

7151

7151

Diag'd. on diag. ch. No. 1202

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. 1246 Office No. H-7151

LOCALITY

State Maine
General locality Blue Hill Bay
Locality Bass Harbor

1946

CHIEF OF PARTY

John Bowie, Jr., Lt. Comdr., C&GS

LIBRARY & ARCHIVES

DATE

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-7151

Field No. 1246

State Maine

General locality Blue Hill Bay

Locality Bass Harbor

Scale 1:10,000 Date of survey Aug. - Oct. 1946

Instructions dated _____

Vessel Sosbee

Chief of party J. Bowie

Surveyed by J. Bowie and C.A. Schoene

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

Protracted by Robt. W. Wagner

Soundings penciled by W.W. Feazel

Soundings in ~~columns~~ feet at MLW ~~MLW~~

REMARKS: This sheet was processed in the Hydrographic Section of the S.E. District at Norfolk, Va.

DESCRIPTIVE REPORT
TO ACCOMPANY

HYDROGRAPHIC SURVEY H-7151 (Field No. 1246)

PROJECT CS-265

SCALE 1:00,000

SHIP SOSBEE

J. BOWIE, COMDG.

PROJECT

Original instructions for Project CS-265 were issued 11 March 1944. Sailing Orders for the SOSBEE to work on this project were issued 24 June 1946.

SURVEY LIMITS

The limits of the sheet cover the area south of Mount Desert Island (Chart 308) to an East-West line thru East Pt. (Swans Island); and between a North-South line thru Dix Pt. (Mount Desert Island) eastward to a North-South line a little to the East of Great Gott Island.

(1908)

To the West, the survey joins W.D. survey 2965; to the East, survey sheet 2146 (GILBERT); and to the South, an unsurveyed area of Project CS-265.

The area surveyed during the 1946 season covers approximately 1/3 of the Sheet, and comprises an area Westward of a North-South line thru Lopaus Pt. to Placentia Island.

VESSEL and EQUIPMENT

The Ship SOSBEE and Launch No. 73, operating from the Ship, were used for the survey.

Depths were obtained by 808 depth recorders.

Turning radius: SOSBEE: 100 meters at 1200 RPM.

Launch 73: 25 meters.

TIDE STATION

A portable tide gage located at Bass Harbor, Mount Desert Island, controls

the reduction of soundings.

Predicted tides were used part of the time for reduction of soundings on the boat sheet.

CONTROL STATIONS

Topographic stations were used to control the survey. These were obtained from AIR PHOTO COMPILATION Surveys Nos. T-8568, 8570, 8572, and 8573, Fred L. Peacock, Chief of Party, 1945-46.

Signals located by hydrographic party:

1. By sextant fix: CAT, FOO, ROCK, TED, SPIRE
2. By angle and distance: NUT, POT.

Most of the above locations are contained in Vol. 7.

SHORELINE and TOPOGRAPHY

The shoreline and topography were obtained from AIR PHOTO COMPILATION Surveys Nos. T-8568, 8570, 8572 and 8573. (1945-46)

Discrepancies:

1. When cuts to 3 rocks in Goose Cove failed to intersect in a point, subsequent investigation show stations 2341 and 2347 (T-8568) to be in error. A check on their air-photo position is recommended. Either these two stations are in error, or they are correct and all the other stations in Goose Cove are wrong. See cuts Vol. 7, pages 19, 20, and 21. (Topo. stations 2341 and 2347 rejected; hydro. locations (Ted and Spire) accepted and used.)

SOUNDINGS

All soundings were obtained by means of 808 depth recorders.

CONTROL OF HYDROGRAPHY

The standard method of sextant fixes were used for hydrographic control.

ADEQUACY OF SURVEY

The sheet is only 1/3 finished but is complete for the area covered except for a development of the ⁴⁵~~47~~ ft. spot at Lat. 44°-13.0', Long. 68°-22.8'. The area surveyed was squared off to make it easy to resume hydrography next season.

