6967

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. 314 Office No. H-6967

LOCALITY

State Maine

General locality Muscongus Bay

Locality ~~Friendship and Franklin Islands to~~ Approaches To St. George River ~~Marshall Point~~

194 4

CHIEF OF PARTY

L.P. Raynor

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DATE JUN 19 1945

8-1870-1 (1)++

6967

Form 537
(Ed. Nov. 1941)

REG. NO. H-6967

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-6967

Field No. 314

State Maine

General locality Muscongus Bay

Locality Approaches To St. George River ~~Friendship and Franklin Islands to Marshall Point~~

Scale 1:10,000 Date of survey June 15 to Oct. 6, 1944

Instructions dated May 7, 1941 & March 11, 1944

Vessel LYDONIA - Launches 79, 82, & 100.

Chief of party L. P. Raynor

Surveyed by Lt. Comdr's. G.W. Lovesee, M. E. Wennermark & C. R. Reed

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

Protracted by A. G. Atwill

Soundings penciled by A. G. Atwill

Soundings in ~~fathoms~~ feet at MLW ~~MLLW~~

REMARKS: This sheet was processed in the Hydrographic Section, Southeastern District, Norfolk, Va.

U. S. GOVERNMENT PRINTING OFFICE 428075

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY SHEET H 6967 (Field No. 314)
Scale 1:10,000
Muscongus Bay - Friendship and Franklin Islands to Marshall Point
Project CS-265 - 1944
Ship LYDONIA - L. P. Raynor, Commanding
Surveyed by G. W. Lovesee, Lieut. Comdr. USC&GS
M. E. Wennermark, Lieut. Comdr. USC&GS
C. R. Reed, Lieut. Comdr. USC&GS

A. PROJECT

Project No. CS-265 Original Instructions dated May 7, 1941. Supplemental Instructions dated March 11, 1944.

B. SURVEY LIMITS AND DATES

The survey includes that part of Muscongus Bay and St. George River Entrance east of Friendship, Cranberry, Harbor, and Franklin Islands to Marshall Point and south to approximate latitude 43° 53.5' and up the St. George River to latitude 43° 57.5'. Field work on the sheet began June 15 and ended October 6, 1944. The survey joins Sheet H 6854 (1:10,000 - 1943) on the west, Sheet H 6965 (1:10,000 - 1944) and Sheet H 6968 (1:10,000 - 1944) on the north, Sheet H 6984 (1:10,000 - 1944) on the southeast and Sheet H 6969 (1:10,000 - 1944) on the south.

C. VESSEL AND EQUIPMENT

Launch 79 using 808 Portable Depth Recorder No. 75 and Launch 82 using 808 Portable Depth Recorder No. 55 were used for the survey basing from the Ship LYDONIA. Launch #100 was used to obtain the positions of low water rocks on October 6th. In general Launch No. 79 was used east and south of the line joining Hooper Point and the Little Caldwell, Stone, McGee, Barter, and Thompson Islands. A few days work with Launch 79 are interspersed in the remaining area of the sheet.

D. TIDE AND CURRENT STATIONS

Tide station for the survey was located at Port Clyde--latitude 43° 55.4', longitude 69° 15.5'. No corrections to observed tides were applied.

No current stations in the area of the survey were occupied.

E. SMOOTH SHEET

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

F. CONTROL STATIONS

Triangulation stations are Franklin Island Light 1859 and Marshall Point Lighthouse 1860. Franklin Island Light was located by intersection by K. G. Crosby's second order triangulation scheme of 1934.

Topographic stations are from recent air photographic surveys sheet numbers T5621, T5622, and T5999. Maps were compiled in 1943.

Several hydrographic signals were located and these are indexed in Volume 1.

G. SHORELINE AND TOPOGRAPHY

Shoreline and topographic details are from topographic sheets listed above under "F".

High water line at latitude 43° 55.15', longitude 69° 18.58' was found to be inaccurate and has been sketched in from data obtained by pacing from signal "PROS" on range to other signals. The error was very apparent when signal "PROS" could not at first be recognized by

the hydrographic party due to its elevation and distance from the high water. The change is shown in red on the boat sheet. Shown as red dashed line on smooth sheet

High water line was erroneously shown on a rock east of Franklin Island Latitude 43° 53.55', longitude 69° 22.34'. This rock is covered at high water.

It is not possible to sound over the low water line in most places on this sheet-the shoreline being mostly ledge rock and too steep to ~~to~~ determine low water line by this method. Positions were obtained at low water at numerous places and the remainder was sketched in from observation. Agreement with air photo low water was only fair. Early topography (cf sheet T1001 - 1865) was remarkably accurate.

H. SOUNDINGS

Soundings were obtained with 808 Portable Depth Recorders or hand lead and pole using standard methods.

I. CONTROL OF HYDROGRAPHY

Three point fixes on shore objects were used exclusively on this sheet.

J. ADEQUACY OF SURVEY

The survey is complete and adequate to supersede prior surveys for charting with exception of charted rock awash (see paragraph M) at latitude 43° 53.76', longitude 69° 21.71'.

Junctions with adjoining surveys are satisfactory and no holidays exist. No excessive differences exist that are not caused by very rough rocky bottom. Depth curves join within limits to be expected where bottom is rough.

K. CROSSLINES

Sufficient crosslines were run to check the sounding lines and develop channels and comply with the instructions. Discrepancies in crossings were generally caused by rough, rocky bottom.

L. COMPARISON WITH PRIOR SURVEYS

Inasmuch as the soundings on prior surveys are in fathoms and fractions and are much more widely spaced than on the present survey this comparison is omitted. The comparison with Charts 312 and 313 under the next heading serves the same purpose.

