

# 8110

Diag. Cht. No. 1202-2.

Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey Hydrographic  
ST-1853  
Field No. ST-05153 Office No. H-8110

### LOCALITY

State Maine  
General locality Blue Hill Bay  
Locality Blue Hill Harbor

19 53

CHIEF OF PARTY

J. S. Morton

LIBRARY & ARCHIVES

DATE November 4, 1954

B-1870-1 (1)

# 8110

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-8110

Field No. St-1853 & St-05153

State MAINE

General locality BLUE HILL BAY

Locality BLUE HILL HARBOR

Scale 1:10,000 & 1:5000 Date of survey 7 May to 3 June 1953

Instructions dated 6 February 1953

Vessel STIRNI

Chief of party J.S. MORTON

Surveyed by ~~SHIP OFFICERS~~ R.C. Darling

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

Fathograms scaled by SHIP'S PERSONNEL

Fathograms checked by SHIP'S PERSONNEL & NORFOLK PROCESSING OFFICE

Protracted by DONALD P. HARNDEN

Soundings penciled by W.W. FEAZEL

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

REMARKS: Field surveys St-1853 & St-05153 were combined under registry number H-8110

2156

A. PROJECT:

Project CS-265 (1953), Supplemental Instructions 222/MEK, S-2-ST, from the Director, dated 4 February 1953 for this project supersedes all previous Instructions. Letter 223/MEK, S-1-ST, from Chief, Division Hydrographic Section dated 6 February 1953, with corrections to original instructions.

B. SURVEY LIMITS AND DATES:

<sup>subplan</sup>  
The survey includes the approaches to Blue Hill Harbor, Maine. Junction with ~~survey #7987~~ (Field No. ST-05153) at NW from Lat. 44-23.8 N, Long. 68-22.5W, to Lat. 44-23.7 N, Long. 68-33.9 W, and SE from Lat. 44-22.4 N, Long. 68-33.0 W, to Lat. 44-23.6 N, Long. 68-31.4 W. The NE and SW portions are bounded by shoreline.

Field work began on 25 May 1953 and was completed on 3 June 1953.

The survey makes a junction with <sup>subplan</sup>~~sheet #7987, 1953~~, scale 1:5,000 to the north. No recent survey has been made to the south.

There were no delays experienced in accomplishing this survey.

C. VESSEL AND EQUIPMENT:

Motor launch 101 was used for the entire survey. The launch was operated from the USC&GSS STIRNI, anchored in Lat. 44-23.8 N, Long. 68-33.2 W.

808 Fathometer nos. 151-SPX, <sup>£155-SPX</sup>~~was~~ used. Hand lead soundings were taken when locating reefs, rocks, and shoals dangerous to navigation.

D. TIDE AND CURRENT STATIONS:

All soundings on the boat sheet were reduced to MLW by use of the tidal data taken from the tide tables for Portland, Maine and applying a ratio correction of 1.15, and a time correction of -15 minutes. A portable automatic tide gage was in operation at Lat. 44-24.56 and Long 68-33.92 throughout the survey. The marigrams from this tide station will be used for reducing soundings with no time or range corrections.

No current stations were occupied.

E. SMOOTH SHEET:

The smooth sheet will be plotted by the Norfolk Processing Office.

F. CONTROL STATIONS:

Triangulation control for the photogrammetric control can be found in description no. 536. The Maine Geodetic Survey established the control in 1862-1863. C.C.B. and G.A.F. were the party chiefs. Additional control was furnished by the U. S. Coast and Geodetic Survey in 1934 by K.G.C.

Photogrammetric control was used exclusively as shown on the manuscript RS-483 (T-11337), scale 1:10,000, 1953. The method used in securing this control will be furnished in a separate report by the photogrammetric party chief.

An officer was assigned by the Photogrammetric Division to work in conjunction with the ship, to supply and oversee the adequacy of the control. He prepared the boat sheets, built the signals, and supplemented the control where necessary. His knowledge of hydrography and photogrammetry made this practice extremely profitable and with very accurate results. Control points selected in the office that were found unsuitable in the field were moved to favorable locations. Areas with insufficient control were supplied with control by means of radial plots in the field. The entire survey was thereby furnished with control of third order accuracy or better.

#### G. SHORELINE AND TOPOGRAPHY:

The shoreline and topography were located by means of photogrammetric plots shown on RS-483 (T-11337) dated 1953.

