

6843

6843

<p>Form 504</p> <p>U. S. COAST AND GEODETIC SURVEY</p> <p>DEPARTMENT OF COMMERCE</p> <p>DESCRIPTIVE REPORT</p>	
Type of Survey	Hydrographic
Field No.	1643
Office No.	H-6843
<p>LOCALITY</p>	
State	MAINE
General locality	COAST OF MAINE
Locality	DAMARISCOTTA RIVER & ^{Vicinity} JOHNS RIVER
<p><u>1943</u></p> <p>CHIEF OF PARTY</p> <p>L. P. Raynor</p>	
<p>LIBRARY & ARCHIVES</p>	
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-6843

Field No. 1643

State MAINE

General locality COAST OF MAINE

Locality DAMARISCOTTA RIVER & VICINITY
~~& JOHNS RIVER~~

Scale 1:10,000 Date of survey July - Sept. 1943

Instructions dated Proj. C.S.-265, dated May 7, 1941, and Supplemental Instructions dated March 11, 1942

Vessel Ship LYDONIA

Chief of party L. P. Raynor

Surveyed by Ship's Officers

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

Protracted by Louis Walter

Soundings penciled by Louis Walter

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

REMARKS: This sheet was processed at the Norfolk Processing Office.

DESCRIPTIVE REPORT

to accompany

SHEET NO. H-6843

The following descriptive report is partially written from notes furnished by the field party.

INSTRUCTIONS:

This survey was executed under authority of the Director's Instructions for Project CS-265, dated May 11, 1941 and Supplemental Instructions dated March 11, 1942.

LOCALITY:

This is a survey of Damariscotta and Johns River, Maine.

CONTROL & SIGNALS:

Triangulation previously established furnished the primary control. The topographic signals were gotten from airphoto compilations Nos. T-5991, T-5992 and T-5993, while the hydrographic signals were determined by sextant cuts.

SURVEY METHODS:

The usual method of three-point fixes was used throughout this survey. The soundings were obtained by means of the #808 fathometer and leadline.

BRIDGES:

South Bristol - Swing Bridge, steel; vehicular, one channel span of 30 feet, vertical clearance 12½ ft. at M.L.W. Owner, -Maine State Highway Commission.

OVERHEAD POWER LINES:

The overhead power line crossings at Back Narrows and Seal Cove have clearances of 46 ft. at M.H.W.

WHARVES AT EAST BOOTHBAY:

The scale of the boat sheet precluded the inclusion of depths at wharves in East Boothbay. These were obtained separately.

The Rice Brothers Corporation pier:

Runs in north-south direction

Depth of 6 ft. along face; keel line, 6 ft.

Depth of 6 ft. along west side to remains of old pier;

keel line, 6 ft.

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The coal pier:

Runs in northeast-southwest direction
Depth of 5 feet along face; keel line, 5 feet
Depth of 5 feet shoaling to 2 feet at bulkhead along east side; keel line the same.
Depth of 5 feet shoaling to 3 feet at end of dock house on west side; keel line the same

25

The Hodgdon Brothers pier:

Runs in east-west direction
Depth of 12 feet along face; keel line, 12 feet
Depth of 12 feet (at end) shoaling to 9½ feet (halfway) to 3 feet (near walkway) on south side; keel line the same.
There are ways on the north side.

The above noted piers are the only piers available except for a stone wharf which has only the face available and where there is a depth of 4 feet.

CHANNELS:

A deep water channel exists in the Damariscotta River within the limits of this sheet. Care should be observed in following deep water by East Boothbay; the east side of the river should be favored.

There is a controlling depth of 2 feet at MLW through The Gut at South Bristol and this is found at the swing bridge. Deeper water exists east and west of the bridge although the section east of the bridge is thickly congested by anchored yachts, fishing boats and lobster pot markers.

A channel for small boats is found between Rutherford and Davis Islands.

There is a deep water channel in the Johns River as far north as Latitude 43° 53.5'; north of the latitude the channel shoals rapidly.

There is a channel for small boats entering Robinson Cove north of High Island.

Channels to Pemaquid Harbor from Johns River are found on both sides of Beaver Island.

There is a channel for small boats found between Pemaquid Harbor and Pemaquid River.