M. COMPARISON WITH CHART

Tides used in the following comparison are Portland, Maine predicted tides which were used in plotting soundings on the boat sheet. Values Changed to agree with smooth sheet

CHART 313 (Print date 7/9/43) A depth of 11 feet was found just north of the charted 9 feet at lat. 43° 56.2', long. 69° 20.9'. Ten feet was found at lat. 43° 56.28', long. 69° 20.8'. The bottom is rough and rocky and the charted 9 feet should be retained. Reject 9ft - Review, Par. 5e(1)

The channel between Friendship and Cranberry Islands is charted as completely blocked. A depth of about 2 feet at low water obtains here.

A least depth of ~~12~~ 13 feet was found at lat. 43° 56.24', long. 69° 19.83' where 25 feet is charted.

A depth of ~~12~~ feet was found near the charted 10 foot spot at lat. 43° 56.13', long. 69° 20.0' without extensive development. ~~Due to the irregularity of the bottom the 10 foot sounding should be retained.~~

No indication of the charted 58 feet and 60 feet appears in the regular system of lines at lat. 43° 54.0', long. 69° 20.2' to 69° 20.4'. Reject 58 and 60 - Review, par 5e(3)g 5e(3)h

A depth of ~~58~~ 51 feet was found near the charted 58 feet at lat. 43° 54.2', long. 69° 21.2'. ✓

The charted 55 feet at lat. 43° 53.8', long. 69° 20.0' is about 30 feet shoaler than soundings on the present survey. It is believed to be misplaced. Rejected 55 ft – Review, par. 5C(7) 49

A depth of ~~60~~ feet at lat. 43° 53.8', long. 69° 22.0' is very near the 52 feet charted. 8 ✓

A depth of ~~11~~ feet was obtained at lat. 43° 55.26', long. 69° 20.8' ✓ 9 not charted use 3 near by somewhat north of the charted 12 feet.

A depth of ~~8~~ feet at lat. 43° 55.53', long. 69° 20.43' verifies a charted 8 feet. Rejected 8 ft – Review, par. 5 5e(2)

The charted sunken rock at lat. 43° 54.05', long. 69° 22.8' has a depth of 3 feet according to the present survey. No development – Reject "+" – Review, par. 6a(3)c*

A depth of 5½ feet (rocky) at lat. 43° 55.14', long. 69° 22.3' is the least sounding obtained in the investigation of the 3 foot charted sounding. A depth of 10 feet at lat. 43° 55.0', long. 69° 22.37' is near a charted 17 feet. The charted soundings should be superseded by the new survey. Agree.

The rock awash charted at lat. 43° 53.76', long. 69° 21.7' was not found. A depth of 9 feet was obtained just south of this position. The spot was not investigated at low water. A further investigation by wire-drag tender is recommended when wire drag work is accomplished in the vicinity. * Retained.

CHART 312 (Print date 5/15/43) A least sounding of 9 feet (rocky) was obtained in Goose Rock Ledge at lat. 43° 56.18', long. 69° 18.7'. The reported 6 feet could not be checked after a thorough search at low water when the bottom could be seen at the 9 foot depth. The 6 feet should be removed from the chart. Agree – Review, par. 6a(1)b

The 5 feet reported depth charted off Howard Point could not be checked. The least depth obtained was 19 feet at lat. 43° 57.05', long. 69° 16.8'. It is recommended that the 5 feet be removed. Agree – Review, par. 6a(2)b

A depth of 11 feet was found at lat. 43° 55.7', long. 69° 18.53' ✓ where 31 feet is charted.

A depth of 5 feet was obtained at lat. 43° 55.52', long. 69° 18.7' ✓ just south of a charted 6 feet.

~~The least depth obtained near the 11 feet charted at lat. 43° 55.5', long. 69° 18.8' is 16 feet. Due to the irregular bottom the 11 feet should be retained.~~

The following comparison with charted soundings in the area surveyed by Launch 79 was compiled by Mr. Lovesee.

CHART 312 The 9 foot charted sounding at Channel Rock west of Hooper Point was thoroughly investigated. A least depth of 5 feet was obtained lat. 43° 56.18', long. 69° 16.80'. The charted sounding should be changed accordingly. It is marked by a black and red buoy. The area 0.15 mile northeast was covered with closely spaced sounding lines and a least depth of 22 feet was found.

The 16 foot charted sounding at Murray Ledge lat. 43° 15 55.90', Long. 69° 16.95' was thoroughly investigated. A least depth of ~~14~~ feet was obtained and should be charted. See Volume 17, page 33. ✓

The area in vicinity of Kelp Ledges now shows a least depth of 9 feet near the 12 foot charted sounding at lat. 43° 55.28', long. 69° 17.09'. Two other soundings in near vicinity of 10 and ~~11~~ 12 feet were obtained. The rock ledge which bares about ~~2~~ 22 feet at Mean Low Tide at

lat. 43° 55.20', long. 69° 17.00' was verified. Another rock ledge which bares about 8 feet at mean low tide was found at the position of the charted sounding of 6 feet, lat. 43° 55.07', long. 69° 17.07'.

A least depth of 4 feet was found on Hooper Rocks where 5 feet is shown on chart 312. This shoal at lat. 43° 54.73', long. 69° 16.85' is guarded by a red nun buoy No. "N6". See Volume 17, page 4.

The rock which ~~bares about 1 foot~~ awash at mean low water at lat. 43° 54.77', long. 69° 16.12' on Allen Ledge was verified.

The rock ledges of Hart Bar were located on the boat sheet to show the limits of mean low water.

Eighteen feet was obtained in the vicinity of the 31 foot sounding shown in about mid channel west of Marshall Point Lighthouse. See volume 17, page 59.

~~Fourteen~~ Twelve feet was obtained on the 18 foot charted sounding at lat. 43° 54.25', long. 69° 15.57'.