Some low water line soundings could not be taken by normal operation of the launch because the reefs and ledges were too steep and could not be negotiated even at high water. In areas of this category, the low water line was located by spot sextant fixes and intermediate points were sketched in by the hydrographer at the time the fixes were taken. Some estimations were made at the beginning and ending of the sounding lines. The record books will show where these were made.

The photographs for the area were taken at approximately the low water stage of the tide. The manuscripts were compiled showing this low water line. The transfer of this line was made on the boat sheet in blue ink. The location made by the hydrographer is shown in black ink.

No discrepancies are noted between the photogrammetric and hydrographic location of the mean low water line.

#### H. SOUNDINGS:

Depths were measured by use of the 808 fathometer. Shoals dangerous to navigation were sounded with the hand lead by drifting and circling a marker buoy placed at the shoalest sounding. The fathometer was in continuous use during this operation and notes were made on the fathogram and in the record books. Fathometer Corrections filed with H-8029

#### I. CONTROL OF HYDROGRAPHY:

Standard hydrographic sextants were used to obtain three point fixes throughout the survey. A courts three arm protractor was used for all boat sheet plotting. (plastic)

J. ADEQUACY OF SURVEY:

The survey is complete and adequate to supersede prior surveys for charting. The junction with the adjoining (survey) to the north is satisfactory and depth curves can be adequately drawn at this junction.

K. CROSSLINES:

7 % crosslines were run with no discrepancies. This includes development mileage in the main scheme of soundings.

L. COMPARISON WITH PRIOR SURVEYS: Review, #5

The new survey agrees very well with the prior survey H-1434, 1879, scale 1:10,000. In shoal areas, however, several pinnacles and boulders have a shoaler depth than previously shown. These soundings are listed in paragraph N. The prior survey was made by hand lead alone, which probably accounts for these discrepancies. Investigations were carried out as described in paragraph H. It is noted that the old survey showed ledges and reefs by "rock awash" symbols. The limits of these ledges and reefs were carefully located and should supersede the rock awash symbols.

No junction with a prior survey was made.

M. COMPARISON WITH CHART: Review, par. 6

The survey was compared with chart 307, scale 1:40,000, 1943 printing. Several small piers are in existence not shown on the chart, but are clearly shown on the photogrammetric manuscripts.

The soundings compare favorably with the chart with the exception of those listed in paragraph N.

N. DANGERS AND SHOALS:

Listed below are the important newly found shoals:

<u>Latitude</u>	<u>Longitude</u>	<u>Least Depth</u>	<u>Position No.</u>
44-23.12 N ✓	68-33.31 W ✓	4 1/2 ft. } same	120 119 c
44-23.14 N ✓	68-33.26 W ✓	6 ✓ } rocky shoal	3 f
44-23.22 N ✓	68-33.38 W ✓	4 ✓	2 f
44-23.30 N	68-33.48 W ✓	5 ✓	155-156 c

These dangers were reported to the U. S. Coast Guard via the Washington Office.

With the above exceptions, all charted dangers, shoals, and bare rocks were found as charted.

O. COAST PILOT INFORMATION:

A marine railway is located at Blue Hill Falls for hauling small boats. (CANARY COVE)

P. AIDS TO NAVIGATION:

There are no aids to navigation in the survey area. ✓

6 It is recommended that a black can or spar be placed to the east of the 8 foot sounding at Lat. 44-23.14, Long. 68-33.26. ✓

Q. LANDMARKS FOR CHARTS:

See report submitted on Form 567.

U. STATISTICS:

Totals for Sheet:

No. Pos. 598, Stat. Mi. of Sdgs. 82.5, No. H. L. Sdgs. <sup>31</sup>~~20~~,  
Area, Sq. Stat. Mi. 2.3

V. TIDE NOTE:

The portable automatic tide gage in Blue Hill Harbor, at Lat. 44-24.56, Long. 68-33.92, furnished most of the tidal data for reduction of soundings. The missing data was supplied by hourly heights sent from the Washington Office. A tide staff reading of 1.2 feet corresponded to MLW. No time or height corrections were necessary. ✓

W. ABSTRACT OF VELOCITY CORRECTIONS:

Phase corrections are as follows:

Fath. No.	A to B ✓	A to C ✓	A to D ✓
151-SPX	-0.4 ft.	-3.1 ft.	-5.4 ft.

