8177

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-2254 Office No. H-8177

LOCALITY

State Maine

General locality

Locality Approaches to West Penobscot Bay

1954

CHIEF OF PARTY

H. O. Fortin

LIBRARY & ARCHIVES

DATE April 1, 1956

COMM-DC 61300

8177

Form 537
(Ed. Nov. 1941)

REG. NO.

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-8177

Field No. Gi-2254

State MAINE

General locality ~~SOUTH OF VINALHAVEN ISLAND~~

Locality APPROACHES TO WEST PENOBSCOT BAY. ~~TWO BUSH ISLAND TO SADDLEBACK LEDGE~~

Scale 1:20,000 Date of survey ~~24 MAY to 17 OCTOBER 1954~~ 18 June to 24 Sept.

Instructions dated 16 FEB. 1954 & 25 FEB. 1954

Vessel GILBERT

Chief of party HENRY O. FORTIN

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

Soundings taken by ~~echo meter~~, graphic recorder, ~~hand lead~~, wire

FATHOGRAMS SCALED BY SHIP PERSONNEL CHECKED BY NORFOLK OFFICE

Protracted by GENE O. WIMBRO

Soundings penciled by ALLAN K. SCHUGELD

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

REMARKS: This survey was smooth plotted by the Hydrographic Section of the Norfolk District Office.

U. S. GOVERNMENT PRINTING OFFICE 428975

A. PROJECT

Revised instructions, Project CS-265(Ref. 22/MEK S-2-GI, S-2-ST) dated 16 February 1954, and revised instructions dated 19 March 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°-52' on the south to Lat. 43°-58' on the north.
Long. 69°-00' on the east to Long. 69°-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.

Not Applicable

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

Approximate limits:

Lat. 43°-57' on the south to Lat. 43°-05'-30" on the north.
Long. 68°-44' on the east to Long. 69°-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. N.V.
✓GI-2154(H-8176), 1:20,000 on the west.✓
✓GI-2354(H-8178), 1:20,000 on the north.✓
GI-1154 (H-8175) N.V. 1:10,000

H-8259(1955) 1:40,000 West - N.V.

west

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

Approximate limits:

Lat. 44°-05'-30" on the south to Lat. 44°-18'-30" on the north.
Long. 68°-50' on the east to Long. 69°-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

Two small areas were developed by the ship in the vicinity of Rockland, Maine on this sheet. One is approximately bounded by Lat. 44°-06.3' to Lat. 44°-06.6' and Long. 69°-05.0' to Long. 69°-05.7'. The other is approximately bounded by Lat. 44°-05.9' to Lat. 44°-06.3' and Long. 69°-02.5' to Long. 69°-03.2'. Not Applicable.

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°-55.49', Long. 69°-15.55'). The records from this gage were applied to all sounding records on this sheet. Not Applicable.

GI-2254(H-8177):

A portable automatic tide gage was in operation throughout this survey at VINALHAVEN on VINALHAVEN ISLAND, MAINE (Lat. 44°-02.60', Long. 68 -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°-06.28', Long. 69°-06.12'). The records from this gage were applied to all sounding records on this sheet. Not Applicable

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

No current stations were occupied.

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

Not Applicable

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): See page 13 of this Report.

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 Isl 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):

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. Hol, 1911, r. 1943
Goose Island, 1911, r. 1943
Indian Island Lt. Ho., 1904, r. 1943

Not Applicable

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

Not Applicable

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.

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.

J. ADEQUACY OF SURVEY

The surveys were complete and are adequate to supersede prior 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

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). } Not Applicable

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). } Not Applicable

N. DANGERS AND SHOALS

GI-2154(H-8176)

No.	Latitude	Longitude	Survey Depth	Chart Depth	Pos. No.
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

Not Applicable

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.

The P.D. sunken wreck (Lat. 43°-56.42', Long. 69°-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. } Not Applicable

Sheet OI-2254(H-8177)

No.	Latitude	Longitude	Survey Depth	Chart Depth (1950 corr to 1954)	Pos. No.
1	43°-58.34'	69°-01.46'	51 53 ft.	58 ft.	224-225Q
2	43°-58.62'	69°-01.31'	50 to 51 ft. 43 ft.	33 ft.	241-242Q See Review Par. 5A(3)
3	43°-59.55'	68°-59.65'	19 WD 21 23 ft.	18 ft.	84V See Review Par. 5B(1)
4	43°-59.55'	68°-57.95'	54 57 ft.	69 ft.	179-180V
5	44°-01.71'	69°-01.38'	23 24 ft.	25 ft.	11-12X
6	44°-02.08'	69°-01.58'	14 ft.	15 ft.	134-135Q
7	43°-58.30'	68°-59.31'	72 56 ft.	87 ft.	91-92J
8	44°-03.48'	68°-57.95'	29 ft.	30 ft.	204-205J
9	44°-03.08'	68°-57.00'	15 14 ft.	11 ft. H-1030	35-36W Review 5A(2)
10	44°-03.03'	68°-57.72'	31 forward from H-2469WD 33 ft.	30 ft.	9-10Y
11	44°-02.74'	68°-57.12'	17 ft.	18 ft.	24-25W
12	44°-02.53'	68°-57.52'	30 28 ft.	30 ft.	257-258M
13	44°-01.28'	68°-57.48'	36 37 ft.	34 ft. H-2469WD	26-27Y
14	44°-01.90'	68°-55.66'	20 on smooth sheet replaced with 19 from H-2469WD 22 ft.	18 ft.	187-188U
15	44°-01.48'	68°-54.69'	52 ft.	69 ft.	184T
16	43°-59.41'	68°-53.94'	51 52 ft.	64 ft.	269-270X
17	44°-00.76'	68°-52.25'	43 ft.	23 ft. H-3023WD	243-244V
18	43°-58.30'	68°-48.78'	50 53 ft.	100 ft. (approx)	112-113R
19	43°-57.80'	68°-48.19'	54 55 ft.	123 ft. (approx)	256-257P
20	43°-56.92'	68°-47.80'	71 69 ft.	180 ft. (approx)	90-91 M
21	43°-58.25'	68°-45.09'	48 49 ft.	52 ft.	130-131P
22	43°-58.21'	68°-46.77'	48 47 ft.	63 ft.	87-88P
23	43°-57.89'	68°-46.62'	62 61 ft.	90 ft.	157-158L
24	43° 58.4	68°-59.3	47 ft	None	114V