The 14 foot charted sounding at lat. 43° 54.40', long. 69° 15.38' could not be found. The depth found here is about 40 feet. However there is a shoal about 150 meters west where 22 feet was obtained. This shoal is well known by local lobster fishermen who have many lobster pots here. However the local men do not know of the shoal area of 14 foot shown on the chart and have no lobster pots in this area. It is recommended the 14 foot sounding be changed to the depth shown on this year's smooth boat sheet. Agree. Review, par. 5C(2).

The rock awash shown on chart 312 at Hart Island Ledges, lat. 43° 54.2½', long. 69° 16.30' was found to have about 4 feet of water over it at mean low tide. See position 11 "w" day, volume 18, page 53, Sept. 6, 1944. This 4 foot depth may change when correct tide reducer is obtained. A rock ledge which bares about 2 feet at mean low water was found about 200 meters west of this position where 17 feet is shown on chart 312. Breakers are seen on both these ledges at half tide with a moderate swell. Rejected rocks awash. Review, par. 6a(2)d

The Sisters rock ledge was found as shown on chart 312 at lat. 43° 54.25', long. 69° 16.95'. This ledge bares about 2 feet at mean low water. On a very calm day with smooth sea this ledge shows as three separate rocks. Eleven to 15 feet of water was found between these rocks as shown on the boat sheet. However with a moderate swell breakers extend all the way between the rocks making it appear as a single ledge. The ledge is guarded by black can buoy No. "C5".

The shoal at Old Horse Ledge lat. 43° 54.42', long. 69° 17.49' bares about 4 feet at mean low tide and is marked by a red beacon at topo signal Z00. See note volume 15, bottom page 4.

The 21 foot charted sounding at lat. 43° 54.32', long. 69° 18.03' was investigated and a shoalest sounding of ~~14~~ 15 feet was found. See volume 18, page 30. (12 on chart from present survey before verification)

The 6 foot sounding at Gig Rock lat. 43° 53.8½', long. 69° 17.62' was investigated. See volume 18, page 31, position 20. Seven feet was obtained but this may reduce to 5 or 6 feet with correct tide reducer. As 35 minutes was spent here running and drifting over the area using the fathometer it is believed the shoalest sounding was found. It is recommended the charted sounding be changed to the new depth. Smooth sheet value 7ft. Agree. Review par 5C(4)

Sixteen feet was obtained on the position of the 24 foot charted sounding at lat. 43° 53.57', long 69° 17.70'. See volume 18, page 49. position 33. (15 on chart from present survey before verification)

Twenty-~~seven~~ six feet was obtained on the position of the 36 foot charted sounding at lat. 43° 53.60', long. 69° 17.32'. See volume 18, page 49. position 32.

The area northeast of the rocky ledge at lat. 43° 54.55', long. 69° 17.88' is shoal for about 200 meters. It is believed the vessel of the Shepard Steamship Company which grounded here in 1941 probably was on this shoal area. The area was covered by closely spaced sounding lines. Review, par. 6a(2)c

The 18 foot charted sounding at lat. 43° 55.19', long. 69° 18.10' was investigated on Sept. 17, 1944. See volume 20, page 24, position 48. This sounding was the shoalest that could be found. The 9 foot charted sounding at lat. 43° 55.10', long. 69° 18.12' was investigated as in paragraph proceeding. The sounding at position 38, volume 20, page 22, was shoalest that could be found. It is recommended the 9 ~~and 18 foot~~ soundings on the chart be retained unless disproved at some late date by wire drag. The 16 and 13 foot charted soundings in the near vicinity were found very close to the charted positions. Agree

A sounding of ~~36~~ 34 feet was found at lat. 43° 54.50', long. 69° 17.25'. This is a pinnacle with deeper water all around. The chart shows much deeper water here. awash at extreme low tide

A pinnacle ~~with a least depth of 2 feet~~ was found at lat. 43° 55.68', long. 69° 16.58'. Chart shows 10 feet here. Local fishermen say this shoal can be waded on, if wearing boots, at low tide so this checks the depths very closely. The water is deeper all around and the ledge is not connected with the shore on Hooper Island.

N. DANGERS AND SHOALS reefs

~~The following rocky shoals~~ were reported on Form 786 - "Advance Report of Dangers to be Charted." (changed to smooth sheet values)

Depth	Latitude	Longitude
15 feet	43° 54' 470 meters	69° 17' 762 meters
25 feet	43° 56' 1070 meters	69° 17' 328 meters
~~25~~ 24 "	43° 56' 579 "	69° 18' 396 "
~~21~~ 26 "	43° 56' 361 "	69° 18' 562 "
22 "	43° 55' 1612 "	69° 18' 1154 "
~~20~~ 15 "	43° 55' 1052 "	69° 19' 342 "
~~38~~ 35 "	43° 53' 1512 "	69° 22' 880 "
~~33~~ "	~~43° 53' 1720~~ "	~~69° 23' 896~~ "
~~8~~ 5 "	43° 54' 558 "	69° 19' 530 "
22 "	43° 54' 1521 "	69° 19' 632 "
Minus -1 foot	43° 55' 110 "	69° 17' 90 "
10 feet	43° 54' 1833 "	69° 22' 488 "
9 "	43° 55' 516 "	69° 17' 123 "
5 "	43° 56' 336 "	69° 16' 1063 "
18 "	43° 55' 00 "	69° 15' 1196 "
~~14~~ 15 "	43° 54' 576 "	69° 18' 28 "
~~14~~ 12 "	43° 55' 1677 "	69° 16' 1267 "
Minus ~~-2~~ 1 feet	43° 54' 320 "	69° 16' 670 "
~~18~~ 16 feet	43° 53' 1056 "	69° 17' 924 "
~~27~~ 26 "	43° 53' 1100 "	69° 17' 436 "
21 "	43° 54' 595 "	69° 15' 691 "
22 "	43° 54' 725 "	69° 15' 659 "
~~14~~ 13 "	43° 54' 446 "	69° 15' 766 "

All dangers reported are ~~rocky shoals~~ reefs.
Charted shoals have been discussed under comparison with chart.