These phase corrections were combined with the following velocity corrections under the echo correction column in the sounding volumes. Bar checks were taken to 70 feet. Below this, temperature and salinity observations were used to get corrections. ✓

Blue Hill Harbor, Launch 101, Summer, 1953

Fath. 151-SPX		
From	To	Corr.
0 ft.	9 ft.	0.0 ft.
9	18	-0.2
18	26.5	-0.4
26.5	34.5	-0.6
34.5	41.5	-0.8
41.5	47.5	-1.0
47.5	56.5	-1.2
56.5	70	-1.4
70	90	-1.6
90	109.5	-1.8
109.5	149	-2.0

Respectfully submitted,

*David F. Romero*

for

R. C. Darling  
LCDR, USC&GS

Approved and Forwarded

*J. S. Morton*

J. S. Morton  
Commander, USC&GS  
Commanding Ship STIRNI

H-8110 (1953) 1:5000 Insert  
ST#05153



A. PROJECT:

Project CS-265 (1953), Supplemental Instructions 222/MEK S-2-ST from the Director dated 4 February 1953 for this project supersedes all previous Instructions.

Letters 223/MEK S-1-ST dated 6 February 1953, from Chief, Division Hydrography Section with corrections to original instructions.

B. SURVEY LIMITS AND DATES:

The Survey includes all of Blue Hill Harbor and approaches in Blue Hill Harbor, Maine. Limits are from Lat.  $44^{\circ} 23.3'N$ , Long.  $68^{\circ} 32.5'W$ , Lat.  $44^{\circ} 23.7'N$ , Long.  $68^{\circ} 33.9'W$  on the south to Lat.  $44^{\circ} 24.8'N$ , Long.  $68^{\circ} 35.3'W$  at the northern section of the harbor.

Field work began on 7 May 1953 and was completed on 2 June 1953.

The Survey <sup>is an insert to H-8110</sup> ~~makes a junction with sheet H-7941~~, 1953 scale 1:10,000 to the South.

The launch used for this survey was in storage for several years. The wood in the hull dried to such an extent that the soundings were too faint on the fathograms. About one weeks work was lost in attempting to improve the echo intensity. The usual spring storms in April and the early part of May prevented field work on numerous days.

C. VESSEL AND EQUIPMENT:

Motor Launch 101 was used for the entire area of the survey. The launch operated from the Coast Survey ship STIRNI, anchored in lat.  $44^{\circ} 23.8'N$ , Long.  $68^{\circ} 33.2'W$ . Two 808 Fathometers, Nos. 155-SPX and 151-SPX were used. Hand lead soundings were taken in locating shoals, reefs, and rocks dangerous to navigation.

D. TIDE AND CURRENT STATIONS:

Soundings on the boat sheet were reduced to MLW by use of tidal data in the tide tables for Portland, Maine and applying a ratio of 1.15 and a time correction of -15 minutes. A portable automatic tide gage was operated at lat.  $44^{\circ} 24.56'$ , long.  $68^{\circ} 33.92'$ . The marigrams from this tide station will be used for reducing soundings with no time or range corrections.

No current stations were occupied.

E. SMOOTH SHEET:

The smooth sheet will be plotted by the Norfolk Processing Office.

#### F. CONTROL STATIONS:

Triangulation can be found in description No. 536. The Maine Geodetic Survey established the control 1862, 1863, C.O.B. & G.A.F. were the party chiefs. Additional control was furnished by the Coast and Geodetic Survey in 1934.

Air photographic control was used exclusively as shown on manuscripts of RS-491 (T-11337A) 1:5,000 scale 1953. Methods used in securing this control will be furnished in a separate report by the photogrammetric party chief. An officer was assigned by the photogrammetric Division to work in conjunction with the ship in supplying and overseeing the adequacy of the control. He prepared the boat sheets, built the signals, and supplemented the photogrammetric control where needed. His knowledge of hydrography and photogrammetry made this practice extremely profitable with accurate results. Control points selected in the office that were found unsuitable for hydrography were moved to favorable locations and areas of insufficient control were supplied with control by means of radial plots in the field. The entire survey was thereby furnished with control consisting entirely of third order accuracy.

