

6845 a&b

U. S. COAST & GEODETIC SURVEY
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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic }
Hydrographic } Sheet No. "C & K"

State Maine

LOCALITY

Casco Bay

(a) Presumpscot River and
Middle Bay
(b) Upper part of Broad Sound

1941

CHIEF OF PARTY

Fred. L. Peacock, C&GS.

U. S. GOVERNMENT PRINTING OFFICE: 1934

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY.

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. "C"

REGISTER NO. T6845a

State MaineGeneral locality Casco Bay, Western PartLocality Presumpscot RiverScale 1:10,000 Date of survey Sep-Oct., 1941Vessel Ship OCEANOGRAPHERChief of party Fred L. PeacockSurveyed by D.E. SturmerInked by D.E. Sturmer and Norfolk Processing OfficeHeights in feet above -- to ground to tops of treesContour, ~~Approximate contour from topographic~~ feetInstructions dated May 7, 1941, 1941Remarks: Project C. S. 265

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SURVEY FIELD LETTER "C"

Casco Bay, Western Part

Maine

Mackworth Island and Presumpscot River

INSTRUCTIONS:

This survey was executed in accordance with the Director's Instructions to the Commanding Officer, Ship OCEANOGRAPHER, dated May 7, 1941, Project C.S.-265

SCALE:

The scale of this survey is 1 : 10,000.

LIMITS:

This is a hydrographic control survey for the Presumpscot River to the head of navigation with detailed shoreline of Halfway Rock, Mackworth Island, and to Latitude $43^{\circ} 41.5'$ of the Presumpscot River. A small area at the crossing of the highway and railroad bridge at Latitude $43^{\circ} 42.9'$ and Longitude $70^{\circ} 15.2'$ was also surveyed in detail. The remainder of the shoreline on this sheet is to be obtained from ^{an}air photographic surveys of this area which is contemplated in the near future.

This survey joins Graphic Control Survey Field Letter "B" on the east and Topographic Survey Field Letter "N" on the south. Both of these surveys were executed by the Ship OCEANOGRAPHER personnel this season. T-6846 (1941)

CONTROL:

Control consisted of triangulation of second and third order accuracy located by C. M. Durgin in 1933 and P. L. Bernstein in 1941. All positions are from field Computations.

SURVEY METHODS:

Standard planetable survey methods were used in locating the signals, high water line, low water line, rocks, and kindred data. In carrying the planetable control up the Presumpscot River cuts were taken from Triangulation Station GOLF to Signals TOAD and MOAT (these were the only ones that could be seen from GOLF), and to Signal MOAT from Triangulation Station HALFWAY ROCK. Planetable triangulation was then carried up the river to Signal ZAZU. From Signal TIPO to Signal 5th a traverse was run closing back on Signal TIPO.

On the north side of Mackworth Island, signals and control points were transferred from Graphic Control Survey Field Letter "B" to this sheet. These were then used for control points of this sheet. This was considered to be more advisable than to try to run a traverse around the island with many short set-ups.

TRAVERSES:

The only traverse run on this sheet was from signal TIPO (Planetable Triangulation Point) to Signal 5th and return. The closing error was two (2) meters, well within the allowable. No adjustment was made.

GENERAL DESCRIPTION:

The land areas covered by this sheet consist of low rolling hills, covered with trees and brush. Mackworth Island has some cleared spaces for cultivation but these are not very prominent from the water. The area from Signal SUNG to the MARINE HOSPITAL STACK is part of the City of Portland.

The bluffs back of the high water line vary in height from five to twenty feet. Where there are rock ledges or rocks and gravel shown outside the high water line, the bluffs will usually be rock for the first few feet with a dirt bluff the remainder of the height. This is shown as a dirt bluff as it is the predominating one of the two.

The area inside the low water line where it is some distance from the shore, is mud and shells, except along the beach where it is indicated by appropriate symbols on the survey.

JUNCTIONS:

A satisfactory junction was made with Sheet "S" on the south. This is the only junction on the Survey.

LOW WATER LINE:

The low water line was rodded in around Mackworth Island from Lat. $43^{\circ} 41.6'$, Long. $70^{\circ} 13.9'$ around the eastern end of the Island to Lat. $43^{\circ} 41.1'$, Long. $70^{\circ} 13.9'$. The remainder of the low water line is so far out in the mud flats that it was more feasible for the hydrographic party to locate it. In the area where the low water line is far out in the mud flats, next to the beach there is often a narrow strip of sand or gravel.

This has been shown on the survey by appropriate symbols to give the character of the beach and Should not be considered the low water line.

This applies to the southern part of the Presumpscot River except for the area 30 meters west of signal ENOS to 120 meters east of signal ENOS.

GEOGRAPHIC NAMES:

No investigation of geographic names was made. Mackworth Island is now locally known as Baxter Island because it was owned by ex-Governor Baxter.

RECOVERABLE HYDROGRAPHIC STATIONS:

There are no marked hydrographic stations on this survey. Prominent recoverable objects which were located are listed below and have been submitted on form 524.