O. COAST PILOT INFORMATION
Information as listed in the Coast Pilot is adequate. The LYDONIA anchored northeast of Caldwell Island (lat. 43° 56.7', long. 69° 17.1') during the work in this area. The depth is 35 to 40 feet, soft gray mud and is well protected from wind and seas.

P. AIDS TO NAVIGATION
The floating aids to navigation located are indexed in a typed list in the front of volume 1. The depths at each buoy should be furnished after plotting the smooth sheet.

Q. LANDMARKS FOR CHARTS
No landmarks are recommended other than the fixed aids to navigation already charted.

R. GEOGRAPHIC NAMES
No new geographic names are recommended. L.H.

S - Z. Remaining subheadings do not apply.

Respectfully submitted

C R Reed

C. R. Reed, Lieut. Comdr. USC&GS

FORWARDED: APPROVED

L P Raynor

L. P. Raynor, Comdr C&GS
Commanding Ship LYDONIA

APPROVAL SHEET F 314 H-6997(1944)

The boat sheet was inspected daily, and the sounding records frequently. Both are approved.

L. P. Raynor

L. P. Raynor, Comdr C&GS
Commanding Ship LYDONIA

STATISTICS

Sheet 314

Date	Day L.82	Day L.79	Volume	Soundings	Positions	Statute Miles	Total Miles
6-15	a		1	2	96	14.3	21.0
6-22	b		1	2	166	31.4	39.5
6-23	c		II	6	173	28.0	37.5
6-24	d		II	3	96	14.3	27.5
6-26	e		III	4	~~187~~ 151	32.3	40.8
6-27	f		IV	6	189	30.3	35.5
6-28		a	5	3	168	23.8	26.8
6-29		b	5	9	113	12.8	17.2
7-10		c	VI	2	75	11.2	12.0
7-11		d	VI	2	73	8.3	9.3
7-12		e	VI	2	97	8.0	14.0
7-13		f	VI & VII	22	128	13.7	17.5
7-14	g		III & VIII	1	198	35.4	43.4
7-15	h		IV	13	86	10.6	15.3
7-19	j		VIII	2	171	25.0	27.7
7-20	k		IX	3	187	26.1	28.0
7-21	l		IX	1	34	4.8	9.7
7-22	m		IX	8	64	6.9	13.0
7-25		g	X	1	64	6.1	11.8
7-26	n		XI	2	155	18.5	27.4
7-27	p		XI	1	64	8.8	18.7
7-28	q		XII	3	172	19.2	29.8
7-29	r		XII	1	69	10.7	14.9
8-2		h	X	0	38	1.1	8.3
8-3	s		XII	11	133	12.7	16.7
8-4	t		XIII	3	49	4.2	11.9
8-5	u		XIII	8	156	15.7	21.5
8-6	v		XIII	6	136	19.3	23.9
8-7		j	X	3	164	26.3	30.0
8-8		k	X & XIV	9	149	24.5	27.5
8-9		l	XV	19	102	13.7	25.0
8-10		m	XIV	7	181	27.4	30.0
8-11		n	XV	9	71	9.2	16.0
8-17		p	XVI	8	120	14.6	20.7
8-18		q	XVI	2	140	18.0	21.0
8-19		r	XVII	5	137	15.2	27.0
8-20		s	XVII	9	131	17.5	25.0
8-21		t	18	7	104	9.0	19.0
8-22		u	18	6	67	7.5	13.0
8-25	w		19	5	62	7.0	17.6
8-30	x		19	1	35	4.1	8.6
9-1		v	18	4	34	4.0	10.5
9-6		w	18	20	30	1.0	5.0
9-8		x	18	10	40	3.5	13.0
9-16		y	19	2	49	3.7	11.0
9-17		z	20	10	77	6.3	18.0
9-19		aa	20	42	108	5.5	13.0
					5102		
				305	~~5138~~	669.5	

34.5 Statute miles of cross lines or 5.4% on this sheet.
17.5 Square statute miles of hydrography on this sheet.

LIST OF SIGNALS USED ON SHEET 514

REGISTRY NUMBER 6967

T-5621 (1943)

ABE
ACE
ADD
AFT
ALE
ANT
APE
AUK
BAA
BAN
BEAR
BEN
BET
BIM
BUD
BUDA
BUM
BUN
BUREN
CAB
CAL
CAM
CAN
CAP
CAR
CIG
COD
CUT
DAB
DAN
DEER (same as RIPO)
DIE
DIG
DIT
DOE
DOT
DROP
DUG
EAR
EEL
EFF
ELF
ELM
EMMA
END
ERG
ERR

T-5621 (1943)

FANG
FAR
FRED
FIG
FLO
FLY
FOP
GAG
GAR
GAS
GAVE
GEO
GERT
HAL
HAT
HAM
HEP
HIP
HOLE
HUB
IBIS
IDA
IDE
INN
IRA
JAB
JAC
JACK
JAN
JET
JON
KAT
KEG
KENO
KILL
KIM
KIT
KROZ
LEM
LIB
LING
LIN
LOG
LOP
MAG
MAT
MAYO

T-5621 (1943)

MER
MINK
MIX
MUD
MAN
NAY
NED
NIL
NUN
NUT
OAG
OAK
OAT
OIL
OLE
OLD
ORA
OSA
OWL
PAR
PAT
PAY
PEG
PIE
PON
POP
PROS
PUG
QUIZ
RAG
RAIL
REA
REX
RIG
RIM
RIPO (same as DEER)
ROE
ROSS
SAL
SAP
SHAK
SIT
SKI
SLY
SOD
SOW
SUE

T-5621 (1943)