ANCHORAGES:

Anchorage are plentiful in the areas embraced by this sheet. Vessels should avoid anchoring in narrow areas where the tidal currents are strong. Favored anchorages for small vessels are east of The Gut at South Bristol, Robinson Cove, McFarlands Cove and Meadow Cove. Larger vessels anchor off Meadow Cove, in McFarlands Cove, and in Pemaquid Harbor, Mud and sand bottom are fairly general in the anchorage areas.

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DANGERS:

In general, the area covered by this survey is very irregular, and abounds in rocks, rocks awash and ledges.

The charted rock awash in Latitude 43° 51.8' and Longitude 69° 34.8' was not found, although the area was visited at low water. A least depth of 1 foot was found on the spot. There are rocks awash 80 meters south by west of this location.

✓
1' sdg changed to rock awash symbol

"Advance Report of Dangers to be Charted" dated Sept. 13, 1943, were submitted to the Washington Office by the field party.

JUNCTIONS WITH CONTEMPORARY SURVEYS:

This survey joins H-6842 on the north and H-6844 on the south.

Not as yet received

STATISTICS:

Statute miles of sounding lines	385.6
Number of positions	3669
Number of hand lead soundings	201
Area in square statute miles	12.0

TIDAL STATIONS:

For the section of this survey south of the Narrows and west of The Gut in the Damariscotta River the tide records from East Boothbay should be used.

For that section of the Damariscotta River north of the Narrows tide records from the East Edgecomb gage should be used.

For Johns Bay, Johns River, Pemaquid River and other areas east of The Gut use the tide records from the Pemaquid Harbor gage.

Predicted tides for Portland, Maine were used for reducing the soundings on ^{the boat} ~~this~~ sheet.

Respectfully submitted,

Isadore M. Zeskind
Associate Cartographic Engineer

Norfolk, Va.
March 18, 1944

Approved and Forwarded

Paul C. Whitney
Supervisor, S. E. District

Note: Attention is called to a difference between the present Chart 313 at East Boothbay and bromide of airphoto compilation No. T-5991. On the chart a small channel enters into an embayment at East Boothbay. The compilation shows this closed. Apparently this difference was not investigated by the field party.

Passage probably closed by tide gates of old mill.

TIDAL NOTES

East Boothbay Gage:

M.L.W. on staff	3.8 feet	
M.H.W. on staff	12.8 "	9.0
Date and height of highest tide 8/17/43	15.7 #	
Date and height of lowest tide 7/19/43	2.0 "	

East Edgecomb Gage:

M.L.W. on staff	5.4 feet	
M.H.W. on staff	14.6 "	8.8
Date and height of highest tide 8/17/43	17.4 #	
Date and height of lowest tide 8/18/43	4.1 "	

Pemaquid Beach Gage:

M.L.W. on staff	3.7 feet	
M.H.W. on staff	12.5 "	8.6
Date and height of highest tide 8/15/43	15.3 "	
Date and height of lowest tide 9/13/43	2.1 "	

Surveys Section (Chart Division)

H6843

HYDROGRAPHIC SURVEY NO.

Records accompanying survey:

Boat sheets .1...; sounding vols. .1²...; wire drag vols.;
 bomb vols.; graphic recorder rolls .3...;
 special reports, etc. .1 envelope - Bar Checks.....

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

Number of positions on sheet	3669.
Number of positions checked	487.
Number of positions revised	.16.
Number of soundings recorded	22000 (estimate)
Number of soundings revised (refers to depth only)	.21.
Number of soundings erroneously spaced	.36.
Number of signals erroneously plotted or transferred
Topographic details	Time .32.
Junctions	Time .4.
Verification of soundings from graphic record	Time .24.

Verification by *A. P. Stiri*..... Total time .201. Date *7/18/44*.

