE (Lat.  $44^{\circ}-02.60'$ , Long.  $68^{\circ}-50.37'$ ). The records from this gage were applied to all sounding records on this sheet.

#### GI-2354(H-8178):

A portable automatic tide gage was in operation throughout this survey at ROCKLAND, MAINE (Lat.  $44^{\circ}-06.28'$ , Long.  $69^{\circ}-06.12'$ ). The records from this gage were applied to all sounding records on this sheet.

The reducers in the sounding volumes were entered with no time or range corrections for all three sheets.

No current stations were occupied.

Not Applicable

E. SMOOTH SHEET

Smooth sheets will be constructed and plotted by the Norfolk Processing Office.

F. CONTROL STATIONS

Sheet GI-2154(H-8176):

## Triangulation Control:

Burnt Is. 2, 1934, r. 1943  
 Green Is. W'ly Bldg. 1913, r. 1943  
 Whitehead Lt. Ho. 1859, r. 1943  
 Tenants Hbr. Lt. Ho. 1859, r. 1943  
 Metinic, 1858, r. 1945  
 Two Bush Is. Lt. Ho., 1902, r. 1943  
 Yellow Ridge Spindle Bn., 1934, r. 1943

## Topographic Control:

N. Gab. Coast Guard Ho., T-5620  
 W. Gab. Ho., 1943, T-8007

Other stations were located from Topographic sheets T-11132S, T-11132N, T-11133N/2, and three stations were the same as those used by the ships WAINWRIGHT & HILGARD on sheet HI & WA-2154.

Sheet GI-2254(H-8177):

## Triangulation Control:

Brimstone Is., 1910, r. 1943  
 Heron Neck Lt. Ho., 1868, r. 1943  
 Saddleback Ledge Lt. Ho., 1861, r. 1943  
 Vinalhaven Water Tower, 1910, r. 1943  
 Two Bush Is. Lt. Ho., 1902, r. 1943

Other stations were located from Air Photo Compilation Sheets T-8025 and T-8030, PH-104 Sheet B, and photogrammetric manuscripts T-11133N/2 and T-11129S.

Sheet GI-2354(H-8178):

*See Processing Office  
 List of signals*

## Triangulation Control:

Drunkard Ledge Bn., 1943, r. 1954  
 Rockland Breakwater Lt. Ho., 1902, r. 1943  
 Shag Rock Bn., 1934, ex. 1902, r. 1943  
 Duck Trap Church Spire, 1861, r. 1946  
 Camden White Brick Stack, 1934, r. 1943  
 Mt. Battie Memorial Obsy., 1934, r. 1943  
 Jameson Pt., Samoset Hotel Water Tank, 1934, r. 1943  
 Owls Head Lt. Ho., 1858, r. 1943  
 Mark, 1911, r. 1943  
 Negro Island Lt. Ho., 1911, r. 1943  
 Goose Island, 1911, r. 1943  
 Indian Island Lt. Ho., 1904, r. 1943

Not Applicable to present survey

Fiddlers Ledge Stone Bn., 1859, r. 1943  
 Round(Pavilion near Spruce Head) 1911, r.1946  
 Compass Is., 1911, r. 1943  
 Mark Is., 1911, r. 1943  
 Job, 1944

**Topographic Control: (Air Photo Compilation)**

Chimney(west gable), 1946, T-8032  
 Jack, 1946, T-8021 (Traverse)  
 Pole, 1954, PH-104 Sheet A (Traverse)  
 Chimney, 1946, T-8021  
 Even, 1946, T-8021 (Traverse)  
 White Silo, 1943, T-8011  
 Chimney(on white house), 1943, T-8009  
 Spire Church, 1943, T-8009  
 Gable(south,yellow cottage), 1946, T-8023  
 Gable(west,white boat ho.), 1946, T-8023  
 Gable(west,white house), 1946, T-8023  
 Gable, 1946 (north gab. hip-roofed house), T-8021  
 N. Gable Ferry Ho., 1946, T-8012  
 Chimney, 1946, T-8021  
 N. Cupola Gray Barn, 1946, T-8012  
 Gable, 1946, T-8021  
 The Graves Light, 1943, T-8010  
 Grindel Point Lt., 1946, T-8021  
 Monroe Is. Lt., 1943, T-8009  
 Largest Chimney(gray house), 1946, T-8023

The remaining signals on this sheet were located by sextant fixes (see Sketchbook Vol. 3), and by theodolite cuts (see PH-104 sheet A and PH-104 sheet B).

**G. SHORELINE AND TOPOGRAPHY**

Shoreline on the boat sheets was sketched in by the photogrammetrist assigned to aid the GILBERT'S work, but this was only done to facilitate hydrographic operations. The verification of shoreline does not apply on any of these three ship sheets.

*Review  
par. 1.*

**H. SOUNDINGS**

All depths were measured by 808 type fathometer No. 161-SPX. All development was done in a criss-cross pattern and no hand-lead soundings were taken on shoals. The usual fathometer corrections (velocity, phase and initial), were calculated and inserted in the sounding volumes where each applied. There were no unusual methods or equipment used.

**I. CONTROL OF HYDROGRAPHY**

Visual 3-point fixes were obtained exclusively on all three sheets with the use of USC&GS hydrographic sextants and one continuous tangent screw Navy type sextant. Fixes were plotted with a celluloid three-arm protractor with extensions. For the most part, strong fixes were obtained except under adverse conditions such as fog and haze. The control itself was adequate and strong.

Due to a small inaccuracy in the location of signal PAW(GI-2154, and GI-2254), there were several jumps in the plotting of some fixes on the boat sheet when using that signal. These jumps were almost negligible and when the signal was repositioned on the sheet, it was thought that the plotting of the fixes was accurate enough for a boat sheet. The smooth sheet plotter should have no trouble with those fixes.

*Not applicable to present survey*

#### J. ADEQUACY OF SURVEY

The surveys were complete and are adequate to supersede prior *Review, par. 5.* surveys for charting.

Since there were few very dangerous shoals and relatively deep water in these surveys, fathoms instead of feet were used exclusively in the original records on all three sheets. Reducers were entered to the nearest 0.1 fathom for depths under 10 fathoms for more accuracy in the shoaler depths. It was felt that sounding in fathoms in an area such as this increased the all around accuracy of the surveys due to the convenience of less phase shifting in the greater depths. ✓

All junctions with adjoining surveys seemed satisfactory and no holidays exist. Depth curves can be adequately drawn on the sheets as a whole and also at the junctions. ✓

There are no special submarine features, except for the ruggedness of the bottom. ✓

#### K. CROSSLINES

Adequate crosslines amounting to at least 10 percent were run. There were no large discrepancies in comparing them to the main scheme of lines. The rugged bottom made it difficult to pin down actual discrepancies, however. ✓

#### L. COMPARISON WITH PRIOR SURVEYS

*see Review, par. 5.*

As far as can be determined, the new surveys compare favorably with prior surveys of those areas. However, since the available prints of the old surveys are not too legible, it was decided to compare certain definite shoal soundings with the charts of the areas concerned. ✓

#### M. COMPARISON WITH CHARTS

Sheet GI-2154(H-8176):

This sheet was compared with charts #322, 1:40,000, 1950 (corrected to 1954) and #313, 1:40,000, 1949 (corrected to 1954).

Sheet GI-2254(H-8177):

This sheet was compared with charts #310, 1:40,000, 1937 (corrected to 1954) and #322, 1:40,000, 1950 (corrected to 1954).

Sheet GI-2354(H-8178):

This sheet was compared with chart #310, 1:40,000, 1937 (corrected to 1954).

