

6849a&b

U. S. COAST & GEODETIC SURVEY

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6849a&b

Form 504 Rev. Dec. 1933	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
<del>XXXXXXXX</del> , DIRECTOR	
L. O. Colbert	
DESCRIPTIVE REPORT	
Topographic } Hydrographic }	Sheet No. T6849a+b
State <u>Maine</u>	
LOCALITY	
<u>Casco Bay, Broad Sound</u>	
<u>Portland Harbor, Back Cove</u>	
<u>1937</u> 41	
CHIEF OF PARTY	
<u>Fred L. Peacock</u>	

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

16849a

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. G

REGISTER NO. 6849a

State Maine

General locality Casco Bay

Locality Lower Broad Sound

Scale 1 : 10,000 Date of survey June, 1941

Vessel Ship OCEANOGRAPHER

Chief of party Fred. L. Peacock

Surveyed by Charles A. Schanck

Inked by Charles A. Schanck

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. G (FIELD)

CASCO BAY

October 8, 1941

## 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 the Western Landing Wharf of the Casco Bay Line at Signal BID at the western edge of the sheet, and the wharf used by lobster fishermen immediately north of the Casco Bay Line wharf. These are the only commercial wharves in the area not shown on current local charts. 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 Lower Broad Sound in Casco Bay. It includes the location of all signals on Stockman, Little Bangs, Stave, Ministerial, Bates, Eagle, Upper Flag, Little Birch, and Horse Islands; and the signals on the western shore of Haskell Island, part of the eastern shore of Great Chebeag Island, the southern tips of Basin Point and Potts Point on Harpswell Neck; and all rocks and islets in the vicinity of the above islands.

<sup>T-6847 a (1941)</sup>  
<sup>T-6845 b (1941)</sup> This sheet connects with Sheet E (field) to the southwest, Sheet K (field) to the north, and Sheet J (field) to the northeast.



## METHODS:

The work on this sheet was done in accordance with standard practice on graphic control surveys. Most of the signals were located by cuts from three or more triangulation stations. Others were located by a combination of cuts from triangulation stations and cuts from previously located graphic control points, or by a cut from a well-established point and resection on other known points. In the few instances where only two cuts were obtained, their intersection was verified by a rod reading from one of them.

## 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:

Seventy-two (72) signals were located by graphic control methods on this sheet.

## LANDMARKS:

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

Respectfully submitted,

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

October 8, 1941

Approved and forwarded:

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

*This graphic control survey was compared with contemporary hydrographic surveys. No further review by the Hydrographic Survey Section is necessary at this time. R.H. Carstens 6/4/46*

Completed in Norfolk Processing Office on March 4, 1942  
Geographic names from Chart # 315.

3/12/42  
Norfolk, Virginia

*Don A. Jones*  
aid, C&GS.



APPENDIX

to

REPORT for TOPOGRAPHIC SURVEY

G(FIELD) *T-6849 a*

MARKED GRAPHIC CONTROL STATIONS

In accordance with instructions in the Director's letter No. 22, MJC, 1995 OC 4, dated August 20, 1941, three 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 two of these marks 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:

ELM (Sand Island)

Same position as sign ELM, also shown on Survey  
G (field). *T-6849 a*

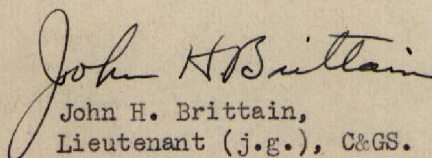
PUP (southwest point of Upper Flag Island.)

Mark is set 10.15 meters (33.3 ft.) from signal  
PUP, on extension of line through Stockman Island  
Beacon and signal PUP

TOL (on Horse Island)

Mark is 4.65 meters (15.3 ft.) from signal TOL  
and 77° to right of Merriconeag Hotel F.S. from  
signal TOL.

The descriptions and positions of these marks were forwarded with Special Report, Anchorage Stations for Chart 201, on October 15, 1941.

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



## Remarks.

## Decisions

1		437700
2		"
3		"
4	Pending with U.S.G.B.	436701
5		437701
6		437700
7	Pending with U.S.G.B.: leave space for 2 letters after Chebeque, in case it approves	437701
8	Chebeque	437700
9		437700
10		"
11		"
12	Pending with U.S.G.B.	437700
13		"
14		437700
15		436701
16		437700
17		"
18		"
19		437701
20		437700
21		"
22		"
23		"
24	For title	436700 U.S.G.B.
25		436700
26		437700
27		"