Station TUNA - tall stack.

MISCELLANEOUS NOTES:

The draw span of the highway bridge across the Presumpscot River at Signal ENOS is of the single leaf bascule type. It has a horizontal clearance of 41 feet and a vertical clearance, when closed of 1 foot. A new bridge is being constructed to replace the one above.

The wooden trestle from Mackworth Island to the mainland has no draw or large opening, and the bents are so close together that it will accommodate only small boats such as skiffs.

The highway bridge near Signal ZAZU is of the fixed span type and has a horizontal clearance of 140 feet and a vertical clearance of 7 feet at Mean High Water. The railroad bridge has a much greater vertical clearance.

SPECIAL NOTE:

The grass area outside the high water line on the southern shore of the Presumpscot River may appear to be shown contrary to Field Memorandum No. 1 (1938) "Mean High Water Line in Marsh and Other Swamp Areas." issued June 20, 1938. At the high water line there is either a hard marsh, sand or in some instances gravel. Immediately back (1 to 5 meters) of this high water line is a dirt bluff ranging in height from 5 to 20 feet. Outside of the high water line the grass, which varies in height from $\frac{1}{2}$ to 2 feet, extends at an even slope to the mud flats. In most instances the high water line is a definite line (taking the large high water range into consideration) and it was felt that it should be shown with a heavy line.

The above is a condition similar to the grass outside the high water line in the lower left corner (below "C") of Fig. 1 of above mentioned field memorandum.

INKING:

The signals, the high water line, the low water line where rodged in, the bluffs, the bridges, the dolphins, the grass areas, and the projection were inked in by the Topographer. The lettering in of signals, triangulation stations, projection lines, the geographic names, etc. will be inked in by the Norfolk Processing Office.

MAGNETIC MERIDIAN:

The magnetic meridian was obtained by declinatoire for Alidade No. 207. The index error is not known.

COMPARISON WITH PREVIOUS SURVEYS:

In general outline this survey is in good agreement with Survey Register No. 755 executed in 1855. There are some small discrepancies in the back of the bays and on some points.

STATISTICS:

Number of statute miles of high water line	4.2
Number of statute miles of low water line	1.1
Number of statute miles of roads	1/2
Number of hydrographic signals located	33

LANDMARKS FOR CHARTS:

The landmarks for charts of this area have been made a subject of a separate report.

Respectfully submitted,

Dale E. Sturmer

October 29, 1941

Dale E. Sturmer, Ensign, C&GS,
U.S.C. & G.S.S. OCEANOGRAPHER.

Approved and forwarded:

Fred. L. Peacock
Fred. L. Peacock,
Chief of Party, C&GS.

*This topographic survey has
been incorporated in T-5957 (1942-43).
A comparison has been made
with contemporary hydrographic
surveys. No further review by
the Hydrographic Survey Section
is necessary at the present
time.*

R.H. Carstens 6/6/46

Remarks

Decisions

1		436700 U.S.G.B
2		436702 "
3		" "
4		" "
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GEOGRAPHIC NAMES

Survey No.

T6845a

~~Explosive~~

Name on Survey

	A, On Chart No.	B, On previous survey No.	C, On U. S. quadrangle Maps	D, From local information	E, On local Maps	F, P. O. Guide or Map	G, Rand McNally Atlas	H, U. S. Light List	
Casco Bay									1
Halfway Rock									2
Mackworth Point									3
Macworth Island									4
Martin Point									5
Presumpscot River									6
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U.S. Government Printing Office
L. Heck 11/3/42

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. K

REGISTER NO. T6845 b

State Maine

General locality Casco Bay

Locality part of
Upper Broad Sound

Scale 1 : 10000 Date of survey June, 1941.

Vessel Ship OCEANOGRAPHER

Chief of party Fred. L. Peacock

Surveyed by Charles A. Schenck

Inked by Charles A. Schanok

Heights in feet above -- to ground to tops of trees

Contour, Approximate contour, Form line interval____feet

Instructions dated May 7, 1941 1941

Remarks: _____

DESCRIPTIVE REPORT

to accompany

GRAPHIC CONTROL SHEET NO. K (FIELD)

CASCO BAY

INSTRUCTIONS:

The work covered by this report was performed in accordance with Paragraph 8, Instructions, Project C.S.-265, dated May 7, 1941, referenced 22 mjc - 1995 OC 1.

PURPOSE AND SCOPE OF WORK:

The primary purpose of this graphic control survey was to locate signals for control of hydrographic and wire drag surveys in the area. Since air photographic surveys for this area are contemplated in the near future no detailed topography was surveyed except the location of a large pleasure pier at Signal TAPE in the southwest corner of the sheet. The omission of other topographic detail is in accordance with the instructions.

LIMITS:

In general the work on this sheet covers the location of signals on the islands around Upper Broad Sound. It includes the location of all signals on Whaleboat, Little Whaleboat, Lower Goose, French, Sow and Pigs, The Goslings, and Upper Green Islands, signals on the eastern side of Bustins Island, on the northeast tip of Great Chebeag Island, and signals on the southwest shore of Harpswell Neck, and around Basin Cove in Harpswell Neck.