*9-5-55 in the review*

*Not applicable*

N. DANGERS AND SHOALSGI-2154(H-8176)

<u>No.</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Survey Depth</u>	<u>Chart Depth</u>	<u>Pos. No.</u>
1	43°-52.39'	69°-12.88'	57 ft.	85 ft.	98-99N
2	43°-54.40'	69°-13.32'	44 ft.	38 ft.	48-49D
3	43°-55.30'	69°-09.95'	57 ft.	69 ft.	57-58N
4	43°-57.22'	69°-10.46'	36 ft.	38 ft.	117M
5	43°-55.39'	69°-08.71'	38 ft.	34 ft.	102-103R
6	43°-56.11'	69°-08.69'	51 ft.	63 ft.	57-58E
7	43°-54.77'	69°-07.89'	40 ft.	49 ft.	174-175M
8	43°-55.71'	69°-05.98'	31 ft.	36 ft.	110-111K
9	43°-55.17'	69°-05.48'	22 ft.	25 ft.	69-70H
10	43°-55.51'	69°-05.09'	18 ft.	14 ft.	108-109P
11	43°-56.87'	69°-06.39'	54 ft.	127 ft.	13-14P
12	43°-58.20'	69°-06.58'	48 ft.	84 ft.	1-2R
13	43°-58.08'	69°-06.80'	50 ft.	34 ft.	2-3A
14	43°-57.40'	69°-06.04'	12 ft.	8 ft.	13-14S
15	43°-56.69'	69°-03.76'	54 ft.	34 ft.	116R
16	43°-57.50'	69°-03.69'	48 ft.	51 ft.	4-5H
17	43°-56.52'	69°-02.63'	42 ft.	39 ft.	60Q
18	43°-56.98'	69°-02.02'	18 ft.	15 ft.	219-220P

Sufficient development was not done on Nos. 2,5,10,13,14,17 and 18 to disprove or prove the charted soundings, but all of them were close enough to the charted values so that the charted soundings can be considered correct.

Due to better development or better methods than previously used, shoaler depths were found on Nos. 1,3,4,6,7,8,9,11,12 and 16. The new survey depths should be used to supercede the charted depths.

On no. 15, although some development was done at this spot, the surveyed depths did not approximate the depth as charted. The 34' charted depth, however, should not be removed from the chart unless verified or disproved by a wire drag survey or some other method.

*Information on this page not applicable to the present survey*

The P.D. sunken wreck (Lat.  $43^{\circ}-56.42'$ , Long.  $69^{\circ}-08.09'$ ) has been wire-dragged. Reference is hereby made to a chart letter from the Co. O. Ships HILGARD & WAINWRIGHT to the Director dated 27 December 1954.

Sheet GI-2254(H-8177)

<u>No.</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Survey Depth</u>	<u>Chart Depth</u>	<u>Pos. No.</u>
1	$43^{\circ}-58.34'$	$69^{\circ}-01.46'$	53 ft.	58 ft.	224-225Q
2	$43^{\circ}-58.62'$	$69^{\circ}-01.31'$	43 ft.	33 ft.	241-242Q
3	$43^{\circ}-59.55'$	$68^{\circ}-59.65'$	23 ft.	18 ft.	84V
4	$43^{\circ}-59.55'$	$68^{\circ}-57.95'$	57 ft.	69 ft.	179-180V
5	$44^{\circ}-01.71'$	$69^{\circ}-01.38'$	24 ft.	25 ft.	11-12X
6	$44^{\circ}-02.08'$	$69^{\circ}-01.58'$	14 ft.	15 ft.	134-135Q
7	$43^{\circ}-58.30'$	$68^{\circ}-59.31'$	56 ft.	87 ft.	91-92J
8	$44^{\circ}-03.48'$	$68^{\circ}-57.95'$	29 ft.	30 ft.	204-205J
9	$44^{\circ}-03.08'$	$68^{\circ}-57.00'$	14 ft.	11 ft.	35-36W
10	$44^{\circ}-03.03'$	$68^{\circ}-57.70'$	33 ft.	30 ft.	9-10Y
11	$44^{\circ}-02.74'$	$68^{\circ}-57.12'$	17 ft.	18 ft.	24-25W
12	$44^{\circ}-02.53'$	$68^{\circ}-57.52'$	28 ft.	30 ft.	257-258M
13	$44^{\circ}-01.28'$	$68^{\circ}-57.48'$	37 ft.	34 ft.	26-27Y
14	$44^{\circ}-01.90'$	$68^{\circ}-55.66'$	22 ft.	18 ft.	187-188U
15	$44^{\circ}-01.48'$	$68^{\circ}-54.69'$	52 ft.	69 ft.	184T
16	$43^{\circ}-59.41'$	$68^{\circ}-53.94'$	52 ft.	64 ft.	269-270X
17	$44^{\circ}-00.76'$	$68^{\circ}-52.25'$	43 ft.	23 ft.	243-244V
18	$43^{\circ}-58.30'$	$68^{\circ}-48.78'$	53 ft.	100 ft. (approx)	112-113R
19	$43^{\circ}-57.80'$	$68^{\circ}-48.19'$	55 ft.	123 ft. (approx)	256-257P
20	$43^{\circ}-56.92'$	$68^{\circ}-47.89'$	69 ft.	180 ft. (approx)	90-91 M
21	$43^{\circ}-58.25'$	$68^{\circ}-45.09'$	49 ft.	52 ft.	130-131P
22	$43^{\circ}-58.21'$	$68^{\circ}-46.77'$	47 ft.	63 ft.	87-88P
23	$43^{\circ}-57.89'$	$68^{\circ}-46.62'$	61 ft.	90 ft.	157-158L

*Information on this page not applicable to the present survey*

Due to lack of complete development over Nos. 2,3,9,10,13 and 14, the depth obtained was not quite as shoal as the charted depths, but they were sufficiently close to verify those depths. Use charted depths on these positions.

Shoal depths found by this survey to supersede the charted depths were Nos. 1,4,5,6,7,8,11,12,15,16,18,19,20,21,22, and 23. Use survey depths on these positions.

The charted depth on shoal No. 17 should not be superseded by the surveyed depth since there was not enough development to warrant this action. The charted sounding should be verified or deleted according to wire-drag or information from some other source.

Not applicable to present survey

Sheet GI-2354(H-8178):

No.	Latitude	Longitude	Survey Depth	Chart Depth	Pos. No.
1	44°-05.99 <sup>1</sup>	69°-02.89 <sup>1</sup>	<del>43</del> 45 ft.	<del>41</del> 33 ft. <i>now charted from F.E. No. 8 (1954)</i>	69R
2	44°-06.62 <sup>42</sup>	69°-05.15 <sup>1</sup>	No indication of 21' as charted. <i>See Rev, par 9</i>		
3	44°-05.97 <sup>1</sup>	68°-58.19 <sup>1</sup>	<del>48</del> 50 ft.	<del>48</del> 64 ft. <i>now charted from pres. survey</i>	11-12P
4	44°-09.00 <sup>1</sup>	68°-59.07 <sup>1</sup>	42 ft.	47 ft.	12-13D
5	44°-10.35 <sup>1</sup>	68°-57.06 <sup>1</sup>	No indication of 48' as charted. <i>Review, par. 6A. (3)</i>		
6	44°-12.20 <sup>1</sup>	68°-54.49 <sup>1</sup>	<del>44</del> 45 ft.	<del>72-78</del> 72 ft.	127-128L
7	44°-12.62 <sup>57</sup>	68°-58.50 <sup>1</sup>	<del>46</del> 49 ft.	61 ft.	155-156M
8	44°-13.31 <sup>26</sup>	68°-58.49 <sup>52</sup>	<del>27</del> 28 ft.	<del>24</del> ft. <i>retained from H-3302 W.D. (1911)</i>	144-145M

Shoaler depths were found at Nos. 3,4,5, and 7. These depths as found should supersede charted depths.