TAB
TAG
TAX
THEO
TIN
TINK
TOBY
UKE
ULE
UNA
URE
URG
VAN
VAT
VI
VOKE
WAD
WAG
WASP
WAX
WAY
WOLF
WREN
YAK
YES
YEW
YOKE
ZAK
ZEP
ZIP
ZOE
ZOO

T-5622 (1943)

ADE
AIM
AL
AMY
ATOM
AXE
AZE
BAD
BEAR
BERT
BUG

T-5622 (1943)

CAT
CITY
CLEM
CRAM
CUR
DAR
DAV
DIP
DOG
EAT
ED
EGG
ELK
EVE
FAG
FERD
FEZ
FILL
FIN
FOX
GAY
GEM
GNU
GOB
GUT
GUY
HEN
HIE
HIT
HOG
HUS
IBEX
INK
IZY
JAY
JOE
JOG
JUT
KEA
KEN
KEY
KIL
LAG
LAK
LIE
LOON
LOR

LIST OF SIGNALS USED ON SHEET 514

REGISTRY NUMBER 6967

T-5622 (1943)	Hyrographic	TRIANGULATION		
MAC	BAT	FRANK	Franklin Island Lighthouse	1859
MAY	FINK	MAR	Marshall Point Lighthouse	1860
MOA	GOAT			
MUT	HET			
NAPU	HOOP			
NED	HOW			
NEW	IMP			
NIT	JEAN			
OPE	JIP			
OWE	KAY			
PEP	KITE			
QUE	LEE			
RAT	LOCO			
RATE	MOSS			
RAY	NAG			
REV	NEL			
ROW	NET			
SAM	OHM-located on sheet			
SIP	OUR 6968(F414)1944			
SOB	PIL			
SUP	SIGN			
SWAN	SOP-located on sheet			
TEAL	STAG 6968(F414)1944			
TOM	TREE-located on sheet			
TON	6965(F214)1944			
TOX	TUG-located on sheet			
TUG	URN 6965(F214)1944			
ULY				
USE				
VIC				
VOLE				
WHIT				
WIL				
WOHM				
WOT				
WRA				
XR				
ZED				

LIST OF SIGNALS USED ON SHEET 314

REGISTRY NUMBER 6967

T-5999 (1943)

ADA
BATE
BEA
CYN
DI
DRY
DUD
ELA
ERL
FAN
FAT
FUN
GAL
GUS
HOD
JES
LOT
LOU
MID
WAR
WIN

TIDAL NOTE

Sheet F-314, 1944 Registry No. H-6967.

The Port Cl yde Tide gage was used for all days except September 16th when the gage was out of pperation. The Burnt Island Gage was used on September 16th.

Mean Low Water is used as the plane of reference. No correction for difference in time or height need be applied.

	Latitude	Longitude	Mean low water on staff.
Port Clyde	43° 55.40'	69° 15.54'	1.7 feet.
Burnt Island	43° 52.33'	69° 17.73'	2.6 feet.

The predicted tides at Portland, Maine were used for reducers for all soundings on the boat sheet with no correction for time or height of tide.

A D D E N D U M

to accompany

HYDROGRAPHIC SHEET H-6967 (F-314 Field)

Latitude 43° 56.87' and Longitude 69° 16.64', 134 c (Red).
Note on page 32, volume 2, states "Rock 20 meters N. covered 1 ft." This note is indefinite as it is not connected by time to soundings between position 133 and 134 c (red). However, it may refer to position 134 c. No rock awash is shown on the boat sheet between position 133 and 134 c, nor on prior hydro and topo. surveys. Rock considered to be at limits of ledge line

Latitude 43° 55.89' and Longitude 69° 18.67', 21-24 s (red), Volume 12.
These 4 detached positions were taken on a shoal. On position 23 a depth of 26 ft. was obtained. Although notes in the sounding record states that shoalest depths were obtained on positions 22 ~~and 24~~, no soundings were recorded. Consider 26ft intended as least depth.

Position 62 - 66 aq (blue); See insert.
These positions were not plotted on the smooth sheet due to the fact that the information given for the shape and location of this part of dock is insufficient to make an accurate sketch. Orientation, size and high water line as shown on sketch on page 44, volume 20 do not appear to conform with data given on other sketches in the sounding volume pertaining to these docks.

Respectfully submitted,

Isadore M. Zeskind

Isadore M. Zeskind
Cartographic Engineer

Norfolk, Va.
June 15, 1945

Approved & Forwarded

Paul C. Whitney

Paul C. Whitney
Supervisor SE District

GEOGRAPHIC NAMES

Survey No. H6967

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
MUSCONGUS BAY										1
ST. GEORGE RIVER								U.S.C.B.		2
MEDUNCOOK RIVER										3
DAVIS STRAIT										4
DEEP COVE										5
										6
										7
FRIENDSHIP I.										8
CRANBERRY I.										9
CALDWELL I.										10
GAY ISLAND										11
MORSE ISLAND										12
OTTER I.										13
HOOPER I.										14
McGEE I.										15
THOMPSON I.										16
HARBOR I.										17
BARTER I										18
SEAVEY I										19
BAR I.										20
TEAL I										21
STONE I										22
HART I										23
FRANKLIN I.										24
MARSHALL PT.								U.S.C.B.		25
HOWARD PT										26
HOOPER PT										27

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GEOGRAPHIC NAMES
Survey No.

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
PORT CLYDE (town)		(location of tide staff)								1
										2
										3
CHANNEL RK										4
MURRAY LEDGE										5
KELP LEDGES										6
HOOPER RKS										7
ALLEN LEDGE										8
HART BAR										9
HART I. LEDGES										10
THE SISTERS										11
OLD HORSE LEDGE										12
GIG RK										13
GOOSE RK LEDGE										14
JENKS LEDGE										15
GAY COVE LEDGE										16
GANGWAY LEDGE										17
			Names unaltered in any approved by L. Heck on 12/7/45							18
										19
										20
Burnt Island		(location of tide staff)								21
										22
										23
										24
										25
										26
										27

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Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. H6967

Records accompanying survey:

Boat sheets 1; sounding vols. 20; wire drag vols. ....;

bomb vols. .....; graphic recorder rolls AT...;

special reports, etc. 1 envelope of Bar. Checks.....