No depths were available for a comparison with the junction of W.D. sheet 2065 (1928)

on the West. Junctions to the South and East will be made next season. par. 4, review ✓

CROSSLINES

Crosslines are in good agreement. Two more East-West lines are needed and can be done upon resumption of field work. (Does not merit additional work) ✓

COMPARISON WITH PRIOR SURVEYS

No data on prior surveys was furnished by the office. ✓

COMPARISON WITH CHART

Chart No. 308, Published Dec. 1942 (5th. edition) is used for comparison.

In general, the new survey is in agreement with the chart. More detail naturally is disclosed by the depth recorder, resulting in minor differences in depths. ✓

Discrepancies to be noted are as follows:

1. The rock shown on the chart just south of Dix Pt. does not exist and should be removed from all charts. Drift sounding with depth recorder and hand lead on two occasions at low tide and a flat sea failed to reveal the rock. Review par. 5a ✓
2. An 8 ft. shoal was developed in the NW part of Goose Cove. ✓
3. The 16 ft. shoal 1/3 mi. S. of Nutter Pt. could not be verified. ²¹ 20 ft. was the least depth found after development and driftsounding. The 16 ft. sounding should be deleted from all charts. (recommend retention see Review, par. 5b) ✓
4. A sounding of ^{2 1/2} 2 ft. was obtained on a rock 0.6 mi. E. of Nutter Pt. where 4 ft. is charted. Investigations made at low tide and flat sea. Top of rock clearly visible. ✓
5. The eastern part of Mitchell Cove bares at low tide. A large reef, not on the chart, exists at Lat. 44°-14.31', Long. 68°-22.15'. ✓
6. 0.9 mi. SW of ^{Lopans} Lopans Pt., a ⁴⁵ 47 ft. sounding was obtained where 51 ft. is charted. ✓
7. Numerous rocks, close inshore, have been located and marked in red on the boat sheet. ✓

DANGERS AND SHOALS

None exist for vessels that cross Bass Har^bor Bar provided they navigate a reasonable distance off-shore. ✓

All previous charted depths should be super^seded by depths obtained by this survey. ✓
(See Review, par. 5)

AIDS TO NAVIGATION

Fixed: None
Floating : Buoy S2
Lat. 45°-15.39'
Long. 68°-23.66'
Day Letter : 4b (Vol. 4, page 12)
Depth : 5 ft.

LIST OF SIGNALS

Triangulation Stations

BASS (BASS HARBOR L.H.)

CENT (PLACENTIA ISLAND 1908-1934)

Topographic Stations (Air Photo Compilation)

ABE	CUR	GAB	PEN	SOB
ATE	CUT	HAND	PET	STO
BAG	DEN	HIP	PIER	TANK
BARN	DER	KEY	PIP	TIC
BLACK	DIX	LEAN	PLA	TINY
BLU	DOC	LONE	RAW	TREE
BROW	DORM	MAY	ROD	TWIN
BURN	DUKY	OLD	SAG	WEE
CHIM	BND	PAN	SKY	YEL

Hydrographic Stations

CAT FOO NUT POT ROCK SPIRE TED

COAST PILOT INFORMATION ✓

Atlantic Coast - Section A-1941.

Page 128

Line 41 : Note about Mitchell Cove and Duck Cove adequate.

Line 45 : After "mid-harbor", add the following sentence: " An excellent anchorage for small boats except in heavy SW weather. Good holding bottom".

(The SOSBEE used Goose Cove for anchorage when operating on Sheet 1246.)