The depth as found on No. 8 was not quite as shoal as the chart depth but was close enough to justify the retention of the depth as shown on the chart. (24 ft. retained from H-3302 W.D. (1911))

Shoal depths No. 1 was wire-dragged by the Ships HILGARD & WAINWRIGHT in 1954. The drag hung at 44 ft. and cleared at 43<sup>1</sup> ft. The shoalest depth that the Ship GILBERT obtained was 45<sup>3</sup> ft. which may not have been the shoalest depth. Wire-drag data should be used at this position. ✓ Chart clearance depth of 41 ft. from F.E. No. 8 (1954)

There was no indication from this survey of the charted depths on Nos. 2 and 5, although some development was run. The charted depths should be retained unless disproved by wire-drag or some other source. ✓

All shoals on all three sheets were found as charted except those listed in this section (Section N). ✓

In no place on these three surveys were any new depths found ✓

of such an important nature to require notification of the Coast Guard.

#### O. COAST PILOT INFORMATION

The Coast Pilot information for this area is adequate and no corrections to existing material were obtained. The ship tied up at the Coast Guard wharf in Rockland Harbor, Maine during the survey operations and went to the working grounds daily when weather permitted.

The ship rode out two hurricanes, CAROL and EDNA (1954) alongside the Coast Guard wharf and experienced no damage, since the GILBERT is a steel hulled vessel. Most wooden vessels, experiencing great difficulty alongside the docks from the wind and sea, cast off, and huddled inside the breakwater or steamed back and forth across the harbor.

These hurricanes were exceptions, however, and the harbor is a satisfactory one in most bad weather, although it is a little unprotected from easterly winds.

#### P. AIDS TO NAVIGATION

##### Floating Aids:

##### GI-2154(H-8176)

<u>Light List Name</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Pos. No.</u>	<u>Date</u>
Metinic Is. Ledge Buoy	43°-53.72'	69°-10.17'	101-102F	6/21/54
Marshall Point Lighted Whistle Buoy 1	43°-53.87'	69°-12.60'	73L	7/12/54
Mosquito Island Bell Buoy "2CI" M	43°-54.70'	69°-13.12'	57D	6/17/54
Crow Island Ledges Buoy "2CI"	43°-57.35'	69°-06.09	149-150R	9/17/54
Two Bush Ledge Lighted Gong Buoy	43°-56.75'	69°-04.91'	106-107K	7-9-54
Rock Buoy 2	43°-57.22'	69°-04.87'	86-87G	6/24/54
Shoal Buoy	43°-57.01'	69°-02.01'	33-34Q	8/2/54

##### GI-2254(H-8177)

Shoal Buoy "2A"	43°-58.59'	69°-01.50'	233-234Q	8/12/54
Two Bush Is. Lighted Whistle Buoy TBI	43°-58.30'	69°-00.20'	99N	8/5/54
Juncken Ledge Buoy	43°-59.46'	68°-59.53'	83-84V	8/23/54

Not applicable to present survey

## GI-2254 (cont.)

<u>Light List Name</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Pos. No.</u>	<u>Date</u>
Twenty-five foot Rock Buoy "1A"	44°-01.66'	69°-01.30'	14-15X	9-13-54
South Guide Buoy A	44°-01.13'	69°-00.30'	37D	6-25-54
Guide Buoy "2GB"	44°-00.83'	68°-58.30'	54S	8-17-54
South Guide Lighted Buoy "B"	44°-03.12'	69°-00.29'	41-42D	6-25-54
Inner Bay Ledges Buoy "6"	44°-04.79'	68°-57.71'	225-226L	8-3-54
Old Horse Ledge Bell Buoy "2A"	43°-59.92'	68°-49.90'	298P	8-9-54
Saddleback Ledge Gong Buoy	44°-00.19'	68°-44.58'	161-162R	8-13-54

not applicable to present survey

GI-2354(H-8178)

N"2" (new buoy)	44°-06.19'	69°-05.68'	(see Volume 10 pg. 57)	
Robinson Rock Whistle Buoy 8	44°-09.00'	68°-58.91'	12-13E	8-24-54
McIntosh Ledge Buoy "1"	44°-09.31'	68°-57.68'	222-223M	9-9-54
Moose Island Reef Buoy "1A"	44°-10.90'	68°-56.51'	69-70K	9-2-54
Ensign Is. Buoy "6"	44°-14.03'	68°-58.20'	23-24R	9-21-54
Lincolnville Bell Buoy "7"	44°-16.69'	68°-59.78'	19-20A	7-29-54
Grindel Point Bell Buoy "2"	44°-16.78'	68°-57.14'	92-93G	8-26-54

Q. LANDMARKS FOR CHARTS

Form 567 has been submitted with a recommendation for a white silo and a water tank to be deleted, affecting Charts #310 and #1203.

A new location for Drunkard Ledge Beacon was also submitted on Form 567, affecting Charts #310 and #1203.

R. GEOGRAPHIC NAMES

No investigation of geographic names was made by the hydrographic party.

S. STATISTICS

Sheet GI-2154(H-8176):

2,230 positions, 695.5 statute mi. sounding, 232.7 mi. to  
and from, 877.6 nautical mi. total.

Sheet GI-2254(H-8177):

4,046 positions 1,125.9 statute mi. sounding, 273.8 mi.  
to and from, 1,314.9 nautical mi. total.

Sheet GI-2354(H-8178): *See Processing Office List of statistics*

2,670 positions, 799.4 statute mi. sounding, 250.5 mi.  
to and from, 1,055.1 nautical mi. total.

T. TABULATION OF APPLICABLE DATA

A velocity correction report, submitted separately, embodies all data pertinent to 808 type fathometer \$161-SPX used on this project for Sheets GI-2154, 2254, and 2354. That report also covers corrections for fathometer #126S used in Launch #CS-101 on Sheet GI-1154. ✓

Respectfully Submitted,

Dale E. Westbrook  
ENS., USC&GS Ship GILBERT

Approved and Forwarded:

Robert A. Marshall  
CDR., USC&GS  
Commanding Officer  
Ships STIRNI & GILBERT

T-8021  
T-8012  
T-11127(W)  
T-8022  
T-11127 (S)  
T-8023  
T-8032  
T-11129(W)  
T-8024

Sheet 1

Photogrammetry

CS-265

MAP TGI-2354 PROJECT NO. Ph-104 SCALE OF MAP 1:20,000 SCALE FACTOR —

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	SIGNATURE NAME		DATUM CORRECTION	N.A. 1927 - DATUM		REMARKS
				DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS	(BACK)		FROM GRID OR PROJECTION LINE IN METERS	FORWARD (BACK)	
Δ LIGHTHOUSE, OWLS HEAD, 1858	G-4733 Pg. 18	1927	44-05-31.551	OWL			973.8	878.1	
Δ LT., 1902 ROCKLAND BREAKW.	G-4733 Pg. 21	"	69-02-40.620	ROCK			903.6	431.2	
Δ HOTEL 1934 SANDSET TANK,	G-4733 Pg. 21	"	44-06-14.257				440.0	141.9	
			69-04-41.020				912.3	222.2	X
Δ LIGHTHOUSE, 1902 INDIAN HEAD IS.	G-4733 Pg. 22	"	44-07-06.535	SAM			201.7	1650.3	
			69-05-10.108				224.8	1109.4	
Δ OBSV. 1934 MT. BATTIE MEM.	G-4733 Pg. 22	"	44-09-55.436	MAN			X 1711.3	140.7	
			69-03-41.429				X 922.5	430.5	X
Δ BRICK STACK, 1934 CAMDEN WHITE	G-6793 Pg. 292	"	44-13-21.758	BAT			671.6	1180.3	
			69-04-10.820				240.2	1091.6	
Δ LIGHTHOUSE, 1904 NEGRO ISLAND	G-6793 Pg. 250	"	44-12-36.574	BRICK			1128.9	723.0	
			69-04-03.401				75.5	1256.2	
Δ CUPOLA, 1911 WHITE BARN	G-6793 Pg. 254	"	44-12-04.634	NEG			143.0	1708.9	
			69-02-57.760				1282.6	49.7	
Δ SPIRE, 1860 DUCK TRAP CHURCH	G-6793 Pg. 245	"	44-15-47.691	BARN			1472.0	379.9	
			69-01-13.818				306.5	1024.4	
Δ ROUND, 1911	G-6793 Pg. 264	"	44-17-26.890	DUCK			830.0	1021.9	
			69-00-31.376				695.6	634.4	
Δ FLAGPOLE, 1911	G-6793 Pg. 264	"	44-18-01.02	VIL			31.5	1820.4	
			68-58-31.01				687.4	642.7	
Δ SPRUCE HEAD HOUSE	"	"	44-18-31.87				983.7	868.2	Not used as Hydre signal See "PAGE" sheet 3
			68-57-49.25				1091.6	238.3	
Δ GOOSE ISLAND,	G-4733 Pg. 19	"	44-11-03.780	GOOSE			116.7	1735.2	tripod over station mark.
			68-57-04.380				97.3	1235.4	