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 thse 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.

Sheet GI-2354(H-8178):

No.	Latitude	Longitude	Survey Depth	Chart Depth	Pos. No.
1	44°-05.99'	69°-02.89'	45 ft.	33 ft.	69R
2	44°-06.62'	69°-05.15'	No indication of 21' as charted.		
3	44°-05.97'	68°-58.19'	50 ft.	64 ft.	11-12P
4	44°-09.00'	68°-59.07'	42 ft.	47 ft.	12-13D
5	44°-10.35'	68°-57.06'	No indication of 48' as charted.		
6	44°-12.20'	68°-54.49'	45 ft.	72 ft.	127-128L
7	44°-12.57'	68°-58.50'	49 ft.	61 ft.	155-156M
8	44°-13.26'	68°-58.51'	28 ft.	24 ft.	144-145M

Shoaler depths were found at Nos. 3,4,5,6, and 7. These depths as found should supercede charted depths.

Not Applicable

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.

Shoal depths No. 1 was wire-dragged by the Ships HILGARD & WAINWRIGHT in 1954. The drag hung at 44 ft. and cleared at 42 ft. The shoalest depth that the Ship GILBERT obtained was 45 ft. which must not have been the shoalest depth. Wire-drag data should be used at this position.

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. Not Applicable

C. 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)

Light List Name	Latitude	Longitude	Pos. No.	Date
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 "2MI"	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

Not Applicable

GI-2254(H-8177)

Shoal Buoy "2A" Nun ✓	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
Junken Ledge Buoy RB-N ✓	43°-59.46'	68°-59.53'	83-84V	8/23/54

GI-2254 (cont.)

Light List Name	Latitude	Longitude	Pos. No.	Date
Twenty-five foot Rock Buoy "1A" Can.	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" Nun	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

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
Mpuse 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

Not Applicable

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. } Not Applicable

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):
2,670 positions, 799.4 statute mi. sounding, 250.5 mi. to and from, 1,055.1 nautical mi. total. } Not Applicable.

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

PROCESSING OFFICE
LIST OF SIGNALS

H-8177

(13)

TRIANGULATION STATIONS

BRIM	BRIMSTONE ISLAND, 1910-43
HERON	HERON NECK LIGHTHOUSE, 1868-1943
OWL	OWLS HEAD LIGHTHOUSE, 1858-1943
SAD	SADDLEBACK LEDGE LIGHTHOUSE, 1861-1943
TOW	VINAL HAVEN WATER TOWER, 1910-43
TWO	TWO BUSH ISLAND LIGHTHOUSE, 1902-43

MARKED TOPOGRAPHIC STATIONS — SOURCE PH-104, SHEET B

WOOD, 1943

TOPOGRAPHIC STATIONS — SOURCE PH-104, SHEET B

Mon(d) Eat Green How Med Nit

SOURCE T-8025

Can

SOURCE T-8030

Ott

SOURCE T-11129(8)

Ram Vex

SOURCE T-11133(N)

Paw

FLOATING AIDS TO NAVIGATION
H-8177

BUOY	LAT.	LONG.	SDG.	POS. NO.	DATE
GULF OF MAINE WEST PENOBSCOT BAY					
Two Bush Chan. Shoal Buoy 2A	43-58.59	69-01.50		235Q;233Q 32L	8-12-54; 8- 3-54
Juncken Ledge Buoy	43-59.48	68-59.53		83V; 86V 74L 53X 16C	8-23-54 8- 3-54 9-13-54 6-24-54
Two Bush I. Ltd. Whistle Buoy TBI	43-58.30	69-00.20		99N	8- 5-54
Twenty-Five Ft. Rock Buoy "1A"	44-01.68	69-01.32		14X 16D	9-13-54 6-25-54
South Guide Buoy "A"	44-01.15	69-00.32		37D 21L	6-25-54 8- 3-54
Guide Buoy "2GB"	44-00.85	68-58.30		54S 24E 21M	8-17-54 7- 6-54 8- 4-54
South Guide Ltd. Buoy "B"	44-03.14	69-00.34		41D 69Q	6-25-54 8-12-54
Inner Bay Ledges Buoy "6"	44-04.79	68-57.68		225L;218L	8- 3-54
Old Horse Ledge Bell Buoy "2A"	43-59.92	68-49.88		298P; 31P 189R 330V	8- 9-54 8-13-54 8-23-54
Saddleback Ledge Gong Buoy	44-00.21	68-44.58		161R	8-13-54
Inner Ledges Buoy "4"	44-04.31	68-57.43		9N	8- 5-54