#### G. SHORELINE AND TOPOGRAPHY:

The shoreline and topography were located by means of photogrammetric plots shown on RS-491 dated 1953.  
(T-11337A)

Some low-water line soundings could not be determined by normal operation of the launch because the reefs were too high and steep to be traversed even at high waters. In areas of this classification, the low water line was located by taking separate fixes at the tips of the reefs or by estimations of the distance from the end or beginning of a sounding line. The photographs for the area were taken at approximately the low water stage of the tide line and the manuscripts were compiled showing the low water line. The transfer of these locations was made on the boat sheet with blue ink. The hydrographic locations are shown in black ink. The low water line was sketched in between the portions located in fixes, while the hydrographer was in the area. Very few discrepancies are noted between the photogrammetric and hydrographic location of the low water line. The greatest difference was found where the bottom was extremely flat. A difference of one foot of tide will move the water line as much as 50 meters which accounts for discrepancies in those areas.

Depths were measured by use of the 808 fathometer. Shoals dangerous to navigation were sounded with the hand lead by drifting and circling a marker buoy placed at the shoalest sounding. The fathometer was in continuous use during this operation and notes made on the fathogram and in the sounding volumes.

#### I. CONTROL OF HYDROGRAPHY:

Standard hydrographic sextants were used to obtain three point fixes throughout the survey. A courts three arm protractor was used for all boat sheet plotting.

J. ADEQUACY OF SURVEY:

The survey is complete and adequate to supersede prior surveys for charting. The junction with the adjoining survey to the south is satisfactory, and depth curves can be adequately drawn at the junction.

K. CROSSLINES:

Eleven percent of crosslines were run with no discrepancies.

L. COMPARISON WITH PRIOR SURVEYS:

The new survey agrees very well with the prior survey H-1434, 1879, 1:10,000. Several pinnacles and boulders in shoal areas however, have a shoaler depth than previously shown. These shoaler soundings are listed in paragraph N. The prior survey was made by handlead alone which probably accounts for these discrepancies. It is noted that the old survey often showed the ledges by "rock awash" symbols. The limits of these ledges were carefully located and should supersede the rock awash symbols. No junction with a prior survey was made.

M. COMPARISON WITH CHART:

The survey was <sup>Peters</sup> compared with chart 307, scale 1:40,000, 1943 printing. The pier at ~~Parker~~ Point is destroyed and should be removed from the chart. The large pier shown on the south<sup>west</sup> end of the peninsula, north of Parker Point is in ruins. This <sup>west</sup> pier should be so noted as it is unsuitable for mooring alongside and is dangerous because of pilings and cribbings remaining below and above the low water line. The soundings compare favorably with the chart except those listed in paragraph N.

\* pier ruins in  $\phi$  44°24.5'  $\lambda$  68°34.47'

N. DANGERS AND SHOALS:

Listed below are the important newly found shoals:

<u>Latitude</u>	<u>Longitude</u>	<u>Least Depth</u>	<u>Position No.</u>
44°-23.90N	68°-33.54W	9.5 ft.	132.5k
44°-24.09N	68°-33.19W	14	46j
44°-24.09N	68°-33.38W	1(B/d)	8p
44°-24.13N	68°-33.55W	2	2p
44°-24.12N	68°-33.41W	2	4p
44°-24.12N	68°-33.37W	2	6p
44°-24.16N	68°-33.70W	*	57a
44°-24.08N	68°-33.69W	6	109h

\* Iron stake stands <sup>4</sup> feet out of water at MLW, on rock awash at MLW. (cov. 1 ft. at M.L.W.)

These dangers were reported to the U. S. Coast Guard by the Washington Office. All charted dangers, shoals, and bare rocks were found as charted with the exception of the shoaler depths listed above.

O. COAST PILOT INFORMATION:

A private yacht club is located at Lat. 44°-24.6' and Long. 68°-33.9'. This club operates only in the summer months.

There is a good anchorage for small craft in Blue Hill Harbor at Lat. 44°-24.3' and Long. 68°-33.9'.

P. AIDS TO NAVIGATION:

There are no fixed aids to navigation in the limits of this survey.

Unofficial Aids: Iron spike - beacon is placed over this spike during the summer months by the private yacht club members at Lat. 44°-24.16' and Long. 68°-33.70' to aid in marking the channel into Blue Hill Harbor.