1 FT. = 3048006 METER

COMPUTED BY:

R.L.M.

DATE 16 August 1954

CHECKED BY:

LH (JG) 60th

DATE

20 Aug '54

M-2388-12

Sheet 2

Photogrammetry

MAP T-61-2354 PROJECT NO. Ph-104 CS-265

SCALE OF MAP 1:20000 SCALE FACTOR —

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	SIGNATURE NAME		DATUM CORRECTION	N.A. 1927 DATUM		REMARKS
				FORWARD	(BACK)		FROM GRID OR PROJECTION LINE IN METERS	FROM GRID OR PROJECTION LINE IN METERS	
Δ COMPASS IS., 1911	G-4733 Pg. 19	1927	44-12-49.070 68-51-56.630	PASS			1514.5 1257.2	337.7 74.5	tripped over station mark
Δ FIDDLERS LEDGE	G-6793 Pg. 242	"	44-06-05.535 68-56-24.052	FID			170.8 535.0	1681.1 799.6	✓
Δ DOG FISH BN., 1934	G-6793 Pg. 242	"	44-05-44.776 68-55-44.01	DOG.			1381.5 977.0	470.4 355.7	✓
Δ BROWNS HEAD LT. No. 1859	G-6793 Pg. 243	"	44-06-42.061 68-54-36.065	ROW			1298.2 802.0	553.7 532.4	✓
Δ DARK HBR. HOTEL CHIM. S.E.E. 1934	G-6793 Pg. 244	"	44-15-30.89 68-54-38.00	<del>END</del> DARK			953.5 843.0	989.4 488.8	898.4 ✓
Δ PORTERFIELD LEDGE BN., 1904	G-6793 Pg. 250	"	44-09-14.306 69-03-43.151	PORT			441.6 958.9	1410.3 374.4	✓
Δ PENDLETON, 1934	G-6053 Pg. 160	"	44-18-04.381 68-53-25.069				135.2 555.7	1716.7 774.4	USED only on vinylite sheets for plotting cuts and fixes
Δ MARK ISLAND, 1911	G-6053 Pg. 160	"	44-15-30.025 68-51-44.521	<del>MARK</del>			926.8 187.6	925.1 343.4	NOT used as Hydro signal traverse run to "RES"
Δ LASELL ISLAND, 1911	G-6793 Pg. 254	"	44-11-46.996 68-57-54.002	LAS			1450.5 1199.2	401.4 133.8	NOT used as Hydro signal traverse run to "LAS"
Δ MARK, 1904	G-4733 Pg. 18	"	44-10-18.302 68-59-03.153	MARK			564.9 70.0	1287.8 1263.0	NOT used as Hydro signal traverse run to "MARKS"
Δ WESTERN IS., 1911	G-6053 Pg. 158	"	44-17-33.019 68-49-24.773				1019.2 549.2	832.7 781.0	USED only on vinylite sheets for plotting cuts and fixes
Δ JOB, 1944	G-8790 Pg. 418	"	44-13-06.74 68-57-05.55	JOB			208.0 123.2	1643.9 1208.7	tripped over mark

1 FT. = 3048006 METER

COMPUTED BY:

R.L.M.

DATE 16 August, 1954

CHECKED BY:

J. F. G.

DATE

30 Aug '54

M. 2388-12

CS-265

MAP T 62-2354

PROJECT NO. PH-104

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	SIGNAL NAME		DATUM CORRECTION	N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
A SPIRE, 1862 ISLESBORO S.CH.	G-6793 Pj 231	1927	44-17-23.797 68-54-31.464	SPIRE			734.5	1117.4	
o TREE			44-14 69-02	✓ TREE	"A"	(725.0) 201.0 (518.5) 147.5	402	1450	Signal cut in by theo. cuts plotted on Vinyhite sheets. Fix taken here as check
o USE			44-15 69-00	✓ USE	"A"	(356.5) 569.5 (13.0) 652.5	1139	713	Same as above
o POLE			44-18 68-57	✓ POLE	"A"	(413.3) 512.2 (127.7) 537.2	1025.2	826.7	traverse run from A SPRUE HEAD HO. FLAG- PINE, 1941 and computed.
o MED			44-03 68-55	✓ MED	"B"	(606.0) 720.0 (56.0) 612.0	1440	412	Signal cut in by theo. cuts plotted on Vinyhite sheets. Fix taken here as check.
o EAT			44-04 68-54	✓ EAT	"B"	(260.0) 265.9 (399.2) 267.9	1331.8	520.1	traverse run & computed from A LEADNETTERS IS., 1868
o HOW			44-05 68-54	✓ HOW	"B"	(754.0) 172.0 (83.0) 584.5	344	1508	SAME AS "MED"
o DRUNKARDS Bdgc. Bn.			44-06 68-57	✓ RUN	"B"	(806.5) 179.5 (528.0) 135.0	239	1613	Beacon cut in by theo. cuts. Position not the same as 1913 survey.
o TAN			44-06	✓ TAN	"B"	(230.0) 292.0 (223.5) 443.5	1392	460	Same as "MED", No fix taken at signal.
o PAR			44-10 68-52	✓ PAR	"A"	(280.5) 245.5 (532.5) 134.0	887	447	Same as above. No fix taken.
o EGG			44-11 68-53	✓ EGG	"A"	(546.0) 380.0 (533.5) 133.0	760	1092	Same as "MED"
o RES			44-15 68-51	✓ RES	"A"	(439.9) 482.0 (120.2) 545.2	972.0	879.9	traverse run from A MARK IS., 1904. Computed position plotted.
							1090.5	240.5	

1 FT. = 3048006 METER

COMPUTED BY:

R.L.M.