STATISTICS
H-8177

DAY LTR.	DATE	VOL. NO.	NO. POS.	WIRE SDGS	STAT. MI. HYDRO
A	6-18-54	1	46	-	18.7
B	6-2154	1	44	-	18.6
C	6-24-54	1	41	-	15.8
D	6-25-54	1&2	42	-	16.1
E	7- 6-54	2	44	-	17.0
F	7- 7-54	2	101	-	26.0
G	7- 9-54	2&3	56	-	19.3
H	7-20-54	3	77	-	25.1
J	7-22-54	3&4	238	-	76.6
K	8- 2-54	4&5	202	-	67.2
L	8- 3-54	5&6	228	-	72.7
M	8- 4-54	6&7	276	-	86.4
N	8- 5-54	7&8	271	-	66.0
P	8- 9-54	8,9&10	309	-	77.9
Q	8-12-54	10&11	265	-	62.1
R	8-13-54	11&12	304	-	82.8
S	8-17-54	12&13	176	-	52.0
T	8-18-54	13	236	-	61.1
U	8-19-54	14	190	-	46.6
V	8-23-54	14&15	337	-	80.3
W	9- 7-54	15&16	146	7	34.6
X	9-13-54	16&17	290	0	72.2
Y	9-16-54	17	123	22	25.8
Z	9-24-54	17	4	4	0.0
	TOTALS		4046	33	1120.9

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8177 (Field No. Gi-2254)

GENERAL

This appears to be an excellent basic survey in an extremely irregular area. No difficulty was experienced with the smooth plot.

SOUNDINGS

All fathograms were rescaled in the Processing Office and the soundings reduced and converted from fathoms to feet with a template. Agreement at crossings was very good and there are no known discrepancies.

Fathometer speed corrections were applied to the following positions; 179 to 180U; 184 to 185U and 88 to 89Y

Respectfully submitted,

Hugh L. Proffitt
Cartographer

Norfolk, Va.
26 March 1956

GEOGRAPHIC NAMES

Survey No. H-8177

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	
Maine									BGN	1
West Penobscot Bay										2
Vinalhaven Island										3
Saddleback Ledge									BGN	4
Otter Island										5
Green Island										6
Monroe Island									BGN	7
Andrews Island										8
Junken Ledge				(position from chart 322)						9
Two Bush Island										10
										11
										12
				Names approved						13
				4-5-56 L. Heck						14
				(any additional names,						15
Tide stations				if desired, may be						16
Vinalhaven				taken from charts					BGN	17
Rockland				309, 310, 322).						18
Port Clyde										19
										20
										21
										22
										23
										24
										25
										26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8177

Records accompanying survey:

Boat sheets 4...; sounding vols. 17..; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 5-Envelopes

special reports, etc. 1-Descriptive report, 1-Smooth sheet, 3-Reduction & Conversion Templates, & 2-Control sheets, Ph-104, A & B sheets.

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

Number of positions on sheet		4046
Number of positions checked		109
Number of positions revised		3
Number of soundings revised (refers to depth only)		130
Number of soundings erroneously spaced		29
Number of signals erroneously plotted or transferred		0
Topographic details	Time	2
Junctions	Time	48
Verification of soundings from graphic record	Time	40

Verification by Saulsbury.....Total time 495 Date 11-29-60

Reviewed by..... Time 285 Date 16 May 1961

M-2232-1

OFFICE OF CARTOGRAPHY

REVIEW SECTION -- NAUTICAL CHART DIVISION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8177 FIELD NO. GI-2254

Maine, Approaches to West Penobscot Bay

SURVEYED: 18 June - 24 Sept. 1954 SCALE: 1:20,000

PROJECT NO. CS-265

SOUNDINGS: 808 Depth Recorder CONTROL: Sextant fixes on shore signals

Chief of Party	H. O. Fortin
Surveyed by	H. O. Fortin; R. T. Koopman D. E. Westbrook
Protracted by	G. O. Wimbro
Soundings plotted by	A. K. Schugeld
Verified and inked by	F. P. Saulsbury
Reviewed by	L. S. Straw
Inspected by	R. H. Carstens

DATE 3-16-61

1. Shoreline and Control

This is an offshore survey. The topography contiguous with the outer limits of the hydrography consists entirely of offshore islands which originates with the following reviewed photogrammetric surveys: T-8552 (1944), T-8030 (1941-44), T-8025 (1941-44), T-8024 (1941-44), T-11129N (1952-55), T-11129S (1952-55) and T-11133N (1952-55).

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

2. Sounding Line Crossings

The cross lines are adequate and the depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. The bottom is characterized by many submerged knolls and ridges including numerous small shoals, rocks and reefs which rise abruptly from greater depths.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-7150 (1946) and H-7056 (1945) on the east; H-8176 (1954) on the southwest; H-7831 (1950) and H-7832 (1950) on the northwest; and H-8178 on the north.

The junctions with H-8259 (1955) and H-8175 (1954-55) on the west and H-8168 (1954) on the south will be considered in the reviews of those surveys.