Floating Aids:

<u>Light List Name</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Pos.No.</u>	<u>Date</u>
			<u>Vol I P. 3&amp;4</u>	
Blue Hill Harbor Buoy 1	44°-24.08'	68°-33.31'	1&2a	29 April 1953
Blue Hill Harbor Buoy 3	44°-24.14'	68°-33.34'	3&4a	29 April 1953
Blue Hill Harbor Buoy 2	44°-24.22'	68°-33.76'	5&6a	29 April 1953
Blue Hill Harbor Buoy 5	44°-24.42'	68°-34.13'	7a	29 April 1953
Blue Hill Harbor Buoy 4	44°-24.39'	68°-34.32'	8&9a	29 April 1953

Q. LANDMARKS FOR CHARTS:

See report submitted on Form 567.

U. STATISTICS:

Totals for Sheet:

No. Pos. 1,179, Stat. Mi. of Sdgs. 87.2, No. H.L. Sdgs. 52,  
Area, Sq. Stat. Mi. 1.3

V. TIDE NOTE:

The portable automatic tide gage in Blue Hill Harbor, at Lat. 44°-24.56', Long. 68°-33.92', furnished most of the tidal data for reduction of soundings. The missing data was supplied by hourly heights sent from the Washington Office. A tide staff reading of 1.2 feet corresponded to MLW. No time or height corrections were necessary on any part of the sheet.

W. ABSTRACT OF VELOCITY CORRECTIONS:

Phase corrections are as follows:

<u>Fathometer No.</u>	<u>A to B</u>	<u>A to C</u>	<u>A to D</u>
151-SPX	-0.4 ft.	-3.1 ft.	-5.4 ft.
155-SPX	-1.6 ft.	-2.2 ft.	-4.2 ft.

These phase corrections were combined with the following velocity corrections under the echo correction column of the sounding volumes. Bar checks were taken with each fathometer to 70-foot depths. Below this, temperature and salinity observations were used to get corrections.

Blue Hill Harbor, Launch No. 101, Summer, 1953.

FATH. 151-SPX

From	To	Corr.
0 ft.	9 ft.	0.0 ft.
9	18	-0.2
18	26.5	-0.4
26.5	34.5	-0.6
34.5	41.5	-0.8
41.5	47.5	-1.0
47.5	56.5	-1.2
56.4	70	-1.4
70	90	-1.6
90	109.5	-1.8
109.5	149	-2.0

Fath. 155-SPX

From	To	Corr.
0 ft.	12 ft.	0.2 ft.
12	25.5	-0.4
25.5	37.5	-0.6
37.5	48.5	-0.8
48.5	58	-1.0
58	69	-1.2
69	82.5	-1.4
82.5	99	-1.6
99	118	-1.8
118	137	-2.0
137	157	-2.2

Respectfully submitted,

*David F. Romero*  
for  
R. C. Darling  
LCDR, USC&GS

Approved and Forwarded,

*J. S. Morton*  
J. S. Morton  
Commander, USC&GS  
Commanding Ship STIRNI

LIST OF SIGNALS  
To Accompany

HYDROGRAPHIC SURVEY H-8110 (Field Numbers St-1853 & St-05153)

TRIANGULATION STATIONS

SPI BLUE HILL CONG. CHURCH SPIRE, 1863-1934

TOPOGRAPHIC STATIONS

SOURCE - COMPILATION T-11337

Acc	Any	Amy	Bah	Bum	Gab	Cow	Day	Deq (d)*	Ego	Elf
Far	Few	Gal (d)*			Gan	Hex	Hub	Ivy	Jut	Ken
Kid	Lay	Nat	Off		Pol	Pug	Sad	Vet	Yak	Zag

SOURCE - COMPILATION T-11337A

Bus	Cat	Dud	Bel	Elf	Far	Fes	Gen	Gum	Ham	Hex
Ice	Ida	Joe	Joy	Key	Kid	Lug	Lux	Man	Mar	Ned
New	Obi	Odd	Pin	Pol	Pug	Quo	Ran	Rid	Sad	Sis
Sub	Tap	Tax	Use	Val	Vet	Wag	Wax	Woo	Yak	Yat
Zag	Zig	608								