.....

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

Number of positions on sheet		5102
Number of positions checked		318
Number of positions revised		20
Number of soundings recorded		33000 Approx
Number of soundings revised (refers to depth only)		18
Number of soundings erroneously spaced		13
Number of signals erroneously plotted or transferred		.....
Topographic details	Time	38 hrs.
Junctions	Time	—
Verification of soundings from graphic record	Time	—

Verification by R.H. Carstens. Total time 332 hrs Date Oct. 9, 1945

Review by G.T. Jordan..... Time 9 hrs 11 Date Dec. 27, 1945

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY REGISTRY NO. 6967

FIELD NO. 314

Maine, Musconguss Bay, Approaches to St. George River
Surveyed in June to Oct. 1944 Scale 1:10,000
Project No. CS-265

Soundings:

808 Fathometer
Hand lead
Pole

Control:

Three-point fix on shore signals

Chief of Party - L. P. Raynor
Surveyed by - G. W. Lovesee, M. E. Wennermark and C. R. Reed
Protracted by - A. G. Atwill
Soundings plotted by - A. G. Atwill
Verified and inked by - R. H. Carstens
Reviewed by - G. F. Jordan, Dec. 27, 1945
Inspected by - R. H. Carstens

1. Shoreline and Control

The source of the shoreline and control is stated in the descriptive report. The map manuscripts from which this detail originates have not been reviewed.

Low-water ledge limits shown in red have been transferred from the 1864-69 topographic surveys in order to supplement the detail obtained by the present survey.

2. Sounding-Line Crossings

The sounding-line crossings are in very good agreement.

3. Depth Curves and Submarine Relief

The present survey covers an inshore area of soft mud bottom extensively broken with outcroppings of rock and occasional boulders. The extensive development accomplished adequately defines the depth curves in the important areas.

The 6-ft. curve is incomplete in the cove at lat. 43° 57.2', long. 69° 16.4' inasmuch as no soundings are shown there on either the present or prior surveys.

4. Junctions with Contemporary Surveys

Satisfactory junctions with the present survey are made on the north by H-6965 (1944), on the northeast by H-6968 (1944), and on the south by H-6969 (1944). Junctions on the east and on the west will be considered in the reviews of H-6984 (1944) and H-6854 (1944).

5. Comparison with Prior Surveys

The prior surveys in this area were made between 1863 and 1868, with the addition of special investigations up to the year 1910. Those surveys are superseded within the area of the present survey, with the exception of certain soundings, bottom characteristics, and limits of ledges which have been transferred to the present survey.

The following discussion of soundings affects charts 312 and 313 which overlap between long. 69° 18' to 20'.

a. H-823a (1863) 1:40,000 scale

A few lines of this prior survey make an unsatisfactory overlap at the southeast corner of the present survey.

The 43-ft. prior sounding charted at lat. 43° 53.8', long. 69° 16.7', where it falls in present 70-ft. depths, should be disregarded. The line including the prior sounding is controlled by a revolving fix, erroneously plotted. The 43 should actually fall about 400 meters north, between the present 19 and 25 ft. shoals, according to the time between positions.

b. H-859 (1864) 1:10,000 scale

The agreement of this prior survey is very good, with the exception of discrepancies noted below:

(1) The 4-ft. prior sounding charted on a reef at lat. 43° 57.37', long. 69° 17.2', should be disregarded. The sounding was actually 4.2 ft. obtained from special investigation in 1902, plotted on H-859, and reduced from predicted tides. The present least depth of 5-ft. is adequate.

(2) The sunken rock charted from the prior survey at lat. 43° 54.42', long. 69° 15.92', should be disregarded. It actually represents a 7-ft. sounding on a rock, falling in present 8-ft. depths. The sunken rock charted 180 m. northwest represents a 4-ft. sounding on a rock falling in 8-ft. depths. The present 3-ft. and 5-ft. soundings

are considered adequate in this foul area.

(3) The 37-ft. prior sounding charted at lat. 43° 56.18', long. 69° 19.6', where it falls in present 50-ft. depths, should be disregarded. The 37 was obtained during a 90° change of course and is considered discredited by present depths.

(4) The 21-ft. prior sounding charted at lat. 43° 56.45', long. 69° 18.2', where it falls in present 25-ft. depths, should be disregarded. The sounding was reduced 1-fm. in error, actually being 27 ft.

(5) The 31-ft. prior sounding charted at lat. 43° 56.7', long. 69° 16.95', where it falls in present 34 to 36-ft. depths, should be disregarded. The 31 is one of several prior soundings on a shoal that are slightly shoaler than present depths.

(6) The two 25-ft. prior soundings, one of which is charted at lat. 43° 56.4', long. 69° 18.4', should be disregarded. The soundings, obtained 75 meters apart on a westerly course, fall in 46 to 60-ft. depths on the present survey. Present undeveloped 46-ft. depths are slightly shoaler than surrounding depths, but it is considered unlikely that there is a 25-ft. shoal of the extent indicated by the prior survey. The two 25-ft. soundings were reduced from 5 fm. soundings which were on line between 8 fms. and 10 fms. The questionable depths may actually have been 49 ft., reduced, as a leadman's call of 9 fms. has occasionally been misunderstood as 5 fms.

(7) The 33-ft. prior sounding charted at lat. 43° 54.92', long. 69° 16.0', where it falls in present 60-ft. depths, should be disregarded. Having been reduced from 7 fms.

c. H-872 (1865) 1:10,000 scale

The agreement of this prior survey covering the easterly part of the present survey is satisfactory.