The present survey is in reasonable agreement at the junction with charts 310 and 322 southwest of the numerous islands and rocks off Vinalhaven Island. New hydrographic surveys in this area have not yet been received.

5. Comparison with Prior Surveys

A.

H-952a (1866-67) 1:10,000	H-1029 (1869-1903) 1:10,000
H-943 (1866-67) 1:20,000	H-1030 (1869) 1:20,000
H-953 (1867) 1:10,000	H-1073 (1870) 1:10,000
H-982 (1868) 1:10,000	H-1074 (1870) 1:20,000
H-1028 (1869) 1:20,000	H-1086 (1869-1907) 1:20,000
FE-7 (1945) 1:40,000	

Prior surveys H-943 (1866-67) and H-1030 (1869) cover about 60 and 20 percent respectively of the area within the limits of the present survey, the remaining 20 percent, principally around the perimeter, is covered by the balance of the surveys listed above.

The differences in depths between the prior and present survey are generally not more than 1 to 3 feet, but there are numerous instances where the differences in depths are considerably greater. These greater differences are attributed to errors in values of the soundings or errors in position resulting from faulty sextant angles and the inaccurate spacing of soundings plotted on the old surveys.

(1) The 33-ft. sounding (item No. 2 paragraph "N" of the Descriptive Report) charted in Lat. 43°58.68', Long. 69°01.31' originates with a survey by Lt. Pillsbury in 1885 as shown on H-943 (1866-67) and falls in depths of 50 ft. on the present survey. The position of the 33-ft. sounding was passed over with a wire drag set at an effective depth of 35 ft. on H-2969 (1908-09). A 32-ft. sounding was obtained by the 1908-09 wire drag work about 200 meters southwest of the 33 ft. in depths of 34 and 36 ft. on the present survey. The 33-ft. sounding is undoubtedly out of position and should be disregarded.

(2) The sounding records for H-1030 (1869) could not be found and consequently questionable soundings could not be evaluated except by direct comparison on the smooth sheets of the prior and present surveys. The following soundings from H-1030: 11 ft. charted in Lat. 44°03.1', Long. 68°57.05'; 22 ft. charted in Lat. 44°03.25', Long. 68°56.65'; 31 ft. charted as 30 ft. in Lat. 44°03.45', Long. 68°58.09' and 30 ft. charted in Lat. 44°02.54', Long. 68°56.44' fall in depths considerably deeper (9 to 18 ft.) on the present survey. Although the development is generally considered adequate on the present survey, it is evident from the irregular character of the bottom, that the use of the wire drag would be required to prove or disprove these critical soundings and accordingly they have been carried forward to the present survey. (See paragraph 5B(3) regarding the charted 30-ft. sounding in Lat. 44° 03.45', Long. 68°58.09')

(3) The 37-ft. sounding originating with H-943 (1866-67) and charted in Lat. 43°59.85', Long. 68°59.52' falls in depths of 60 to 80 ft. on the present survey. This sounding is erroneously plotted on the prior survey but when plotted correctly it agrees with the present survey depths in this immediate vicinity. The 37-ft. sounding should be disregarded.

(4) Fifteen soundings which were not considered disproved by the present survey and supplementary bottom characteristics have been retained from the prior surveys. With these additions the present survey is adequate to supersede these prior surveys within the common area.

B. H-2969WD (1908-09) 1:20,000
H-3023WD (1909-10) 1:20,000

(1) The 18-ft. sounding at Junken Ledge Lat. 43°59.53' Long. 68°59.56' has been charted since 1914 in place of a 19-ft. sounding shown on H-2969WD. A replotting of the 19 ft. places the sounding on a present 21-ft. shoal where it has been carried forward. The charted 18 should be disregarded. (Item 3, paragraph N of the Descriptive Report)

(2) The 30-ft. sounding charted in Lat. 44°03.03' Long. 68°57.72' originates with a 31ft. sounding shown on H-2969WD (1908-09) and falls on a 33 ft. spot on the present survey. The A and D sheet of H-2969WD shows an effective drag depths of 41 ft. over the 31-ft. depth on the wire drag smooth sheet. This is also in conflict with the 33 ft. depth obtained by the present survey. These discrepancies prove that there was excessive lift of the drag over this shoal spot. The charted 30-ft. sounding is superseded by the 31-ft. sounding carried forward from H-2969WD (1908-09) to the present survey. (Item 10, paragraph "N" of the Descriptive Report)

(3) The 31 ft.(charted as 30) sounding in Lat. 44° 03.45', Long. 68°58.09' mentioned in paragraph 5A(2) and carried forward from H-1030 (1869) to the present survey is in conflict with a 33 ft. effective drag depth on H-2969WD (1908-09). This sounding falls between sounding lines on the present survey which are considerably deeper, but because of the irregular bottom and the possibility of drag lift, the 31-ft. sounding is not considered disproved.

(4) Depths on the present survey are in conflict with effective wire-drag depths on H-3023WD (1909-10) as follows:

a. In Lat. 43°59.86', Long. 68°48.50' a 37-ft. effective depth drag passed over a 33-ft. depth from the wire-drag work and a 34-ft. depth on the same spot obtained by the present survey. The effective depth of the wire-drag survey is obviously faulty and should be disregarded.

b. The 36-ft. sounding in Lat. 43°57.05' Long. 68°45.58' obtained by the wire drag was passed over by a 39-ft. effective depth drag. At this position 38 ft. was the least depth obtained by the present survey. The effective depth should be disregarded.

c. Except as noted above in 5B(2), (3) and (4) the depths on the present survey do not conflict with the effective depths of these wire-drag surveys.