SOURCE - COMPILATION RS-484

Coa    Pie    Rig    San

*\* descriptions filed under T-8559 (1944)*

ST-05153

H-8110

## Floating Aids to Navigation to Accompany

Name	Lat.	Long.	Depth of Water	Position No.	Date of Location
Blue H111 Harbor Buoy 1.	44°-24'	68°-33'	Approx. 29 ft.	1a 2a	29 April 1953
Blue H111 Harbor Buoy 3.	44°-24'	68°-33'	Approx. 18 ft.	3a 4a	" "
Blue H111 Harbor Buoy 2.	44°-24'	68°-33'	Approx. 18 ft.	5a 6a	" "
Blue H111 Harbor Buoy 5.	44°-24'	68°-34'	Approx. 11 ft.	7a	" "
Blue H111 Harbor Buoy 4.	44°-24'	68°-34'	Approx. 14 ft.	8a 9a	" "

*Agree with Section 7.*

Statistics for Hydrographic Survey H-8110 (ST-05153)

Ship STIRNI - Project No. CS-265

Vol. No.	Day Letter	Date	No. of H. L. or Wire Sdgs.	No. of Posn's	No. Statute Miles of Sdg. Line
I	a(Blue)	4/29/53	0	9	0.0 (Buoy Locations)
I	a	5/7/53	0	104	8.6
I	b	5/8/53	0	105	9.3
I	c	5/11/53	0	24	2.1
I	d	5/12/53	0	26	1.3
I	e	5/14/53	0	57	4.5
II	f	5/15/53	1	16	0.9
II	g	5/19/53	0	206	18.0
II	h	5/20/53	1	179	14.3
III	j	5/21/53	6	117	7.1
III	k	5/22/53	4	134	8.8
III	l	5/28/53	8	33	1.7
III	m	5/29/53	11	79	5.4
IV	n	6/1/53	0	46	3.1
IV	p	6/2/53	21	63	2.1
TOTAL			52	1,198	87.2

Area of Square Miles 1.5

Statistics for Hydrographic Survey H-8110 (ST-1853)

V	a	5/25/53	0	141	24.8
V	b	5/26/53	4	129	17.4
V & VI	c	5/27/53	3	158	21.5
VI	d	5/28/53	1	96	12.7
VI	e	5/29/53	9	37	3.8
VI	f	6/2/53	3	4	0.0
VI	g	6/3/53	11	33	2.3
TOTAL			31	598	82.5

Area of Square Statute Miles 2.3

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TOTALS 83 1,796 169.7

Total Square Statute Miles 3.8



ADDENDUM  
To Accompany

HYDROGRAPHIC SURVEY H-8110 (Field Numbers St-1853 & St-05153)

GENERAL

Field surveys St-1853 and St-05153 were combined for convenience in smooth plotting, and are treated as one survey under registry number H-8110.

DISCREPANCIES

Soundings at crossings generally agree very well, how-ever, at Lat. 44-24.35, Long. 68-33.90, soundings on "a" day are from 1 to 2 feet shoaler than those between positions 113 and 115j. (*resolved in verification*)

The sunken rock, shown on manuscript T-11337A at Lat. 44-24.11, Long. 68-33.51, falls in 11 feet of water on the smooth sheet. There is a  $2\frac{1}{2}$  foot sounding 25 meters to the northward so it is probable the symbol is displaced on the manuscript. *Review, PPG*

The sunken rock, shown on chart 307 at Lat. 44-24.13, Long. 68-33.13, was neither confirmed nor disproved. *Disregard skn rk., Review, PPG*

Respectfully submitted,

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

Norfolk, Va.  
6 Oct. 1954

GEOGRAPHIC NAMES

Survey No. H-8110

Name on Survey										
	A	B	C	D	E	F	G	H	K	
	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		
Maine									Bay	1
Blue Hill Bay			(title)						"	2
BLUE HILL HARBOR										3
Blue Hill Bay									Bay	4
Blue Hill (village)									"	5
Carter Point										6
Canary Cove										7
Parker Point										8
Peters Point										9
Sculpin Point										10
Woods Point										11
LONG ISLAND										12
CROSSON PT										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27
										M 234

Names approved  
11-8-54

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-8110..

Records accompanying survey:

Boat sheets .2...; sounding vols. 6....; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls 5 Env.;  
 special reports, etc. 1 Smooth Sheet; 1 Descriptive Report; Speed, Stylus &  
 Bar Checks filed with fathograms;.....