Review by *R. H. Carstens*..... Time .47.4 Date *7/29/44*

GEOGRAPHIC NAMES

Survey No. H-6843

2	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		
	<u>Johns Island</u> ✓										1
	<u>Yr Beaver Island</u> ✓										2
	<u>Pemaquid Beach</u> ✓										3
	<u>Pemaquid Harbor</u> ✓			(village)							4
	<u>Pemaquid Harbor</u> ✓										5
	<u>Pemaquid River</u> ✓										6
	<u>High Island</u> ✓										7
	<u>Robinson Cove</u> ✓										8
	<u>Foster Cove</u> ✓										9
	<u>Western Branch</u> ✓										10
											11
											12
											13
	<u>East Edgecomb</u>										14
											15
											16
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											22
											23
											24
											25
											26
											27

NAMES LISTED IN RED APPROVED
 by L. Heck on 8/10/44

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT PHOTOSTAT OF	}	No. H H6843 No. T	{	received March 21, 1944 registered March 21, 1944 verified reviewed approved
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This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
✓ 25	Pg 18 2	<i>RS</i>	Comdr Senior
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	Comdr. R. W. Knox
----	-------------------

1 RWK

GEOGRAPHIC NAMES

Survey No. H-6843

1 Name on Survey	Sources										
	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			
<u>Maine</u>											1
<u>Damariscotta River</u>											2
<u>Johns River</u>											3
<u>Kelsey Ledge</u>											4
<u>Salt Marsh Cove</u>											5
<u>Lones Cove</u>											6
<u>Burnham Cove</u>											7
<u>Pleasant Cove</u>											8
<u>Carlisle Point</u>											9
<u>McGuire Point</u>											10
<u>Clark Cove</u>											11
<u>Long Cove</u>											12
<u>Plummer Point</u>											13
<u>Webber Island</u>											14
<u>Back Narrows</u>											15
<u>Western Ledge</u>											16
<u>Meadow Cove</u>											17
<u>East Boothbay</u>											18
<u>Caris Cove</u>											19
<u>Seal Cove</u>											20
<u>Jones Cove</u>											21
<u>McFarlands Cove</u>											22
<u>The Gut</u>											23
<u>South Bristol</u>											24
<u>Rutherford Island</u>											25
<u>Davis Island</u>											26
<u>Johns Bay</u>											27

	Remarks	Decisions
1		USGB
2		438695
3		"
4		439685
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14	Pending with USGB	438695
15		"
16		"
17		"
18		" USGB
19		"
20		"
21		"
22		" USGB
23		"
24		"
25		"
26		"
27		" USGB

Remarks

Decisions

	Remarks	Decisions
1		438695 USGB
2		"
3		"
4		"
5		"
6		"
7		"
8		"
9	Pending with USGB	439695
10		"
11		
12		
13		
14	Location of one tide staff off limits of this sheet	
15		
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HLE

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography:~~

✓ Division of Charts: Attention: H. R. EDMONSTON

Plane of reference approved in
12 volumes of sounding records for

HYDROGRAPHIC SHEET 6843

Locality Coast of Maine: Damariscotta River & Johns River

Chief of Party: L. P. Raynor in 1943
Plane of reference is mean low water reading
3.8ft. on tide staff at East Boothbay
16.6ft. below B. M. 1

5.4 ft. on tide staff at East Edgecomb
12.8 ft. below B. M. 1

3.7 ft. on tide staff at Pemaquid Beach
14.5 ft. below B. M. 1

Height of mean high water above plane of reference is 9.0 feet
at East Boothbay; 9.1 feet at East Edgecomb; 8.8 feet at
Pemaquid Beach

Condition of records satisfactory except as noted below:

Ham
Cat Chief, Division of Tides and Currents.

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6843

Field No. 1643

Maine, Damariscotta River and Vicinity
Surveyed July - September 1943; Scale 1:10,000
Instructions dated May 7, 1941 and March 11, 1942

Soundings:

Hand lead
808 Fathometer

Control:

Three-point fix on shore signals

Chief of Party - L. P. Raynor
Surveyed by - C. J. Wagner; W. F. Deane; R. H. Randall
Protracted by - L. Walter
Soundings plotted by - L. Walter
Verified and inked by - A. R. Stirni
Reviewed by - R. H. Carstens
Inspected by - H. R. Edmonston, August 4, 1944

1. Shoreline and Signals

The shoreline and signals originate with air photographic surveys T-5991 (1941), T-5992 (1941), T-5993 (1941) and sextant fixes recorded in the sounding records.

2. Sounding Line Crossings

Satisfactory.

3. Depth Curves and Submarine Relief

In this area shoals rise sharply from considerable depth and numerous ledges and rocks awash are exposed at low tides. Generally, there is deep water close inshore.