6. Comparison with Chart 310 (Latest print date 10-19-59)
Chart 322 (Latest print date 10-5-59)

A. Hydrography

The charted hydrography originates principally with previously discussed prior surveys and the present survey (critical soundings only) before verification and review.

Numerous soundings throughout the present survey were applied to the chart from a bromide copy of the boat sheet. In some cases the soundings were illegible, in others, changes were made during verification. It would serve no useful purpose to list all of the charted soundings which are in error due to their application. Under those conditions, however, they are superseded by the depths now shown on the present survey.

The present survey with the indicated additional information from prior surveys supersedes the charted information within the area covered, (note 1)

B. Aids to Navigation

The charted aids to navigation are verified in position by the present survey and satisfactorily mark the features intended. No new dangers which would require aids were found.

7. Condition of Survey

a. The sounding records and the Descriptive Report are complete and comprehensive.

b. The smooth plotting, particularily the plotting of intermediate soundings was well done.

c. Supplemental bottom characteristics from prior surveys were carried forward to augment those on the present survey.

8. Compliance with Project Instructions

The present survey adequately complies with the Project Instructions.

9. Additional Field Work Recommended

This is a good basic survey in a difficult area; no additional field work is recommended, (not r)

Examined and Approved:

Chief, 10/13/61
Nautical Chart Division

Assistant Director, 10/26/61
Office of Cartography

10/30/61
Projects Officer,
Operations Division

Assistant Director,
Office of Oceanography

(note 1) except for the 38-ft. sounding charted in lat. 44°05.08', long. 68°57.5' from H-982 (1868) which has not been disproved and should be retained on the chart.

9/25/63

note ~ except for the 38-ft. sounding charted in lat 44°05.8', long 68°57.5', from H-982 (1868) which should be investigated when work is resumed in this area.

9/25/63 JWS

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. Apr. 1950

TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Coastal Surveys 9 April 1956

Division of Charts: R. H.Carstens

Plane of reference approved in
17 volumes of sounding records for

HYDROGRAPHIC SHEET 8177

Locality Penobscot, Maine

Chief of Party: H. O. Fortin in 1954
Plane of reference is mean low water, reading
4.3 ft. on tide staff at Vinalhaven
13.6 ft. below B. M.2 (1908)

Height of mean high water above plane of reference is 9.4 feet.

Condition of records satisfactory except as noted below:

William Shafner

Chief, Tides Branch

U. S. GOVERNMENT PRINTING OFFICE 877933

1203

Chart 310 1/40

322 1/40

ON ORIGINAL DOCUMENT
H-8178 (1:20,000)

69°

(1954)

(1950)

1:20,000

H-7832

(1941-43)

(1950)

H-7831

(1:10,000)

8177

PT-8259 (1:10,000)

H-7833 (1955)

H-8176

(1954) 1:20,000

H-8168

1:20,000

(1954)