(1) The 7-ft. prior sounding charted at lat. 43° 55.45', long. 69° 18.55', where it falls on a 17-ft. shoal sounding on the present survey, should be disregarded. The 7 is one of eighteen soundings with unrecorded time intervals between positions. The 7 is considered to have actually fallen on the reef 70 meters north.

(2) The 14-ft. prior sounding charted at lat. 43° 54.40', long. 69° 15.38', where it falls on the edge of the present 22 ft. shoal, should be disregarded. The development on the present survey, as reported on page 4 of the descriptive report is adequate to disprove the single shoal sounding on the prior survey.

(3) The 5-ft. prior sounding charted on the buoyed ledge at lat. 43° 54.73', long. 69° 16.85', should be disregarded. Adequate investigation on the present survey shows a least depth of 6 ft. The prior sounding was actually 5½ ft.

(4) The 5-ft. prior sounding charted on the buoyed ledge at lat. 43° 53.85', long. 69° 17.62', should be disregarded. Adequate investigation on the present survey shows a least depth of 7 ft.

(5) The 57-ft. prior sounding charted at lat. 43° 54.25', long. 69° 17.30', should be disregarded. The 57 is considered to be one of four erroneous 57-ft. prior soundings on line which fall in 66 to 90-ft. depths on the present survey.

(6) The 34-ft. prior sounding charted at lat. 43° 54.9', long. 69° 19.7', where it falls near the 60-ft. curve, should be disregarded. The leadman's call of 11 fms. was probably misunderstood as 7 fms., reducing to 34 ft. instead of 58-ft. The depths on the present survey are adequate.

(7) The following soundings should be disregarded because they are two of several consecutive soundings on prior lines that are shoaler than present depths.

57 ft. (charted) - lat. 43° 54.95', long. 69° 19.85' - in 63-ft. depths.
55 ft. (charted) - lat. 43° 53.75', long. 69° 20.0' - in 91-ft. depths.

(8) The 1-ft. prior sounding charted at lat. 43° 55.38', long. 69° 16.82', where it falls in present 9-ft. depths should be disregarded. A note in the prior records states that the line ended (1-ft. sounding) at the shoreline.

d. H-950 (1867) 1:10,000 scale

The agreement of this prior survey in the northwest area of the present survey is very good.

e. H-986 (1868) 1:10,000 scale

The comparison of this prior survey is fair; most of the disagreements arise from apparent difficulty in obtaining soundings in the deeper areas of the prior survey.

(1) The 9-ft. prior sounding charted at lat. 43° 56.2', long. 69° 20.9', where it falls in 16-ft. depths on the present survey, should be disregarded. H-986 shows 13-ft. from a special investigation in 1885 with a penciled side note that a 9-ft. depth was reported. The 11-ft. and 10-ft. soundings on the present survey 50 and 150 meters north, respectively are considered adequate.

(2) The 8-ft. prior sounding charted at lat. 43° 55.50', long. 69° 20.45', should be disregarded. The 8 was a single sounding on line. Subsequent development showed a least depth of 9 ft. the same depth found on the present survey.

(3) The following charted prior soundings as well as adjacent soundings on the same sounding lines consistently disagreed with present depth and should be disregarded.

a. 54 ft. in 68-ft. depths at lat. 43° 55.15', long. 69° 20.45'.
b. 28 ft in 35-ft. depths at lat. 43° 55.15', long. 69° 21.35'.
c. 39 ft. in 50-ft. depths at lat. 43° 55.6', long. 69° 21.5'.
d. 75 ft. in 93-ft. depths at lat. 43° 54.2', long. 69° 22.1'.
e. 69 ft. in 78-ft. depths at lat. 43° 54.55', long. 69° 22.0'.
f. 69 ft. in 78-ft. depths at lat. 43° 54.52', long. 69° 21.20'.
g. 58 ft. in 67-ft. depths at lat. 43° 54.04', long. 69° 20.38'.
h. 60 ft. in 69-ft. depths at lat. 43° 54.03', long. 69° 20.20'.

(4) The 3-ft. prior sounding charted at lat. 43° 55.14', long. 69° 22.3', should be disregarded. Investigation on the present survey resulting in a least depth of 5½ ft. is considered adequate. The 3 originated with a special investigation in 1885 and was plotted on H-986.

(5) The undeveloped 19-ft. prior sounding charted at lat. 43° 53.85', long. 69° 20.9', has been retained. The present survey shows 23 ft. from close development lines, but no detached investigation for least depth was made. The boat sheet shows an 18-ft. sounding, but no authority for it was found in the records or on the fathograms. The sounding should be noted for investigation when wire drag surveys are made in this area.

f. T-1001 (1865) 1:10,000

(1) The small bare rock charted from the prior survey at lat. 43° 53.99', long. 69° 21.4', should be disregarded. This rock is shown inside the southern limits of low water ledge line and is considered to be an erroneous representation of the ledge. Detached investigation of a kelp patch here resulted in a least depth of 2 ft. on the present survey 50 meters west of the position above.

The present survey, with indicated additions, is adequate to supersede the foregoing surveys.

6. Comparison with Chart 312 (Latest print of Aug. 4, 1945)
Chart 313 (Latest print of Sept. 1, 1945)

a. Hydrography

The charted soundings are from prior surveys and investigation already discussed, with the exception of critical soundings which were charted from the present survey before verification.

(1) Charts 312 and 313

a. The following soundings charted from the present survey before verification are in error and should be disregarded.