The usual depth curves could be satisfactorily drawn.

4. Junctions with Contemporary Surveys

A satisfactory junction was effected with H-6842 (1943) on the north. No surveys to the south are registered at this date.

5. Comparison with Prior Surveys

- a. H-791 (1860)
 H-903 (1866)
 H-920 (1867)

Agreement with these prior surveys is generally good over an area of irregular bottom. Differences of about 10 feet in some of the deeper depths are probably due to the different methods of surveying.

The following soundings, chart 313, differ with present survey depths and should be disregarded:

1. 37-ft. in Lat. $43^{\circ}56.22'$, Long. $69^{\circ}35.0'$ from H-903, falling in present depths of about 45 feet was incorrectly spaced and actually falls further inshore.
2. 19-ft. in Lat. $43^{\circ}55.42'$, Long. $69^{\circ}33.85'$, from H-903, falling in present depths of 23-26 feet was probably read 1 fathom in error. The original sounding was 3 fm. 1 ft. followed by 3 fm. 5 ft. and preceded by 4 fm. 3 ft. Similar depths of the present survey are only 100 meters inshore. Oe
||
3. 39-ft. in Lat. $43^{\circ}54.68'$, Long. $69^{\circ}34.54'$, from H-791, falling in present depths of about 60 feet and the 33-ft. in Lat. $43^{\circ}54.45'$, Long. $69^{\circ}34.35'$ from H-791 falling in depths of about 57 feet were probably read in error. In both cases the original sounding was 7 fathoms on a line of 11-fm. depths.
4. 6-ft. in Lat. $43^{\circ}53.9'$, Long. $69^{\circ}34.39'$ from H-791, falling in depths of about 21 feet is probably spaced incorrectly and should fall further inshore.
5. 45-ft. in Lat. $43^{\circ}52.62'$, Long. $69^{\circ}35.2'$, from H-791, falling in present depths of about 65 feet is probably plotted in error. Adjacent soundings on the same line also conflict with present survey depths. The sounding line was not identified in the sounding records of that survey.

6. 46-ft. in Lat. $43^{\circ}51.82'$, Long. $69^{\circ}31.71'$, from H-920, falling in present depths of 71 feet is probably displaced and should fall on the present shoal 100 meters to the west.
7. 22-ft. in Lat. $43^{\circ}51.95'$, Long. $69^{\circ}31.65'$, from H-920, falling in present depths of about 60 feet was found to be incorrectly spaced and falls on the present shoal 100 meters to the north.
8. 18-ft. in Lat. $43^{\circ}52.5'$, Long. $69^{\circ}31.7'$, from H-920, falling in present depths of 39 feet was incorrectly reduced and should be 24 feet. In this area cross lines on the original survey are in conflict. The sounding is probably erroneous.
9. 34-ft. in Lat. $43^{\circ}52.79'$, Long. $69^{\circ}32.9'$, from H-920, falling in present depths of about 45 feet is probably displaced and should be closer inshore.
10. 5-ft. in Lat. $43^{\circ}53.7'$, Long. $69^{\circ}33.28'$, from H-920, falling in present depths of about 13 feet is probably incorrectly spaced and should fall 90 meters to the south in present depths of 4 feet.
11. The bare rock in Lat. $43^{\circ}52.2'$, Long. $69^{\circ}35.0'$ from H-791 was not seen at 6 feet of tide and has been carried forward as a rock awash. The area was not inspected at low tide.
12. The 9-ft. sounding in Lat. $43^{\circ}53.67'$, Long. $69^{\circ}32.47'$ from H-920 is not considered disproved by the present survey and has been carried forward.

The present survey adequately reveals the configuration of the bottom and together with the sounding and rock carried forward is adequate to supersede these prior surveys within the common area.

- b. T- 994 (1865)
T- 995 (1865)
T-1032 (1866)

The following charged features from these topographic surveys differ with the present survey

determination. In most cases the differences are due to an incorrect interpretation of the prior surveys.