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

Number of positions on sheet	.....	1796
Number of positions checked	.....	160 (detected position at rocks)
Number of positions revised	.....	7
Number of soundings revised (refers to depth only)	.....	251 * 119 styles 63 phase
Number of soundings erroneously spaced	.....	—
Number of signals erroneously plotted or transferred	.....	—
Topographic details	Time	16 hrs
Junctions	Time	5 hrs
Verification of soundings from graphic record	Time	12 hrs

Verification by E. E. Thomas..... Total time 170..... Date 8/21/57

Reviewed by J. A. Dinsmore..... Time 30..... Date 7/19/57

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8110

FIELD NO. ST-1853  
ST-05153

Maine, Blue Hill Bay, Blue Hill Harbor

Project No. CS-265

Surveyed - May - June 1953

Scale 1:5,000 and  
1:10,000

Soundings:

Control:

808 Depth Recorder  
Hand lead

Sextant fixes on  
shore signals

Chief of Party - J. S. Morton  
Surveyed by - R. C. Darling  
Protracted by - D. P. Haraden  
Soundings plotted by - W. W. Feazel  
Verified and inked by - E. Thomas  
Reviewed by - T. A. Dinsmore 19 July 1957  
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline and signals originate principally with reviewed air-photographic surveys T-11337 and T-11337A of 1953. The shoreline south of lat.  $44^{\circ}22.3'$  is from RS-484 (T-8559, 1944).

2. Sounding Line Crossings

Depths at crossings are in good agreement considering the irregularities in the bottom.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated.

The bottom for the most part is irregular. Ledges, reefs, pinnacles and mounds contribute to the bottom irregularities. As much as 27 ft. of silt covers portions of the harbor bottom.

4. Junctions with Contemporary Surveys

No contemporary adjoining surveys are registered in this area at the present time. Charted hydrography, however, is in harmony with depths at the limits of the present survey.

5. Comparison with Prior Surveys

H-1434 (1879) 1:10,000

The present survey falls within the area covered by this prior survey. A comparison of the prior and present surveys reveals no appreciable changes in bottom. However, the widely spaced sounding lines on the early survey failed to reveal much critical information disclosed by the closer development on the present survey.

*Contradictory statements*

Although the delineation of bottom features is quite complete on the present survey, a number of prior inshore soundings have been carried forward to supplement present depths. A few bottom characteristics were also retained from the prior survey.

With the indicated additions, the present survey is adequate to supersede the prior survey within the common area

6. Comparison with Chart 307 (Latest print date 3/11/57)

A. Hydrography

Charted hydrography originates principally with the previously discussed survey supplemented by various surveys by the Corps of Engineers, the latest of which are blueprints 45291-92 of 1949. The present survey has been partially applied to the chart prior to verification and review. Numerous revisions of 1 ft. have been made to smooth-sheet soundings during verification.

Several sunken rock symbols are charted from information shown on an advance print of T-11337A. This information has been subsequently removed from the manuscript during a recent review of T-11337A. The present survey entirely supersedes all charted information.

B. Aids to Navigation

The buoy charted in lat.  $44^{\circ}24.4'$ , long.  $68^{\circ}34.38'$ , was located about 90 meters southeastward on the present survey. The survey position appears to serve better the purpose intended.

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

It is noted that the hydrographer recommends placing a buoy east of the 4 to 6-ft. rocky shoal in lat.  $44^{\circ}23.14'$ , long.  $68^{\circ}33.26'$ .

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was generally accurate.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

Except for the undeveloped 20-ft. shoal in lat.  $44^{\circ}23.68'$ , long.  $68^{\circ}31.64'$ , the survey is considered to be basic. It is presumed that the shoal will be developed on the junctional survey when work is resumed in this area.

Examined and Approved:

*Wallace A. Bruder*  
for Max G. Ricketts  
Chief, Nautical Chart Branch

*Charles A. Schanck*  
Charles A. Schanck  
Chief, Division of Charts

*Karl B. Jeffers*  
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Chief, Division of Coastal Surveys

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~

5 November 1954

Division of Charts: R. H. Carstens

Plane of reference approved in  
6 volumes of sounding records for

HYDROGRAPHIC SHEET 8110

Locality Blue Hill Bay, Maine

Chief of Party: J. S. Morton in 1953  
Plane of reference is mean low water, reading  
1.2 ft. on tide staff at Blue Hill Harbor  
19.7 ft. below B. M. 1 (1953)

Height of mean high water above plane of reference is 10.1 feet.

Condition of records satisfactory except as noted below:

*E. C. McKay*  
Tides Branch

Chief, Division of Tides and Currents.