Chart - 1203

VINALHAVEN

Calderwood Neck

Long Island

Browns Head

Owls Head

Monroe I

Holiday Beach

Emery I

Cutters Nubble

Fisherman I Passage

Fisherman I

Grindstone Ledge

Inner Grindstone Ledge

Upper Gangbow Ledge

Marblehead I

Ash I

Little I

Otter I

Crescent I

Little Green I

Little Pond I

Birch I

Green I

Camp I

Oak I

High I

Two Bush I

Northern Triangles

Hurricane I

Little Hurricane

Heron Neck

Green I

Dogfish I

Leadbetter I

Seal Ledge

Green Ledge

Spectacle Ledge

Lairey Ledges

Lindell

Cedars

Old Harbor Pond

Standpipe

Dodge Point Ledge

Norton

Indian Pt

Roberts Harbor

Sheep I Ledge

Crosby Ledge

Griffin Ledge

Halibut Ledge

Little Triangle Ledge

Sister Ledge

Barley Hill

Calderwood Pt

Bluff Head

Benny Ledge

Deep Cove

Browns Ledge

Stoddart I

Smith I

Smith Cove

Combs Hill

Burnt Is

Hay I

Hen Is

Outer Scrag Ledge

Saddleback Ledge

Saddleback Ledge Shoal

Diamond Rk Ledge

Diamond Rk

Middle Ledge

Carvers I

Hay Is

Brimstone I

Lt Brimstone

Buffalo Ledge

Eastern Ledge

Channel Rk

Roberts Is

Knubble Ledges

Lane Ledges

Yellow Rk

Other I Ledges

Old Horse Ledge

Areys Ledges

Bay Ledge

Snippershan Ledge

Junken Ledge

Perry Ledge

Drunkard Ledge

Fiddler Ledge

Stand in Pt Ledge

Seal Cove

Crockett Pt

Conway Pt

Long Cove

Deer I

Spears Rk

Shag Rk

Owls Head Ledge

Post Hill

Broad Cove

Dodge Pt Ledge

Pleasant Point

Sheep I Shoal

Little Rock

Rock

Ash I Ledge

Sunken Pond Ledge

NE Pond Ledge

Pond I

Ames Pt

Dix

Pleasant

Yellow Ledge

False Halibut Ledge

Halibut Rk

Hewett Rk

Hewett Ledge

Two Bush Ledge

Alden Rk

Collins Pk

Gay Head

Gay Neck

Hurricane Sound

Penobscot Bay

West Penobscot Bay

Fisherman I Passage

Hanna Neck

Deer Isle

Island

Bay

Sound

Passage

Ledge

Rock

Point

Cove

Harbor

Pond

Creek

Channel

Reach

Thoroughfare

Narrows

Entrance

Inlet

Shoal

Light

Bell

Whistle

Siren

Horn

Tank

Standpipe

Church

Spire

Tower

Radio Mast

Flagstaff

Buoy

Spar

Can

Nun

Conical

Target

Obscured

Submerged

Rocky

Sandy

Muddy

Shelly

Stony

Weedy

Coarse

Fine

Hard

Soft

Foul

Clean

Good

Poor

Fair

Anchorage

Prohibited

Restricted

Danger

Caution

Warning

Notice

Information

Chart

Publication

Edition

Corrected

Through

Notice to Mariners

Local Notice to Mariners

Light List

Tide Table

Current Table

Coast Pilot

Sailing Directions

Navigation

Navigable

Channel

Fairway

Turning Basin

Anchorage Area

Mooring Area

Seaplane Area

Dumping Ground

Cable Area

Pipeline Area

Submarine Area

Military Practice Area

Firing Danger Area

Restricted Area

Prohibited Area

Caution Area

Danger Area

Traffic Separation Scheme

Inshore Traffic Zone

Precautionary Area

Two-Way Route

One-Way Route

Recommended Track

Deep Water Route

Separation Zone

Separation Line

Separation Scheme

Traffic Lane

Traffic Flow

Traffic Direction

Traffic Control

Traffic Signal

Traffic Light

Traffic Sign

Traffic Buoy

Traffic Beacon

Traffic Vessel

Traffic Officer

Traffic Regulation

Traffic Rule

Traffic Violation

Traffic Accident

Traffic Jam

Traffic Congestion

Traffic Density

Traffic Volume

Traffic Count

Traffic Survey

Traffic Study

Traffic Report

Traffic Plan

Traffic Design

Traffic Engineering

Traffic Safety

Traffic Education

Traffic Enforcement

Traffic Court

Traffic Ticket

Traffic Fine

Traffic Penalty

Traffic Offense

Traffic Violator

Traffic Driver

Traffic Pedestrian

Traffic Cyclist

Traffic Motorist

Traffic Vehicle

Traffic Car

Traffic Truck

Traffic Bus

Traffic Motorcycle

Traffic Bicycle

Traffic Scooter

Traffic Moped

Traffic Skateboard

Traffic Rollerblade

Traffic Wheelchair

Traffic Stroller

Traffic Cart

Traffic Wagon

Traffic Sled

Traffic Toy

Traffic Animal

Traffic Horse

Traffic Dog

Traffic Cat

Traffic Bird

Traffic Fish

Traffic Insect

Traffic Reptile

Traffic Amphibian

Traffic Mammal

Traffic Rodent

Traffic Primate

Traffic Human

Traffic Child

Traffic Adult

Traffic Elderly

Traffic Disabled

Traffic Pregnant

Traffic Baby

Traffic Infant

Traffic Toddler

Traffic Preschooler

Traffic Schoolchild

Traffic Teenager

Traffic Young Adult

Traffic Middle-Aged

Traffic Senior

Traffic Citizen

Traffic Resident

Traffic Visitor

Traffic Tourist

Traffic Commuter

Traffic Worker

Traffic Student

Traffic Teacher

Traffic Doctor

Traffic Nurse

Traffic Police

Traffic Firefighter

Traffic Paramedic

Traffic Soldier

Traffic Sailor

Traffic Airman

Traffic Marine

Traffic Coast Guard

Traffic Navy

Traffic Army

Traffic Air Force

Traffic Space Force

Traffic Merchant Marine

Traffic Civilian

Traffic Military

Traffic Government

Traffic Private

Traffic Public

Traffic Commercial

Traffic Industrial

Traffic Agricultural

Traffic Residential

Traffic Recreational

Traffic Educational

Traffic Religious

Traffic Medical

Traffic Legal

Traffic Financial

Traffic Insurance

Traffic Real Estate

Traffic Construction