DATE

16 August, 1954

CHECKED BY:

dL G

DATE

30 May '54

M-2388-12

CS-265

MAP T-62-2354

PROJECT NO Ph-104

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	SIGNAL NAME		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
○ BARR	×		44-16 68-50	✓ BARR	✓ "A"	(921.0) (5.0) (254.0) 11.5	10 23	1842 1308 <del>1310</del>	Position established by theodolite, plotted on vinylite sheets. Fix taken as check.	
○ TOP	×		44-17 68-53	✓ TOP	✓ "A"	(484.5) (441.5) (171.0) 494.0	883 988	969 342	Same as above	
○ KEY	×		44-14 68-54	✓ KEY	✓ "A"	(290.5) (235.5) (118.5) 547.5	1271 1093	581 237	Same as above	
○ LAS	×		44-11 68-57	✓ LAS	✓ "A"	(199.8) (726.1) (64.1) 602.1	1452.3 1204.2	399.6 128.2	traverse run & computed from A Mark Is. 1911 Computed G.P. plotted.	
○ MARK	×		44-10 68-59	✓ MARK	✓ "B"	(245.9) (280.0) (628.8) 37.7	560.0 75.4	1291.9 1257.6	traverse run & computed from A MARK, 1904 Computed G.P. plotted.	
□ MONROE IS. LT.	1943/54	1927	44-04 69-01	✓ MON		(231.0) (695.0) (25.0) 642.5	1390 1285	462 50	G.P. from Form 524 (Air photo plot)	
□ The GRAVES LT., 1953	✓	"	44-10 69-02	✓ LOT	<del>"B"</del>	(67.0) (859.0) (570.0) 92.5	1718 193	134 1140	Same as above	
□ JACK, 1946	×	"	44-17 68-54	✓ JACK		(777.5) (148.5) (256.0) 9.0	297 18	1555 1312	Same as above	
□ EVEN, 1946	×	"	44-16 68-57	✓ EVEN		(614.0) (312.0) (524.0) 141.5	624 283	1228 1048	Signal over mark	
□ GRINDEL PT. LT. 1946	×	"	44-16 68-56	✓ GRIN		(110.0) (816.0) (256.5) 409.0	1632 818	220 513	Same as above	
□ WHITE SINO, 1943	×	"	44-14 69-02	✓ SINO		(227.0) (299.0) (338.5) 327.5	598 655	1254 677	Same as above	
□ WHITE CHIMNEY	1946	"	44-17 68-59	✓ CHIM		(78.5) (847.5) (696.0) 329.0	1695 738	157 592	Same as above	

1 FT. = 3048006 METER

COMPUTED BY: R.L.M.

DATE 16 August, 1954

CHECKED BY: J.E.G.

DATE 30 May 52

M-2388-12

MAP T-6I-2354 PROJECT NO. Ph-104

SCALE OF MAP 1:20,000 SCALE FACTOR -

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\mu$ -COORDINATE LONGITUDE OR $x$ -COORDINATE	SIGNAL NAME		DATUM CORRECTION	N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		REMARKS
				FORWARD	(BACK)		FORWARD	(BACK)	
□ NORTH GABLE FERRY HOUSE, 1946	✓	1927	43-16 69-06	✓ SLIP T-8012		(170.0) 756.0 (475.5) 250.0	1512 500	340 831 875	G.P. from Farm 524 (Air photo plot)
□ GABLE, 1946	✓	"	44-15 68-57	✓ ACRE T-8021		(920.0) 6.0 (74.5) 591.0	12 1182	1840 149	Same as above
□ GRAY BARN, 1946	✓	"	43-16 69-00	GRAY T-8012		(601.0) 320.0 (80.5) 585.0	640 1170	1212 ?	"
□ CHIMNEY, 1946	✓	"	44-17 68-55	✓ RED "T-8021"		(177.0) 809.0 119.5 545.5	1618 1091	234 239	"
□ GABLE, 1946	✓	"	44-16 68-54	✓ HIP T-8021		(710.5) 215.5 (373.0) 292.5	431 585	1421 746	"
□ GABLE, 1946	✓	"	44-08 68-55	✓ OHM T-8023		(569.0) 357.0 (431.5) 235.5	714 471	1138 863	"
□ GABLE, 1946	✓	"	44-08 68-54	✓ WEST T-8023		(69.5) 856.5 (253.0) 414.0	1713 828	139 566	"
□ GABLE, 1946	✓	"	44-09 68-53	✓ GAB T-8023		(532.5) 393.5 (572.0) 154.5	787 309	1065 1024	"
□ CHIMNEY, 1946	✓	"	44-10 68-50	✓ OAK T-8032		(1370) 789.0 (85.5) 581.0	1578 1162	274 171	"
□ GRAY HO. 1946 LARGEST CHIMNEY.	✓	"	44-07 68-56	✓ PET T-8023		(911.5) 734.5 (694.0) 23.0	1469 126	383 1208	"
○ GREEN	✓	"	44-03 68-55	✓ GREEN ✓ "B"		(56.5) 829.5 (605.5) 162.5	1739 325	113 1011	"
○ Sub Pt. WESTERN IS. 1911		"	44-17 68-49	- ✓			1027.1 510.0	824.8 820.2	Used only for plot on mylith sheets for fix at 'BARR'. G.P. computed

1 FT. = 3048006 METER

COMPUTED BY R.L.M.

DATE 16 Aug '54

CHECKED BY: JEG

DATE 30 May '54

M-2388-12

At 1000 -

Liz - sketch book

#3  
#3

WAT

Additional Topo. stations

X Free - T-11129(N)

X Hit - T-11129(N)

Green stations

✓ BAP - T-11129(N)

PROCESSING OFFICE  
LIST OF SIGNALS  
H-8178

TRIANGULATION STATIONS

ROCK	ROCKLAND BREAKWATER L.H., 1902-43
SHAG	SHAG ROCK BEACON, 1934-43
RICK	CAMDEN, WHITE BRICK STACK, 1934-43
BAT	MOUNT BATTIE MEMORIAL OBSERVATORY, 1934-43
SAM	JAMESON POINT, SAMOSET HOTEL WATERTANK, 1934-43
OWL	OWLS HEAD L.H., 1858-1943
DARK	DARK HARBOR HOTEL CHY., S.E. END, 1934-43
NEG	NEGRO ISLAND L.H., 1904-43
GOOSE	GOOSE ISLAND, 1911-43
MAN	INDIAN HEAD L.H., 1902-43
FID	FIDDLERS LEDGE, SYONE BEACON, 1859-1943
PASS	COMPASS ISLAND, 1911-43
DUCK	DUCK TRAP CHURCH SPIRE, 1861-1946
VIL	ROUND (PAVILION NEAR SPRUCE HEAD), 1911-46
JOB	JOB, 1944
LOT	THE GRAVES LIGHT, 1953

TOPOGRAPHIC STATIONS

SOURCE PH-104, SHEET "A"

Barr	Egg	Key	Las	Par	Pole	Res	Top	Tree	Use
------	-----	-----	-----	-----	------	-----	-----	------	-----

SOURCE PH-104, SHEET "B"

Eat	Green	How	Mark	Med	Run	Tan
-----	-------	-----	------	-----	-----	-----

DESCRIBED TOPOGRAPHIC STATIONS

Acre	Gable, 1946	T-8021
Chim	White Chimney, 1946	T-8021
Even	Even, 1946	T-8021
Free	Church Spire, 1943	T-11129N
Gab	Gable (W. White House), 1946	T-8023
Gray	North Cup. Gray Barn, 1946	T-8012
Grin	Grindel Pt. Light, 1946	T-8021
Hip	Gable (Hip Roofed House), 1946	T-8021
Hit	Chy. On White House, 1943	T-11129N
Jack	Jack, 1946	T-8021
Mon	Monroe Island Light, 1943	T-11129N
Oak	Chimney (W. Gable), 1946	T-8032
Ohm	Gable (South Yellow Cottage), 1946	T-8023
Pet	Largest Chy. (Gray House), 1946	T-8023
Red	Chimney (Center Of House), 1946	T-8021
Silo	White Silo, 1943	T-11127N
Slip	N. Gable Ferry House, 1946	T-8012
West	Gable, West White Boat House, 1946	T-8023