1. The islet charted in Lat. $43^{\circ}56.58'$, Long. $69^{\circ}35.15'$ from T-994 is part of a fish trap symbol. *H 6843 show islet and reef. 3. m. dr.*
2. The rock charted as bare in Lat. $43^{\circ}53.73'$, Long. $69^{\circ}34.72'$ from T-995 was found to be a rock baring 3 feet at MLW on the present survey.
3. The three islets in Lat. $43^{\circ}54.3'$, Long. $69^{\circ}33.95'$ charted as bare were found to bare 5-9 feet at MLW.
4. The rock charted as bare in Lat. $43^{\circ}53.52'$, Long. $69^{\circ}34.70'$ from T-995 was found to be awash at MLW.
5. The larger of two islets charted as bare in Lat. $43^{\circ}53.1'$, Long. $69^{\circ}34.15'$ from T-995 was found to bare 8 feet at MLW.
6. Several rocks charted as bare in Lat. $43^{\circ}54.3'$, Long. $69^{\circ}32.3'$, from T-1032, are shown as ledges or rocks awash on the present survey.
7. The islet charted in Lat. $43^{\circ}54.73'$, Long. $69^{\circ}32.78'$ from T-1032 is probably a low water feature. It falls close to the low water line of the present survey.
8. Numerous rocks awash charted in Lat. $43^{\circ}53.6'$, Long. $69^{\circ}30.85'$ from T-1032 represent a low water area. The present survey found no rocks in this area.
9. The three islets charted in the vicinity of Lat. $43^{\circ}53.5'$, Long. $69^{\circ}30.9'$ from T-1032 are probably low water areas and fall in present low water areas or depths of one foot.
10. The three rocks awash charted in Lat. $43^{\circ}53.2'$, Long. $69^{\circ}30.75'$ from T-1032 represent a rocky low water area.

11. The bare rock charted in Lat. $43^{\circ}53.32'$, Long. $69^{\circ}30.7'$ is carried forward as a rock awash. It was passed by the sounding party at 2 feet of tide without being noted.
12. The two islets charted in Lat. $43^{\circ}54.3'$, Long. $69^{\circ}32.7'$ from T-1032 were found to be ledges bearing 1 to 5 feet at MLW.
13. The bare rocks charted in Lat. $43^{\circ}54.25'$, Long. $69^{\circ}34.9'$ are probably rocks awash.

The present survey determination should be used in charting these features.

6. Comparison with Chart 313 (Latest print date 4-15-44)

a. Hydrography

The charted hydrography within the limits of the present survey originates largely with the previously discussed surveys which need no further consideration and with preliminary locations of dangers found in chart letters 504 (1943) and 638 (1943). The rock awash in Lat. $43^{\circ}53.08'$, Long. $69^{\circ}35.05'$ was reported in chart letter 322 (1939). The 12 ft. P. D. charted in Lat. $43^{\circ}51.68'$, Long. $69^{\circ}32.05'$ from blueprint 13452 falls in present depths of 36-65 feet. The reported sounding of 12 feet can be considered disproved.

*19' found
nearly in H6843
nothing in
3-30-45
2.m.b.*

b. Aids to Navigation

The present survey positions of aids to navigation in some cases differ by as much as 50 meters with the charted positions but they still satisfactorily mark the features intended. The uncharted mooring buoy in Lat. $43^{\circ}51.75'$, Long. $69^{\circ}33.4'$ is probably maintained by local interests.

7. Condition of Survey

Satisfactory.

8. Compliance with the Instructions for the Project

Satisfactory.

9. Additional Field Work Recommended

This basic survey was well accomplished and no additional field work is recommended.

10. Superseded Surveys

H- 791 (1860) in part
H- 903 (1866) " "
H- 920 (1867) " "
T- 994 (1865)
T- 995 (1865)
T-1032 (1866)

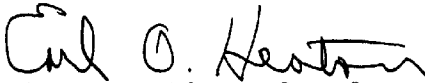
Examined and approved:



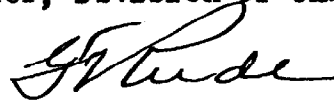
Chief, Surveys Branch



Chief, Division of Charts



Chief, Section of Hydrography



Chief, Division of
Coastal Surveys

Applied to Reconstruction of ch. 314 3/5/45 EHE
Partially applied to Ch 1204 - 3/6/45 - JFW ✓
Spot corrections applied to chart 313 6/8/45 CAM (part. applied)
1-30-78 314 (INSET) FULLY APPLIED TO INSET AFTER V, R & I. L. B. EVERHART

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994

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