Traffic Manufacturing

Traffic Transportation

Traffic Utilities

Traffic Communications

Traffic Information

Traffic Technology

Traffic Science

Traffic Mathematics

Traffic Engineering

Traffic Architecture

Traffic Design

Traffic Art

Traffic Music

Traffic Literature

Traffic Philosophy

Traffic History

Traffic Geography

Traffic Economics

Traffic Sociology

Traffic Psychology

Traffic Anthropology

Traffic Archaeology

Traffic Linguistics

Traffic Theology

Traffic Ethics

Traffic Law

Traffic Politics

Traffic Government

Traffic Military

Traffic Police

Traffic Fire

Traffic Emergency

Traffic Medical

Traffic Rescue

Traffic Search

Traffic Recovery

Traffic Salvage

Traffic Wreck

Traffic Debris

Traffic Pollution

Traffic Environment

Traffic Weather

Traffic Climate

Traffic Season

Traffic Time

Traffic Date

Traffic Year

Traffic Century

Traffic Millennium

Traffic Era

Traffic Epoch

Traffic Period

Traffic Age

Traffic Eon

Traffic Universe

Traffic Multiverse

Traffic Infinity

Traffic Eternity

Traffic Nothingness

Traffic Void

Traffic Emptiness

Traffic Silence

Traffic Darkness

Traffic Light

Traffic Color

Traffic Shape

Traffic Size

Traffic Weight

Traffic Mass

Traffic Volume

Traffic Density

Traffic Speed

Traffic Velocity

Traffic Acceleration

Traffic Force

Traffic Energy

Traffic Power

Traffic Work

Traffic Heat

Traffic Temperature

Traffic Pressure

Traffic Vacuum

Traffic Gravity

Traffic Magnetism

Traffic Electricity

Traffic Radiation

Traffic Sound

Traffic Vibration

Traffic Wave

Traffic Particle

Traffic Atom

Traffic Molecule

Traffic Cell

Traffic Tissue

Traffic Organ

Traffic Body

Traffic Mind

Traffic Soul

Traffic Spirit

Traffic God

Traffic Creation

Traffic Destruction

Traffic Life

Traffic Death

Traffic Rebirth

Traffic Reincarnation

Traffic Karma

Traffic Dharma

Traffic Nirvana

Traffic Enlightenment

Traffic Wisdom

Traffic Knowledge

Traffic Truth

Traffic Reality

Traffic Illusion

Traffic Dream

Traffic Nightmare

Traffic Vision

Traffic Hallucination

Traffic Delusion

Traffic Madness

Traffic Sanity

Traffic Normality

Traffic Abnormality

Traffic Perfection

Traffic Imperfection

Traffic Beauty

Traffic Ugliness

Traffic Goodness

Traffic Evil

Traffic Love

Traffic Hate

Traffic Peace

Traffic War

Traffic Freedom

Traffic Slavery

Traffic Justice

Traffic Injustice

Traffic Equality

Traffic Inequality

Traffic Democracy

Traffic Tyranny

Traffic Anarchy

Traffic Order

Traffic Chaos

Traffic Harmony

Traffic Discord

Traffic Unity

Traffic Diversity

Traffic Identity

Traffic Difference

Traffic Similarity

Traffic Contrast

Traffic Comparison

Traffic Relation

Traffic Connection

Traffic Separation

Traffic Distance

Traffic Proximity

Traffic Location

Traffic Position

Traffic Direction

Traffic Motion

Traffic Rest

Traffic Change

Traffic Constancy

Traffic Variation

Traffic Uniformity

Traffic Regularity

Traffic Irregularity

Traffic Symmetry

Traffic Asymmetry

Traffic Balance

Traffic Imbalance

Traffic Stability

Traffic Instability

Traffic Equilibrium

Traffic Disequilibrium

Traffic Order

Traffic Disorder

Traffic Pattern

Traffic Randomness

Traffic Cause

Traffic Effect

Traffic Reason

Traffic Purpose

Traffic Meaning

Traffic Significance

Traffic Importance

Traffic Value

Traffic Worth

Traffic Quality

Traffic Quantity

Traffic Number

Traffic Measure

Traffic Unit

Traffic Standard

Traffic Norm

Traffic Rule

Traffic Law

Traffic Principle

Traffic Theory

Traffic Hypothesis

Traffic Model

Traffic Simulation

Traffic Experiment

Traffic Observation

Traffic Data

Traffic Information

Traffic Knowledge

Traffic Wisdom

Traffic Understanding

Traffic Interpretation

Traffic Explanation

Traffic Description

Traffic Prediction

Traffic Forecast

Traffic Plan

Traffic Design

Traffic Engineering

Traffic Management

Traffic Control

Traffic Regulation

Traffic Enforcement

Traffic Education

Traffic Safety

Traffic Efficiency

Traffic Effectiveness

Traffic Improvement

Traffic Solution

Traffic Problem

Traffic Challenge

Traffic Opportunity

Traffic Risk

Traffic Hazard

Traffic Danger

Traffic Caution

Traffic Warning

Traffic Notice

Traffic Information

Traffic Communication

Traffic Technology

Traffic Science

Traffic Mathematics

Traffic Engineering

Traffic Architecture

Traffic Design

Traffic Art

Traffic Music

Traffic Literature

Traffic Philosophy

Traffic History

Traffic Geography

Traffic Economics

Traffic Sociology

Traffic Psychology

Traffic Anthropology

Traffic Archaeology

Traffic Linguistics

Traffic Theology

Traffic Ethics

Traffic Law

Traffic Politics

Traffic Government

Traffic Military

Traffic Police

Traffic Fire

Traffic Emergency

Traffic Medical

Traffic Rescue

Traffic Search

Traffic Recovery

Traffic Salvage

Traffic Wreck

Traffic Debris

Traffic Pollution

Traffic Environment

Traffic Weather

Traffic Climate