PLANIMETRIC FEATURES

Bap T-11129N

HYDROGRAPHIC STATIONS

Liz Vol. 1, pg. 2

Wat Vol. 1, pg. 3

STATISTICS  
To Accompany

H-8178

<u>VOL. NO.</u>	<u>DAY LTR.</u>	<u>DATE</u>	<u>NO. LL SDGS</u>	<u>NO. POS.</u>	<u>STAT. MI. SDGS.</u>
1	A	7-29-54	0	71	25.8
1	B	8- 6-54	0	75	23.2
1 & 2	C	8-11-54	0	175	60.7
2	D	8-16-54	0	82	25.8
3 & 4	E	8-24-54	0	256	81.7
4 & 5	F	8-25-54	0	217	73.1
5 & 6	G	8-26-54	0	238	68.5
6	H	8-27-54	0	212	66.1
7	J	9- 1-54	9	128	34.8
7 & 8	K	9- 2-54	0	197	67.6
8	L	9- 8-54	0	144	37.3
8 & 9	M	9- 9-54	0	237	77.0
9	N	9-14-54	8	8	-
9 & 10	P	9-15-54	6	243	65.0
10	Q	9-20-54	0	44	8.1
10 & 11	R	9-21-54	12	79	15.7
11	S	9-23-54	4	179	51.3
11 & 12	T	9-27-54	0	49	13.2
12	U	9-29-54	0	26	4.1
TOTALS			39	2660	799.0

ADDENDUM  
To Accompany

HYDROGRAPHIC SURVEY H-8178 (Field No. Gi-2354)

GENERAL

This appears to be an excellent basic survey with only minor discrepancies occurring during the smooth plot. Soundings agree very well at crossings with the exception of a discrepancy at Lat. 44-13.0, Long. 68-54.75, where positions 192 to 194E cross 20 to 21L. Also, see crossing at 186 to 187E in the same vicinity.  
*(Discrepancies resolved, - crossings now in adequate agreement)*

SOUNDINGS

Soundings in volumes 1 thru 5 were reduced and converted in the conventional manner. Those in the remaining 6 $\frac{1}{2}$  volumes were reduced and converted with a template. It required 87.5 man hours to reduce and convert soundings in 5 volumes using the old method, and only 48 man hours to reduce and convert soundings in 6 $\frac{1}{2}$  volumes when using a template  
*(noted in Review, par. 7d.)*

Soundings between positions 68 and 70C were not penciled. See note in volume 2, page 8. *(Portion of line rejected; no control; locality adequately covered otherwise)*

Soundings between positions 116 and 140L are being submitted on an overlay in order to avoid congestion on the smooth sheet. *(sdgs. applied to smooth sheet) overlay attached to D.R.*

Fathometer speed corrections were applied to soundings between positions 189 and 204M, to bring them into agreement at crossings and with surrounding hydrography.

The poor quality of the fathometer returns on K day resulted in a great many missed and questionable soundings.

Respectfully submitted,

*Hugh L. Proffitt*  
Hugh L. Proffitt  
Cartographer.

Norfolk, Va.  
9 January 1956

NOTE: This Office was unable to find any records or reference to wire drag work accomplished in the approaches to Rockland Harbor and shown on boat sheet for this survey. One of the Field Officers connected with the work suggests that the work may have been recorded in a ~~special~~ volume covering special projects already forwarded to the Washington Office.

F.E. #2 § 8 (1954) W.D.

RHC

# TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Survey~~

14 February 1956

Division of Charts: R. H. Carstens

Plane of reference approved in  
12 volumes of sounding records for

HYDROGRAPHIC SHEET

8178

Locality Penobscot Bay, Maine

Chief of Party: H. O. Fortin in 1954

Plane of reference is mean low water, reading

4.0 ft. on tide staff ~~at~~ (7/30/54) at Rockland

3.9 ft. ~~below~~ on tide staff (8/31/54) at Rockland

39.9 ft. below B.M. 10 (1931)

Height of mean high water above plane of reference is 9.7 feet.

Condition of records satisfactory except as noted below:

*William H. Hofner*

Branch  
Chief, ~~Division of~~ Tides and Currents

## GEOGRAPHIC NAMES

Survey No. **H-8178**

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
<u>Maine</u>			(title)						BGN	1
<u>West Penobscot Bay</u>			( . )							2
										3
<u>Rockland</u> ✓			(tide station)							4
<u>Spruce Head</u> ✓										5
<u>Long Island</u> ✓										6
<u>Resolution Island</u> ✓									BGN	7
<u>Lasell Island</u> ✓										8
<u>North Haven Island</u> ✓										9
<u>Stand-in Point</u> ✓										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names approved

1-31-56 L. Heck

If additional names are  
to be applied, use any  
on 7-27-53 print of  
Chart 310.

# Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8178.....

Records accompanying survey;

Boat sheets 1...; sounding vols. 12...; wire drag vols. ....; bomb vols. ....; graphic recorder rolls 5-Envelopes special reports, etc. 1-Descriptive report, 1-Smooth sheet, ..... 1-Velocity corrections, and 1-Overlay tracing, .....

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

Number of positions on sheet		<u>2660</u>	
Number of positions checked	<u>Prelim.</u>	<u>50</u>	134
Number of positions revised	<u>complete</u>	<u>2</u>	2
Number of soundings revised (refers to depth only)		<u>65</u>	✓
Number of soundings erroneously spaced		<u>12</u>	16
Number of signals erroneously plotted or transferred		<u>0</u>	
Topographic details	Time	<u>4 hrs</u>	
Junctions	Time	<u>2 hrs</u>	
Verification of soundings from graphic record	Time	<u>2 hrs</u>	
<u>Prelim. Verif. D. R. Engle</u>		<u>144</u>	<u>8-13-56</u>
Verification by <u>George A. Hoxim jrl</u>	Total time	<u>260</u>	Date <u>Feb-3-58</u>
Reviewed by <u>J. A. Dinsmore</u>	Time	<u>60</u>	Date <u>10 Sept. 1956</u>
Addendum by <u>Fannie B. Powers</u>	Time	<u>55</u>	Date <u>8-10-65</u>

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H-8178

The verifier should deal with the present hydrographic survey only, as the reviewer considers its relation to previous surveys and published charts. He should be thoroughly familiar with Chapters 3, 7 and 9 of the Hydrographic Manual.

1. The descriptive report was consulted and appropriate notes were made in soft pencil regarding action taken. ✓
2. Soundings originating with the survey and mentioned in the descriptive report have been verified, including latitude and longitude. ✓
3. All reference to survey sheets mentioned in the descriptive report include the registry number and year. ✓
4. Geographic names of hydrographic features if on sheet are in slanting lettering and of topographic features in vertical lettering. ✓
5. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken. ✓
6. All positions verified instrumentally were check marked in the sounding records. ✓
7. All critical soundings are clear and legible and are a little larger than the adjacent soundings. ✓
8. The metal protractor has been checked within the last three months. ✓
9. The protracting and plotting of all bad crossings were verified. ✓
10. All detached positions locating critical soundings, rocks or buoys were verified. *All buoys not plotted during prelim. verif.* ✓
11. The boat sheet was compared with the smooth sheet. ✓

12. The spacing of soundings as recorded in the records was closely followed. ✓
13. The bottom characteristics were shown on outstanding shoals.  
*No. - Characteristics not available on some shoals.*
14. The reduction and plotting of doubtful soundings were checked. ✓ —
15. The transfer of contemporary topographic information was carefully examined. ✓
16. All junctions were transferred and overlapping curves made identical. *inspected only*
17. The notation "JOINS H- (19--)" was added in ink for all contemporary adjoining or overlapping sheets now registered. Those not verified are shown in pencil. ✓
18. The depth curves have been inspected before inking.
19. All triangulation stations and transfer of topographic and hydrographic signals were checked. ✓
20. Heights of rocks were checked against range of tide.
21. Rocks transferred from topographic surveys have a dotted curve where shown thereon. Rocks located accurately by hydrographer are encircled by dotted red curve.
22. Unnecessary pencil notes have been removed.
23. Objects on which signals are located and which fall outside of the low water line have been described on the sheet.
24. The low water line and delineation of shoal areas have been properly shown.
25. Degree and minutes values and symbols have been checked. ✓
26. Questionable soundings have been checked on the fathograms. ✓