LANDMARKS FOR CHARTS

The prominent church spire in West Tremont at the head of Goose Cove should
be charted. Its location can be obtained from AIR PHOTO COMPILATION Survey
(1946)
T-8568 (Station No. 2347) (See Addendum.) ✓

GEOGRAPHIC NAMES 814 ✓

Geographic names as shown on Chart 308 are correct and no changes required. ✓
The "Desert" in Mount Desert Island is pronounced "De'zert". 214 ✓

John Bowie, Jr.
John Bowie, Jr.
Lieut. Comdr., C. & G.S.
CComdg. Ship SOSEEE

(1946)
 STATISTICS FOR HYDROGRAPHIC SURVEY H-~~7151~~-(1246)

SHIP SOSBEE, PROJECT CS - 265

Vol. No.	Day Let.	Date	No. Sdgs.	No. Pos.	Stat. Mi.	Vessel
1	A	9/8/46	C.P.	146	34.5	SOSBEE
1	B	9/9/46	"	94	21.2	"
2	C	9/11/46	"	104	20.2	"
2 & 3	D	9/12/46	"	205	421.2	"
3	E	10/8/46	"	110	22.3	"
4	a	9/26/46	"	22	2.3	Launch 73
4	b	9/27/46	"	236	27.6	" "
5	c	9/28/46	"	124	15.9	" "
5	d	10/10/46	"	7	----	" "
5	e	10/11/46	"	176	14.8	" "
6	f	10/12/46	"	118	16.4	" "

AREA : 10.0 square statute miles.

TIDAL NOTE

To be supplied by Norfolk Processing Office. ✓

SALINITIES

Obtain from GILBERT. ✓

A D D E N D U M

to accompany
(1946)
HYDROGRAPHIC SURVEY H-7151 (Field No. SO. 1246)

~~Corrections shown in red in the preceding portion of this report were made in this office and refer to data as shown on the smooth sheet.~~

Signal SPIRE, latitude $44^{\circ}15.79'$ and longitude $68^{\circ}23.66'$: The location of this signal as shown on the smooth sheet was obtained by sextant cuts and is approximately 15m. southeast of the position shown on airphoto T-8568. (See "Landmarks for Charts.") (formerly Sta. 2347 on T-8568 (1946) ✓

Fathometer Corrections: The fathometer corrections are contained in a combined report for sheets H-7150 and H-7151 and will be forwarded with the data for H-7150. ✓

Tidal Note: The tidal corrections for soundings on the smooth sheet were obtained from a portable automatic tide gage which was located at Bass Harbor, Mt. Desert Island, at latitude $44^{\circ}14.42'$ and longitude $68^{\circ}21.13'$. ✓

M.L.W. corresponds to a height of 3.4 ft. on the tide staff. ✓

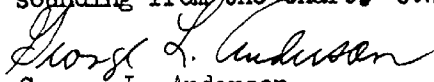
M.H.W. corresponds to a height of 13.6 ft. on the tide staff. ✓

Respectfully submitted,


Isadore M. Zeskind
Cartographic Engineer

Norfolk, Va.
July 23, 1947

Approved and Forwarded ; it is recommended that the 16 ft. Shoal S. of Nutter Point be wire dragged before removing the 16 ft. sounding from the chart. Concur; see Review, par. 5 b. ✓


George L. Anderson
Supervisor, S.E. District

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7151

FIELD NO. 1246

Maine, Penobscot Bay, Blue Hill Bay
Surveyed in August - September 1946 Scale 1:10,000
Project No. CS-265

Soundings:

Control:

808 Fathometer

Sextant fixes on shore signals

Chief of Party - J. Bowie, Jr.
Surveyed by - J. Bowie, Jr. and C. A. Schóene
Protracted by - R. W. Wagner
Soundings plotted by - W. W. Feazel
Verified and inked by - H. A. Curtis
Reviewed by - T. A. Dinsmore, January 2, 1948
Inspected by - H. W. Murray

1. Shoreline and Signals

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

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated except along the northwest shore of Placentia Island where the foul character of the bottom prevented development to the low-water line.

The bottom is very irregular. Reefs and rocky ledges are prevalent in the northern part of the area. Several shoal indications, such as the 45-ft. sounding in lat. $44^{\circ} 13.03'$, long. $68^{\circ} 22.75'$, rise in deeper water outside of the 60-ft. curve.

4. Adjoining Surveys

No contemporary surveys adjoin the present survey. Junctional surveys are contemplated on the south and east. Charted hydrography is in harmony with the depths at the limits of the present survey.