## GEOGRAPHIC NAMES

Survey No. T6849a

GEOGRAPHIC NAMES											
Survey No. T6849a											
Name on Survey											
	A,	B,	C,	D	E	F	G	H	K		
Basin Point											1
Bates Island											2
Broad Sound											3
Crotch Island											4
Crow Island											5
Eagle Island											6
Great Chebeag Island											7
Great Mark Island											8
Haddock Island Rock											9
Haskell Island											10
Horse Island											11
Little Bangs Island											12
Little Birch Island											13
Little Mark Island											14
Luckse Sound											15
Ministerial Island											16
Potts Harbor											17
Potts Point											18
Sand Island											19
Stave Island											20
Stockman Island											21
Upper Flag Island											22
Whale Rock											23
Casco Bay											24
West Brown Cow											25
Thrumcap											26
Goose Nest											27

Names underlined in red approved by L. Heck on 4/25/42

M 234

Names underlined in red approved  
by L. Heck on 4/25/42



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

T6849b

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. "N"

REGISTER NO. 6849b

State Maine

General Locality ~~Casco Bay~~ Portland Harbor

Locality Back Cove

Scale 1:5000 Date of survey July-August, 19 41

Vessel Ship OCEANOGRAPHER

Chief of party Fred L. Peacock

Surveyed by Dale E. Sturmer

Inked by D.E. Sturmer and Norfolk Processing Office

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

Contour, Approximate contour, Form line interval        feet

Instructions dated May 7, 1941, 19       

Remarks: Project C.S. - 265



# DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SURVEY - REGISTER NO. 6849b

Casco Bay, Maine

Back Cove

## INSTRUCTIONS:

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

## SCALE:

The scale of this survey is 1:5000.

## LIMITS:

This is a detailed topographic survey of Back Cove, the area between Tukey and the Grand Trunk Railway Bridge, and northward to Martin Point.

This survey joins topographic survey Reg. No. 6845a on the north and topographic survey Reg. No. 6847b on the south.

## CONTROL:

Control consisted of triangulation of the second and third order accuracy located by C.M. Durgin in 1933. The 1941 stations were located after completion of the survey. These stations were plotted on the sheet as a check on the topographic location of these objects. All positions are from field computations.

## SURVEY METHODS:

Standard planetable survey methods were used throughout. The signals were first set out from triangulation stations, and these were used as additional control points. No traverses were run on this survey.

## DESCRIPTION:

(In the following paragraphs triangulations<sup>stations</sup> are referred to as "stations" and hydrographic signals as "signals".)

From station CN to the southern end of the railroad bridge is a stone seawall about 8 feet high. The spit up to signal NEW has a cinder beach on the northern side. Also on this spit for part of the way is a trestle which supports the railroad tracks and is a continuation of the one to the westward. The trestle west of the signal NEW is in poor condition and just to the north of it are the remains (piling and stringers) of an old dock which runs parallel to the railroad tracks.

The survey sheet is self explanatory to signal SIT which is on a



corner of a wooden bulkhead. Wooden docks and bulkheads extend from signal QUN to signal ON. Then a long wooden bulkhead extends from signal ON to signal NAT. 75 meters northwest of signal NAT the fill and riprapping for Baxter Boulevard begins.

Baxter Boulevard extends all around the western and northern side of Back Cove to signal BIS. It is mainly built on reclaimed land of Back Cove by means of a fill, which forms a bluff from 5 to 10 feet high. The face of the fill is projected in most places by riprap at the waterline and grass sodding above it.

A section with all riprap protection extends from the bridge at signal GOT eastward to a point about 350 meters east of signal FAT. For the unlinked parts of the shoreline on the northwest side of Back Cove see Paragraph "Note pertaining to Field Memorandum No. 1, 1938",

The highway bridge (TUKEY BRIDGE) across the entrance to Back Cove consists of a fill with a stone seawall on either side <sup>begins</sup> extending about 200 meters to the south of signal BIS. The bridge <sup>here</sup> and extends to a point about 60 meters north of signal HOE. At the northern end of the Grand Trunk Railway a similar fill begins about 30 meters south of signal SOB and extends to the northward. (See paragraph on "Bridges")

#### BRIDGES:

The highway bridge (Tukey Bridge) across the entrance to Back Cove is of steel construction set on concrete piers. The draw span is the horizontal swing type, with south opening of the draw being used by water traffic. The draw span has a <sup>horizontal</sup> clearance of 67 feet, and a vertical clearance of 3 feet when closed. The roadway is 40 feet wide.

The railroad <sup>bridge</sup> is a wooden trestle supporting a single track. The draw span is of horizontal swing type with water traffic using the south side of the draw. The draw span has a horizontal clearance of 91 feet and a vertical clearance of 3 feet when closed.

#### LOW WATER LINE:

The only low water line rodged in is between the two bridges on the south side of the entrance to Back Cove. 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 many places the character of the beach is shown, however this should NOT be taken as the low water line.

#### NOTES PERTAINING TO FIELD MEMORANDUM NO. 1, 1938:

The inking of the high water line on the northern and western side of Back Cove may appear to conflict with the above Field Memorandum.