This sheet joins Sheet L (field) on the north, Sheet J (field) on the east, Sheet G (field) on the south, and Sheets F (field) and H (field) on the west.

T-68436(1941)
T-68437(1941)
T-68438(1941)
T-68439(1941)
T-68440(1941)

METHODS:

The work on this sheet was done in accordance with standard practice on graphic control stations. With the exception of Basin Cove all signals were located by three or more cuts from triangulation stations or previously located

graphic control stations, or by a combination of two cuts and a rod reading.

To locate the signals in Basin Cove it was necessary to run a traverse from Signal BLA located by graphic control to Triangulation Station Harpswell Neck, Basin Point, House Chimney. This traverse had a closure of 4 meters in a distance of 1.8 miles.

GEOGRAPHIC NAMES:

No investigation of geographic names in this area was made.

RECOMMENDATIONS FOR ADDITIONAL WORK:

A new detailed topographic survey of this area is recommended.

STATISTICS:

One hundred two (102) signals were located on this sheet.

LANDMARKS:

Landmarks recommended for charting in this area have been made the subject of a separate report.

Respectfully submitted,

October 8, 1941

Charles A. Schanck

Charles A. Schanck, Lt.(j.g.), C&GS,
U.S.C. & G.S.S. OCEANOGRAPHER.

Approved and forwarded:

Fred. L. Peacock
Fred. L. Peacock,
Chief of Party, C&GS.

This graphic control sheet has been compared with contemporary hydrographic surveys. No further revision by the Hydrographic Survey Section is necessary at the present time.

RH Carstens 6/6/46

Remarks.

Decisions

1		437700
2		"
3		"
4		437700
5		"
6		437700 U.S.G.B.
7		"
8		436700 U.S.G.B.
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11		437700
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GEOGRAPHIC NAMES

Survey No.

T6845b

GEOGRAPHIC NAMES		Survey No. T6845b									
Name on Survey	<div>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</div>										
	A.	B.	C.	D.	E.	F.	G.	H.	K.		
Ash Point											1
Ash Point Cove											2
Barnes Island											3
Basin Cove											4
Basin Point											5
Bustins Island											6
Bustins Ledge											7
Casco Bay											8
Curtis Cove											9
French Island											10
Grassy Ledge											11
Great Chebeag Island											12
Harpwell Neck											13
Horse Island											14
Irony Island											15
Little Whaleboat Island											16
Lower Goose Island											17
Middle Bay											18
Peter Cove											19
Pettingill Island											20
Potts Harbor											21
Shelter Island											22
Sow and Pigs											23
The Goslings											24
Upper Goose Island											25
Upper Green Island											26
											27

M 234

Remarks

Decisions

1		437 700
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M 234		

GEOGRAPHIC NAMES

Survey No.

T6845b

~~GRAPHIC INDEX~~

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

Whaleboat Island

White^s Point

Broad sound

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6

Names underlined in red approved

7

by L. Heck on 3/13/44

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M 234-

APPENDIX

to

REPORT on TOPOGRAPHIC SURVEY

K(FIELD)

MARKED GRAPHIC CONTROL STATIONS

In accordance with instructions in the Director's letter No. 22, MJC 1995 OC 4, dated August 20, 1941, six graphic control stations in the area of this survey were permanently marked with hydrographic station marks. The field work on this survey had been completed when the instructions were received so four of them were set eccentric to the located signals, tied in by distance and direction, and then plotted on the sheet.

The marks were set as follows:

KID (Lower Goose Island)

Mark set 3.75 meters (12.3 ft.) from signal KID and on line between signal KID and triangulation station BUSTIN, 1933.

BLA(Harpswell Neck, west side)

Mark has same position as signal BLA

SOCK(North end of Whaleboat Island)

Mark is set 3.81 meters (12.5 ft.) from signal SOCK and on line between signal SOCK and triangulation station Baptist Church Spire, Harpswell Neck, 1933.

PUSS (Northwest of Little Whaleboat Island)

Same position as signal PUSS

WISE (South end of French Island)

Mark is set 5.40 meters (17.7 ft.) from signal WISE and on line between signal WISE and triangulation station SOUTH FREEPORT, CASCO CASTLE, 1933. Also shown on Survey H(field)

POD (Peters Cove, Harpswell Neck)

Mark is set 3.54 meters (11.6 ft.) from signal POD and on line between signal POD and triangulation station BUSTINS, 1933.

The descriptions and positions of these marks were forwarded with Special Report, Anchorage Stations for Chart No. 201, on October 15, 1941.

John H. Brittain
John H. Brittain, Lieut. (j.g.) C&GS

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

~~No. T~~

No. T **T6845** a & b

received Nov. 28, 1941
registered Dec. 20, 1941
verified
reviewed
approved

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.

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RETURN TO

82	R. W. Knox
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W. R. Knox