5. Comparison with Prior Surveysa. H-1164 (1872) and H-1453 (1879-1905) 1:10,000

The present survey falls within the area of these prior surveys. Comparison with the prior soundings indicates that no changes in bottom have occurred. However, the old sounding lines are widely-spaced, and fail to show several rocks and shoals disclosed by the present survey. A discussion of the more important discrepancies follows:

- (1) The rock awash (charted) in lat. $44^{\circ} 15.05'$, long. $68^{\circ} 24.19'$, originates with H-1164 (1872). Investigation during the present survey adequately disproves the existence of a detached rock at this location. A re-examination of the old survey records revealed the rock awash to be the tip of the ledge extending off Dix Point. The rock had been displaced about 75 meters offshore because of erroneous spacing of soundings on the prior sounding line. The rock awash is therefore superseded by ledge symbolization on the present survey.
- (2) Two prior soundings, which are not disproved by the present survey, have been carried forward from H-1164 (1872). These are the 3-ft. sounding (uncharted) falling in present 5-to 6-ft. depths in lat. $44^{\circ} 14.39'$, long. $68^{\circ} 22.30'$, and the 12-ft. sounding (charted) falling in present 20-ft. depths in lat. $44^{\circ} 14.96'$, long. $68^{\circ} 23.75'$.

Several prior soundings have been carried forward to supplement present depths in the inshore area of Placentia Island. Bottom characteristics were also transferred from the prior surveys. The present survey, with the indicated additions, is adequate to supersede the above surveys.

b. H-2965 W.D. (1908) 1:20,000

This wire-drag survey covers only a small part of the present survey. Within the common area, no conflicts exist between the effective drag depths and present survey depths, however, discrepancies in soundings exist as follows:

The 16-and 19-ft. soundings (charted) in lat. $44^{\circ} 14.40'$, long. $68^{\circ} 23.43'$, and lat. $44^{\circ} 14.41'$, long. $68^{\circ} 23.52'$, respectively, originate with H-2965 W.D. (1908). The 16 falling in present 50-ft. depths, was obtained on a foggy day during which no drag work was accomplished. Its position was described as uncertain, presumably because of indistinct signals. In view of the position uncertainty and because present development disproves the 16-ft. sounding where presently plotted, it is recommended that the 16 be disregarded in its present position (see following paragraph).

The 19-ft. prior sounding, falling in present 21-ft. depths, was obtained during a hand lead investigation of the above 16-ft. sounding on a later day. The 19 has been carried forward to the present survey. Until disproved by wire drag, it is recommended that the 16 be retained on the chart, but that its position be moved arbitrarily to that of the 19-ft. sounding.

6. Comparison with Chart 307 (Print date of 8/13/43)
Chart 308 (Print date of 5/26/47)

a. Hydrography

Charted hydrography originates entirely with the previously discussed surveys which need no further consideration, except the rock awash charted in lat. $44^{\circ} 15.17'$, long. $68^{\circ} 22.71'$ which is actually a low-water feature on T-1281 (1872) and is now superseded by ledge symbolization on the present survey.

b. Aids to Navigation

The survey and charted positions of the buoy in Goose Cove are in substantial agreement and the buoy adequately marks the feature intended. There are no other aids to navigation within the area.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was accurately done.
- c. As noted in the Descriptive Report, the 45-ft. spot, rising from 65-ft. depths in lat. $44^{\circ} 13.03'$, long. $68^{\circ} 22.75'$, was not developed.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions, except as noted in par. 7c above.

9. Additional Field Work Recommended

This is a very good basic survey, however, development of the 45-foot sounding, discussed in par. 7c above, is desirable.

It is further recommended that a wire-drag investigation be made of the 16-ft. sounding discussed in par. 5b of this review.