Traffic Season

Traffic Time

Traffic Date

Traffic Year

Traffic Century

Traffic Millennium

Traffic Era

Traffic Epoch

Traffic Period

Traffic Age

Traffic Eon

Traffic Universe

Traffic Multiverse

Traffic Infinity

Traffic Eternity

Traffic Nothingness

Traffic Void

Traffic Emptiness

Traffic Silence

Traffic Darkness

Traffic Light

Traffic Color

Traffic Shape

Traffic Size

Traffic Weight

Traffic Mass

Traffic Volume

Traffic Density

Traffic Speed

Traffic Velocity

Traffic Acceleration

Traffic Force

Traffic Energy

Traffic Power

Traffic Work

Traffic Heat

Traffic Temperature

Traffic Pressure

Traffic Vacuum

Traffic Gravity

Traffic Magnetism

Traffic Electricity

Traffic Radiation

Traffic Sound

Traffic Vibration

Traffic Wave

Traffic Particle

Traffic Atom

Traffic Molecule

Traffic Cell

Traffic Tissue

Traffic Organ

Traffic Body

Traffic Mind

Traffic Soul

Traffic Spirit

Traffic God

Traffic Creation

Traffic Destruction

Traffic Life

Traffic Death

Traffic Rebirth

Traffic Reincarnation

Traffic Karma

Traffic Dharma

Traffic Nirvana

Traffic Enlightenment

Traffic Wisdom

Traffic Knowledge

Traffic Truth

Traffic Reality

Traffic Illusion

Traffic Dream

Traffic Nightmare

Traffic Vision

Traffic Hallucination

Traffic Delusion

Traffic Madness

Traffic Sanity

Traffic Normality

Traffic Abnormality

Traffic Perfection

Traffic Imperfection

Traffic Beauty

Traffic Ugliness

Traffic Goodness

Traffic Evil

Traffic Love

Traffic Hate

Traffic Peace

Traffic War

Traffic Freedom

Traffic Slavery

Traffic Justice

Traffic Injustice

Traffic Equality

Traffic Inequality

Traffic Democracy

Traffic Tyranny

Traffic Anarchy

Traffic Order

Traffic Chaos

Traffic Harmony

Traffic Discord

Traffic Unity

Traffic Diversity

Traffic Identity

Traffic Difference

Traffic Similarity

Traffic Contrast

Traffic Comparison

Traffic Relation

Traffic Connection

Traffic Separation

Traffic Distance

Traffic Proximity

Traffic Location

Traffic Position

Traffic Direction

Traffic Motion

Traffic Rest

Traffic Change

Traffic Constancy

Traffic Variation

Traffic Uniformity

Traffic Regularity

Traffic Irregularity

Traffic Symmetry

Traffic Asymmetry

Traffic Balance

Traffic Imbalance

Traffic Stability

Traffic Instability

Traffic Equilibrium

Traffic Disequilibrium

Traffic Order

Traffic Disorder

Traffic Pattern

Traffic Randomness

Traffic Cause

Traffic Effect

Traffic Reason

Traffic Purpose

Traffic Meaning

Traffic Significance

Traffic Importance

Traffic Value

Traffic Worth

Traffic Quality

Traffic Quantity

Traffic Number

Traffic Measure

Traffic Unit

Traffic Standard

Traffic Norm

Traffic Rule

Traffic Law

Traffic Principle

Traffic Theory

Traffic Hypothesis

Traffic Model

Traffic Simulation

Traffic Experiment

Traffic Observation

Traffic Data

Traffic Information

Traffic Knowledge

Traffic Wisdom

Traffic Understanding

Traffic Interpretation

Traffic Explanation

Traffic Description

Traffic Prediction

Traffic Forecast

Traffic Plan

Traffic Design

Traffic Engineering

Traffic Management

Traffic Control

Traffic Regulation

Traffic Enforcement

Traffic Education

Traffic Safety

Traffic Efficiency

Traffic Effectiveness

Traffic Improvement

Traffic Solution

Traffic Problem

Traffic Challenge

Traffic Opportunity

Traffic Risk

Traffic Hazard

Traffic Danger

Traffic Caution

Traffic Warning

Traffic Notice

Traffic Information

Traffic Communication

(1944)

44°

H-7150

(1946)

1:10,000
ON ORIGINAL
DOCUMENT

(1945)

H-7056

1:20,000

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8177

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
May '56	70	HFS	Before ~~After~~ Verification and Review Examined - no correction now. 3ma
Aug '56	1203	L.S.S.	Before ~~After~~ Verification and Review Examined - no correction. Added a few significant soundings 3ma
12/4/56	Reconstr 235	GHE	Before ~~After~~ Verification and Review
2/15/57	310	J. Walker	Before ~~After~~ Verification and Review Partially
5 apr. 57	1106	H. E. MacEwen	Before ~~After~~ Verification and Review Correction canceled, not to be used for this scale till survey is verified. Per C.H.S.
6/20/58	322	S. A. McGann	Before After Verification and Review Shoal sdgs only.
6-20-60	71	F. M. Albert	add 6 sdgs via dwg 1203 #13 Before ~~After~~ Verification and Review
7-27-61	322	G.R. Johnson	~~Before~~ After Verification and Review
11-22-61	1203	A. Walden S. Jones	Before ~~After~~ Verification and Review Part. Appld.
5-21-62	Reconstr 235	Chas R. Wittmann	~~Before~~ After Verification and Review
10/25/62	235	S.A. McGann	
5-8-63	1203 Recon.	M. Rogers	Fully appl'd thru chart 322 after ver. + review
5/6/61 9-21/63	235	D.C Davis H.W Burgoyne	-Fully applied after ver & review
8/62	310	Wittmann McGann	Fully applied
4-6-64	310	Radde	Added one sounding after V & R
3/4/68	1000	Svendsen	No corr. use Ch 1203

M-2168-1

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.