Lat.	Long.	Charted Depth	Ver. Depth
43° 56.6'	69° 20.55'	6 ft.	11 ft.
43° 56.8'	69° 18.2'	4 ft.	8 ft.
43° 56.65'	69° 18.0'	1½ ft.	5 ft.
43° 54.3'	69° 18.05'	12 ft.	15 ft.

b. The 6-ft. sounding charted at lat. 43° 56.18', long. 69° 18.77', should be disregarded. This depth was reported in 1889, according to a note to that effect on H-859. H-859 development shows a least depth of 11 ft. Close development lines and detached investigation were accomplished on the present survey and resulted in an accepted least depth of 9 ft.

c. No authority was found for the low water spot charted at lat. 43° 55.4', long. 69° 19.40' just south of the rock awash. A 9-ft. sounding agreeing with the present survey was charted here prior to 1916.

d. The 9-ft. sounding charted at lat. 43° 55.1', long. 69° 18.1', from an investigation by H. C. Graves in 1910, has been retained on the present 13 to 15-ft. shoal. The records for the 9, which was reported in chart letter No. 464 (1910), and shown on blueprint No. 13452, show that the depth was obtained at the time of placing a marker buoy. Close development and detached investigation was made on the present survey but the hydrographer recommends retaining the sounding.

(2) Chart 312

a. The rock awash at lat. 43° 54.8', long. 69° 16.15' is incorrectly charted. The correct position is about 50 m. southeast.

b. The 5-ft. sounding charted at lat. 43° 57.05', long. 69° 16.83' should be disregarded. This shoal sounding falling in 22 to 30-ft. depths was charted in 1916 as a reported depth but the origin of the report can not be readily ascertained. H-859 shows an undeveloped 18-ft. sounding on line. Investigation on the present survey of an area, 300 meters radius, at the reported position revealed only the accepted least depth of 19 ft. on the shoal.

c. The sunken rock reported at lat. 43° 54.6', long. 69° 17.7' should be disregarded. The symbol and note were charted from chart letter No. 590 (1941) which reported the grounding of a vessel. The existence of the extended shoal area with 5-ft. depths found on the present survey explains the grounding.

d. No authority was found for the rocks awash charted at lat. 43° 54.2', long. 69° 16.3'. Sunken-rock symbols are shown on T-960, although 5-ft. depths on H-872 were charted prior to chart recompilation in 1916. Investigation at mean low water on the present survey shows 3 and 4-ft. depths which cause heavy breakers at half tide at times of moderate swell. The sunken rock symbols on the present survey are adequate.

(3) Chart 313

a. The rock awash on the present survey at lat. 43° 54.9', long. 69° 22.4' supersedes the reported rock 100 meters southwest.

b. No authority was found for the low water spot charted at lat. 43° 55.15', long. 69° 22.25'. Five and one half feet is the least depth on this shoal as discussed in par. 5e (4).

c. No authority was found for the sunken rock symbol charted at lat. 43° 54.05', long. 69° 22.8' which should be disregarded. The present survey shows an undeveloped 3-ft. shoal. A 4-ft. sounding from H-986 was shown prior to recompilation of the chart in 1916.

d. The 11-ft. sounding charted at lat. 43° 54.1', long. 69° 21.35' from the present unverified survey should be disregarded. The 11 is considered to be scaled on the fathogram at the top of kelp. Fourteen feet is the accepted depth, although the actual depth may be nearer 18 ft.

b. Aids to Navigation

The aids located on the present survey are in agreement with the charted aids. The obstruction buoy charted at lat. 43° 55.0', long. 69° 15.92', was placed subsequent to the time of the present survey.

7. Condition of Survey

The sounding records are neat and legible; the descriptive report is comprehensive; the smooth sheet plotting is very good.

Dense reflection from kelp often obscured the profile of the bottom on the fathograms, making positive determination of the true depth impossible.

Investigation of many shoals and submerged ledges was very good, having been made at low water and including detached investigations with fathometer and hand lead.

8. Compliance with Project Instructions

Satisfactory.

9. Additional Field Work

As a matter of record, development of the following is desirable:

a. Lat. 43° 53.85', long. 69° 20.9' - 19 ft. - see par. 5e(5).

b. Lat. 43° 55.97', long. 69° 20.34' - 6 ft. - undeveloped.

c. Lat. 43° 54.1', long. 69° 21.3' - 14 ft. - see par. 6a(3)d.

d. Lat. 43° 57.2', long. 69° 16.4' - unsurveyed cove.

Inasmuch as considerable irregular bottom is included on the present survey, wire dragging is advisable to assure that least depths have been obtained on all dangerous shoals and also to assure that no additional shoals exist in apparently smooth bottom areas.

Examined and approved:

Robert W. Ward
Chief, Nautical Chart Branch

F. J. Gordon
Chief, Chart Division

Carl O. Heaton
Chief, Section of Hydrography

Raymond P. Eyman
Chief, Division of Coastal Surveys

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

July 5, 1945.

Division-of-Hydrography-and-Topography:

✓ Division of Charts: Attention: H. W. MURRAY

Plane of reference approved in
20 volumes of sounding records for

HYDROGRAPHIC SHEET 6967

Locality Friendship and Franklin Islands to Marshall Point,
Muscongus Bay, Maine.

Chief of Party: L. P. Raynor in 1944
Plane of reference is mean low water reading
1.7 ft. on tide staff at Port Clyde
13.5 ft. below B. M. 1
2.6 ft. on tide staff at Burnt Island
17.4 ft. below B. M. 1

Height of mean high water above plane of reference is 9.0 feet.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 154327

NAUTICAL CHARTS BRANCH

SURVEY NO. H6967

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
6-25-45	312	Streeter	Before ~~After~~ Verification and Review critical sdgs. only
6-25-45	313	Streeter	Before ~~After~~ Verification and Review critical sdgs. only
7/16/45	1203	L A McGann	Before ~~After~~ Verification and Review critical soundings
3/7/46	1204	L A McGann	~~Before~~ After Verification and Review partially applied — (crit. sdgs only)
~~1/13/46~~	~~313 Reconst~~ Reconst. 313	G H Everett	~~Before~~ After Verification and Review
5-8-63	Reconst 1203	M. Rogers	~~Before~~ After Verification and Review thru chart 313.
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.