Handwritten note:
12/12

Examined and approved:

I. E. Rittenburg
I. E. Rittenburg
Chief, Nautical Chart Branch

Casper M. Durgin
Casper M. Durgin
Chief, Division of Charts

K. G. Crosby
K. G. Crosby
Chief, Section of Hydrography

G. K. Green
G. K. Green
Chief, Division of Coastal Surveys

GEOGRAPHIC NAMES

Survey No. H-7151

H7151

Name on Survey

On Chart No. / On previous survey No. / On U. S. quadrangle Maps / From local information / On local Maps / P. O. Guide or Map / Rand McNally Atlas / U. S. Light List

	A	B	C	D	E	F	G	H	K	
<u>Maine</u>			(for title)						USGB	1
<u>Blue Hill Bay</u>		"	"						"	2
<u>Mt. Desert Island</u>										3
<u>Dix Point</u>									USGB	4
<u>Goose Cove</u>										5
<u>Nutter Point</u>									USGB	6
<u>Duck Cove</u>										7
<u>Mitchel Cove</u>										8
<u>Lopaus Point</u>									USGB	9
<u>Bass Harbor</u>			(location of tide staff)							10
<u>Placentia Island</u>										11
<u>Great Gott Island</u>									USGB	12
<u>Swans Island</u>									"	13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names underlined in red are approved.
1/5/48 H. HECK

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. **17151..**

Records accompanying survey:

Boat sheets **.4...**; sounding vols. **6....**; wire drag vols. **0....**;
 bomb vols. **0....**; graphic recorder rolls **.10...**;
 special reports, etc. **0.....**

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

Number of positions on sheet		1342
Number of positions checked		.213
Number of positions revised		.5
Number of soundings revised (refers to depth only)		.10
Number of soundings erroneously spaced		.6
Number of signals erroneously plotted or transferred		.0
Topographic details	Time	.16
Junctions	Time	.1
Verification of soundings from graphic record	Time	.18

Verification by *Henry P. Curtis*..... Total time **242 hrs** Date **9/24/47**

Reviewed by *J.A. Dimonove*..... Time **38 hrs** Date **1/2/48**

TIDE NOTE FOR HYDROGRAPHIC SHEET

31 July 1947

~~Division of Hydrography and Topography:~~

Division of Charts: H. W. MURRAY

Plane of reference approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 7151

Locality - Blue Hill Bay, East ^{coast} of Maine

Chief of Party: - J. Bowie in 1946
Plane of reference is mean low water, reading
3.4 ft. on tide staff at Bass Harbor
10.9 ft. below B. M. 3 (1911)

Height of mean high water above plane of reference is 9.9 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section
Chief, ~~Division of Tides and Currents.~~

NAUTICAL CHARTS BRANCH

SURVEY NO. 47151

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
8/4/47	307	Richardson	Before After Verification and Review <i>Critical information only.</i>
8/26/47	308	Walkey	Before After Verification and Review <i>Critical information only.</i>
7-22-48	308	M. Andrews	Before After Verification and Review <i>Partially applied.</i>
11-15-48	1106	F. Albert	Before After Verification and Review <i>completely app'd.</i>
7-18-49	307	M. Andrews	Before After Verification and Review <i>Partially applied.</i>
12/28/54	308 Reconst.	STE	Before After Verification and Review
6-20-61	307	H.R. Johnson	Before After Verification and Review <i>Completely Applied.</i> <i>Portion of survey south of 44° 16' 30" App. thru Chrt 308</i> <i>Comp app'd thru Chrt 307. Reconst. of 308 Records</i>
9/5/61	1202	J. H. Eaton	Before After Verification and Review
12-10-62	1202	R. E. Elkins	<i>Shoalms, low-water line, rocks <u>not</u> revised pending reconstruction.</i>
3-15-62	307 Recal.	W. P. Rogers	<i>completely applied</i> Before After Verification and Review <i>thru overlap of chart 308 and Bp 61907 (drawing copy of chart 307.)</i>
4/20/62	306 Reconst.	Helmer	Before After Verification and Review <i>comp. app'd thru chart 307 & 308</i>

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.