- (41-46)
27. Source of shoreline and signals (when not given in report).  
*Topo from T-8012, 8020, 8021, 8022, 8023, 8024 + 8032 (1946)*
  28. All notes on sheet are in accordance with figure 171 in the Hydrographic Manual. ✓
  29. All aids located, with those on contemporary topographic sheets, have been shown on survey.
  30. Depth curves were satisfactory except as follows:  
*944° 13' + Disagreement in crosslines 1 + 8 days with E day. Verified  
λ 68° 54' + was unable to find any reason for disagreement except that  
bottom trace on E day was rather weak introducing possibility that the soft  
bottom did not register on fathogram. Assuming this to be the case, 1 + 8 day*
  31. Sounding line crossings were satisfactory except as follows: ✓  
*→ soundings were given preference.*
  32. Junctions with contemporary surveys were satisfactory except as follows: ✓
  33. Condition of sounding records was satisfactory except as follows: ✓
  34. The protracting was satisfactory except as follows: ✓
  35. The field plotting of soundings was satisfactory except as follows: ✓
  36. Notes to reviewer: *This sheet was given preliminary verification. Still  
be completed in Norfolk. See attached overlay concerning  
IF - 6F VO/ #4 Line not needed and overlay  
destroyed. No shoaler edge revealed  
etc*

Position Verit. *D. H. Engle*  
Verified by *Geo. A. Kozumozak*

8-12-56  
Date 2-3-57

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8178

FIELD NO. GI-2354

Maine, West Penobscot Bay, Stand-in Point to Long Island

Project No. CS-265

Surveyed - May - Oct. 1954

Scale 1:20,000

Soundings:

Control:

808 Fathometer

Sextant fixes on  
shore signals

Chief of Party - H. O. Fortin  
Surveyed by - H. O. Fortin, D. E. Westbrook and R. T. Koopman  
Protracted by - A. K. Schugeld  
Soundings plotted by - A. K. Schugeld  
Preliminary Verification by - D. R. Engle  
Verified and inked by - *G.A. Kozemczak*  
Reviewed by - T. A. Dinsmore 10 Sept. 1956  
Inspected by - R. H. Carstens

1. Shoreline and Signals

This is an offshore survey. The shoreline outlined on the smooth sheet originates with reviewed air-photographic surveys T-8012, T-8020, T-8021, T-8022, T-8024, and T-8032 of 1941-46. *Also T-11127 and T-11129 of 1952-55 T-8023*

The source of the signals is given in the Descriptive Report.

2. Sounding Line Crossings

Considering the irregularities in the bottom, depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated on this offshore survey.

The bottom for the most part is irregular as characteristic of a glaciated area. Numerous submerged knolls and ridges contribute to the bottom irregularities. No unusual submarine features are apparent.

4. Junctions with Contemporary Surveys

The present survey junctions adequately with H-8177 (1954) on the extreme south and with H-7830 (1950) and H-7832 (1950) on the west. The transfer of junctional soundings is deferred pending the complete verification of the present survey.

There are no other contemporary surveys registered in the area at this time. However, charted hydrography is in harmony with the depths at the limits of the present survey.

5. Comparison with Prior Surveys

- a. H-982 (1868) 1:10,000                      H-1143 (1871-02) 1:20,000  
      H-1086 (1869) 1:20,000

These prior surveys, taken together, cover the area of the present survey. A comparison of the prior and present depths indicates that no changes in bottom have taken place. Differences in depths occurring in some instances are attributed to the irregularities in the bottom. The old sounding lines which are widely spaced fail to show many of the shoaler indications revealed by the closer development attained on the present survey. Although the delineation of bottom features is more complete on the present survey, several prior soundings have been carried forward to supplement present depths. Numerous bottom characteristics were also retained from the prior surveys.

The present survey, with the indicated additions, is adequate to supersede the prior surveys within the common area.

- b. H-2969 W.D. (1908) 1:20,000                      H-3302 W.D. (1911) 1:20,000  
      H-3195 W.D. (1910-11) 1:20,000

These wire-drag surveys cover the area of the present survey. No conflicts are noted between the effective drag depths and depths on the present survey. Several soundings, most of which represent lesser depths than obtained on the present survey, have been retained from these wire-drag surveys. Bottom characteristics were also carried forward to the present survey.

- c. F. E. No. 2 (1954) W.D.                      F. E. No. 8 (1954) W.D.

Field examination No. 2 (1954) covers a portion of the detached hydrography located within Rockland Harbor on the present survey. No conflicts are noted between the effective drag depths and the present survey depths. The drag work of the field examination, however, does not cover the 21-ft. sounding carried forward to H-7831 (1950) and the present survey in lat.  $44^{\circ}06.44'$ , long.  $69^{\circ}05.16'$ ,

from H-2969a. W.D. (1908). The present development is not considered adequate to disprove the prior 21-ft. sounding which should be retained on the chart.

Field examination No. 8 (1954) covers the 43-ft. shoal located in lat.  $44^{\circ}05.98'$ , long.  $69^{\circ}02.89'$ , on the present survey. The clearance depth of 41 ft. presently charted from the drag work of the field examination should be retained on the charts.

d. H-7831 (1950)

The detached investigations referred to in the preceding paragraphs also fall within the limits of this prior survey. No important differences are noted in the prior and present depths. The 43-ft. shoal depth obtained in lat.  $44^{\circ}05.98'$ , long.  $69^{\circ}02.89'$ , has been carried forward to H-7831 to supplement information on that survey.

6. Comparison with Chart 310 (Latest print date 9/5/55)

A. Hydrography

Charted hydrography originates principally with the prior surveys which need no further consideration. The present survey has been partially applied to the chart through blueprint 52220 which is a copy of the boat sheet.

Specific information is furnished on the following charted items:

(1) The 15-ft. sounding charted in lat.  $44^{\circ}06.05'$ , long.  $68^{\circ}57.68'$ , is erroneous and should be replaced by the 22-ft. sounding previously charted from H-3195 W.D. (1911). Originating with a copy of the boat sheet (Bp. 52220) of the present survey, the charted sounding was misread as 2.6 fms. which reduced to 15 ft.

(2) The 48-ft. sounding charted in lat.  $44^{\circ}10.36'$ , long.  $68^{\circ}57.05'$ , represents the depth over a wreck which originally was located on H-3195 W.D. (1910-11). The Corps of Engineers reported (in C. L. 349, 1911) that the masts of the vessel were removed in August 1911 giving about 50 ft. of water over the wreck at M.L.W. It is recommended that the 48-ft sounding be retained as charted.

Numerous shoal soundings appearing on the present survey are not yet charted. The more important of these are listed in the following comparison:

<u>Latitude</u>	<u>Longitude</u>	<u>Depths</u>	
		<u>Survey</u>	<u>Chart</u>
44°10.4'	68°53.68'	33	35
44°12.2'	68°54.49'	44	72 - 78
44°12.62'	68°58.5'	46	61
44°14.72'	68°59.2'	62	72
44°16.8'	68°51.6'	75	114

The present survey supersedes the charted hydrography except as previously noted.

#### B. Aids to Navigation

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 preliminary verification of the smooth sheet indicates that the smooth plotting was generally accurate.
- c. The poor quality of the fathometer returns on K day necessitated the rejection of portions of sounding lines on that day. This resulted in several small "holidays" such as occur in lat. 44°10.0', long. 68°56.6' and lat. 44°08.7', long. 68°56.4'.
- d. It is noted in the Processing Office Addendum that a template was used for reducing about 60% of the soundings directly from the fathograms. The template method provided both the conversion of fathoms to feet and a mechanical application of the usual reducers. This method resulted in a time savings of approximately 50% as compared with the conventional method of reducing soundings.