However, this is rather an unusual condition because of the filling in of Back Cove for the construction of Baxter Boulevard. In most places the high water line is along the fill or very close to it. Thus the high water line is quite definite. In some places such as southeast of signal FAT the high water line is a foot or more up on the rock riprap of the fill, although grass extends for 50 meters out into the cove. So it was deemed advisable in this instance to ink in the high water line.

In two places at signal JAS and northeast of signal HAT the high water line is out in the grass some distance from the fill.

This high water line was rodged in but has been left in pencil as it approximates the condition of "A", Fig. 1, Field Memorandum No. 1, 1938.

#### MAGNETIC MERIDIAN:

The magnetic meridian on this survey was taken with the declinoire for alidade No. 164, the index error for which was not known.

#### GEOGRAPHIC NAMES:

No investigation of geographic names was made.

#### JUNCTIONS:

Satisfactory junctions were made with adjoining survey.

#### COMPARISONS WITH PREVIOUS SURVEYS:

There have been so many changes that it has been difficult to make a comparison with previous surveys (1869) of this area.

#### RECOVERABLE HYDROGRAPHIC STATIONS:

CEN - Center of draw span of highway bridge.  
US - Stack  
WOP - Stack  
PEN - Center of draw span of railroad bridge

Descriptions for the above hydrographic signals have been submitted on Form 524.



## LANDMARKS FOR CHARTS:

The only landmark in addition to those shown on Chart 325 recommended for charting is:

STACK, Marine Hospital, Lat.  $43^{\circ} 41'$  plus 545 m. 17.658  
Long  $70^{\circ} 14'$  " 1039 m. 46.381

Located by triangulation by P. L. Bernstein, 1941.

## DEVIATION FROM CONVENTIONAL SYMBOLS:

Because of the large scale of the survey it was deemed advisable at times to deviate from conventional symbols. In detailing the bridges, especially the draw span, the conventional symbol would not show sufficient information and obscure essential detail.

The outlines of large wrecks were rodded in and are shown with a dashed line.

## UNSURVEYED AREAS:

On the north side of Back Cove and behind Baxter Boulevard in the vicinity of the bridges at Signals GOT, FAT, CON are sloughs which are not navigable. These were left unsurveyed under the assumption that these will be obtained from the air-photographic survey of this area. The slough of Signal NEW was surveyed before it was known that an air-photographic survey was to be made.

## INKING:

The high water line, low water line, beach symbols, bluffs, bridges, projection lines, and kindred data with the notes pertaining thereto were inked by the Topographer. The names of stations, signals, projection line numbers, projection data, and similar notes will be inked by the Norfolk Processing Office.

## MISCELLANEOUS NOTES:

In places where sawed off pilings are designated as "-- feet above mud flats" the beach is sloping and the note "bares -- feet at mean low water" would apply to the whole area.



T6849b

## STATISTICS:

Number of statute miles of high water line	7.0
Number of statute miles of low water line	0.3
Number of statute miles of roads	2.9
Number of statute miles of railroads	2.0
Number of hydrographic signals located	57

Respectfully submitted,

*Dale E. Sturmer*Dale E. Sturmer, Ensign, C&GS.  
U.S.C. & G.S.S. OCEANOGRAPHERDecember 12, 1941  
-----

Approved and forwarded:

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

*This 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*



A D D E N D U M

to accompany

DESCRIPTIVE REPORT

T - 6849 b

Back Cove

The inking on this survey including Baxter Blvd. around Back Cove, Portland was completed in the Norfolk Processing Office on March 4, 1941.

There are several signals indicated on this survey by red circles for which no hydrographic signal name was indicated. As far as could be determined, these signals were not used by the hydrographic parties and no names were assigned. The red circles indicating the unnamed signals were left on the topographic survey.

The geographic names shown on this survey in pencil were taken from Chart number 325.

This survey sheet was cleaned with particular attention to leaving penciled sections of the shoreline intact.

*Don A. Jones*  
Don A. Jones,  
Aid, C&GS.

3/11/42  
Norfolk Processing Office,  
Norfolk, Virginia.



## Remarks.

## Decisions

1		436702
2		"
3		436702
4		436702
5		"
6		"
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M 234		



# GEOGRAPHIC NAMES

Survey No. **T6849b**

Name on Survey	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
	A,	B,	C,	D	E	F	G	H	K
<u>Back Cove</u>									1
<u>Baxter Blvd.</u>									2
<u>East Deering</u>									3
<u>Portland</u>									4
<u>Turkey Bridge</u>									5
<u>Grand Trunk Railway Bridge</u>									6
									7
									8
									9
									10
									11
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									24
									25
									26
									27

Names underlined in red approved  
by L. Heck  
4/25/92 on



# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
DESCRIPTIVE REPORT  
~~PHOTOGRAPHIC~~

~~No. 11~~

No. T T6849 a & b

received March 19, 1942  
registered April 7, 1942  
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.

ROUTE		Initial	Attention called to
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RETURN TO

82	R. W. Knox
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*Perk*