#### 8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

#### 9. Additional Field Work

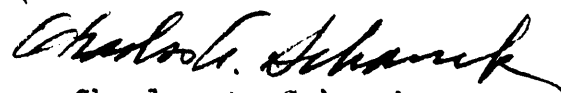
With the retention of several soundings from the prior surveys, the present survey is considered basic for the area covered and no additional hydrography is recommended. Numerous undeveloped shoal indications would require further

investigation had not wire-drag surveys been previously accomplished in this area. The 21-ft. sounding retained in lat.  $44^{\circ}06.44'$ , long.  $69^{\circ}05.16'$ , from H-2969a (1908) W.D. was recommended for further examination by wire drag in the review of H-7831 (1950). The records of H-2969a notes that a supporting sounding of 25 feet was obtained on a rock in substantially the same position as the 21. The hydrographer of H-2969a further noted that the 21 was possibly obtained on top of a post or mooring pile. Further investigation of the 21 by wire drag is again recommended.

Examined and Approved:



H. R. Edmonston  
Chief, Nautical Chart Branch



Charles A. Schanck  
Chief, Chart Division



J. C. Bull  
Chief, Hydrography Branch



Samuel B. Grenell  
Chief, Division of Coastal Surveys

## ADDENDUM TO REVIEW

H-8178 (1954)

Verification and Inking by-----G. A. Kozemczak  
Review Addendum by-----F. B. Powers 8/10/65  
Inspected by-----R. H. Carstens

The verification of this survey has been completed. Soundings, depth curves and junctions have been completely inked.

### Junctions with Contemporary Surveys

Adequate junctions were completed with H-7830 (1950) on the west and H-7832 (1960) on the southwest.

Comparison with Chart 310 (latest print date 3-22-65)  
Chart 311 (latest print date 4-5-65)

The charted hydrography originates with the present survey after preliminary verification and Review. Only the following differences are noted:

1. Charted depth of 82 in lat.  $44^{\circ}05.72'$ , long.  $68^{\circ}58.3'$  where present survey depth is 92.
2. Present depth of 127 not charted in lat.  $44^{\circ}17.75'$ , long.  $68^{\circ}57.4'$ .
3. Present depth of 110 not charted in lat.  $44^{\circ}17.3'$ , long.  $68^{\circ}52.82'$ .

### Condition of Survey

- (a) Completion of verification and inking reveals that the smooth plotting was well done.
- (b) The Descriptive Report is complete and comprehensive.

Approved:

  
Lorne G. Taylor

Chief, Nautical Chart Division

TO ACCOMPANY H

HES

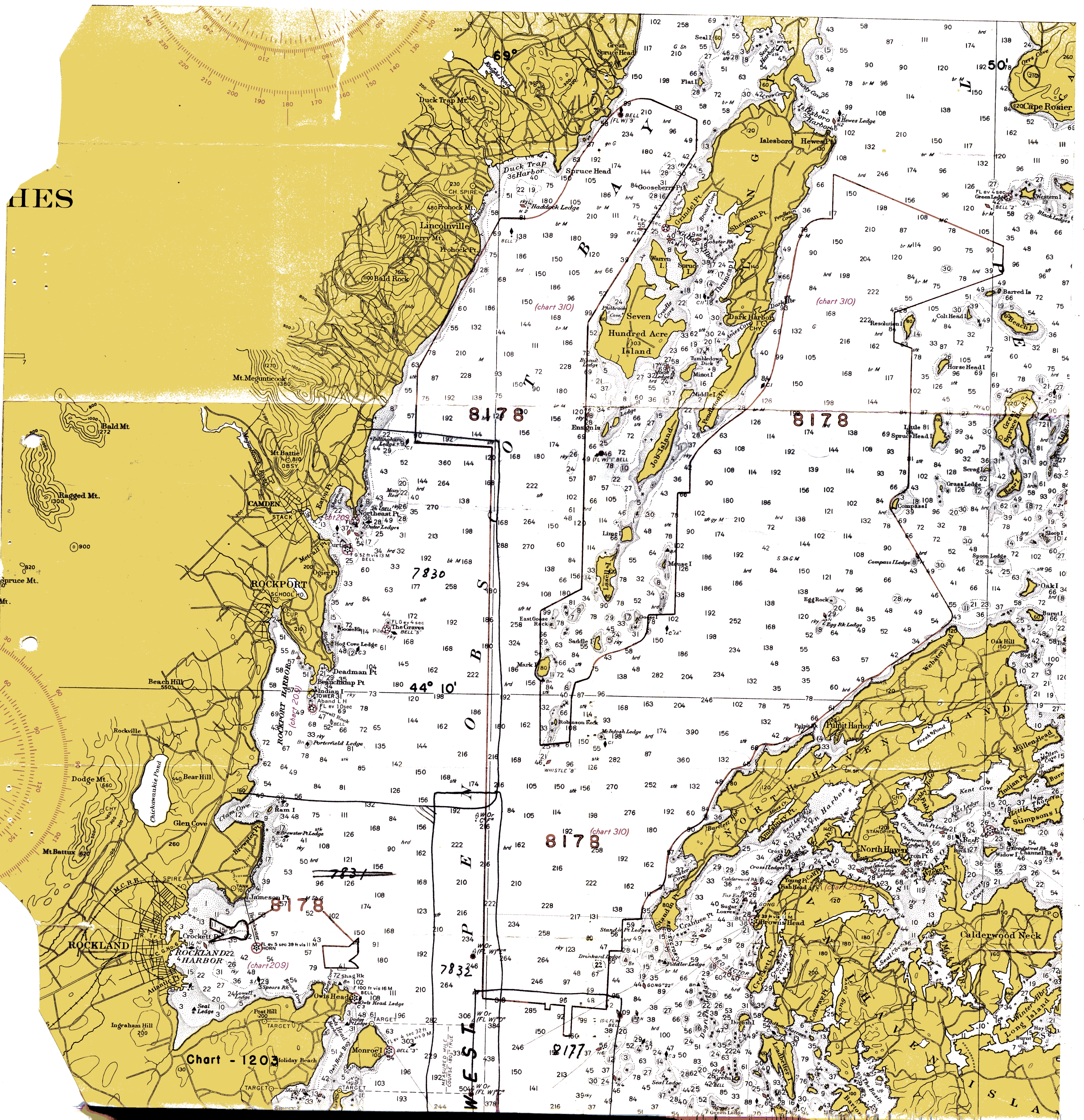


Chart - 1203

WEST

ISLAND

# NAUTICAL CHARTS BRANCH

SURVEY NO. H-8178

## Record of Application to Charts

Preliminary Ver & Rev 9-10-56  
Rev. Addendum 8-10-65

DATE	CHART	CARTOGRAPHER	REMARKS
May '56	70	H.F.S.	Examined. No correction now. Before After Verification and Review
Aug '56	1203	L.S.S.	Examined. No correction. at this time. Before After Verification and Review add 62 in place of 72 one mile SW of 700 fath. sma
12/21/56	71	C.R. Wattmann	Before After Verification and Review Examined as fully applied
2/7/57	Reconst. 235	JAE	Before After Verification and Review Prelim
2/13/57	310	WE	Before After Verification and Review Prelim
2 Apr '57	1106	H. MacEwen	Before After Verification and Review Preliminary Correction not published at this time. Re-applied after 1203 is corrected. Per. G.H.S. Apr. 23, 1957
5/1/57	1000	H.W. Burgoyne	Before After Verification and Review Scale of 5 No Corr.-Ch. for small
6/17/59	209	J. Walker	Before After Verification and Review Preliminary Completely
8/19/59	310	Wattmann	Examined. Preliminary Before After Verification and Review couple dozen soundings added. (To be fully applied to the reconstruction) JMA
5-8-63	1203 Recon.	M. Rogers	Before After Verification and Review Fully applied thru 310 Recon. Preliminary
9/22/66	1203	O. Svendsen	Fully applied - after L-1292/66 Final work & review

M-216A-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.