DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

L. O. Colbert

DESCRIPTIVE REPORT

Topographic Plate
Hydrographic Sheet

State: Maine

LOCALITY
Gasco Bay, Broad Sound
Portland Harbor, Back Cove

1937 41

CHIEF OF PARTY
Fred L. Peacock
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. 6849a

State ... Maine ...

General locality ... Casco Bay ...

Locality ... Lower Broad Sound ...

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

Vessel ... Ship OCEANNOGRAPHER ...

Chief of party ... Fred. L. Peacock ...

Surveyed by ... Charles A. Schenck ...

Inked by ... Charles A. Schenck ...

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

Contour, Approximate contour, Form line interval ... feet ...

Instructions dated ... May 7, 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 mjo - 1935 cc l.

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.

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

October 8, 1941

Approved and forwarded:

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

This graphic control survey was completed with contemporary hydrographic surveys. No further review by the Hydrographic Surveys Section is necessary at this time.

Eld Carman, 4/16

Completed in Norfolk Processing Office on March 4, 1942

Geographic names from Chart #315.

Don A. Jones

C&GS
APPENDIX

to

REPORT for TOPOGRAPHIC SURVEY
G(FIELD) T-6849x

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-6849x

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.
<table>
<thead>
<tr>
<th>Remarks</th>
<th>Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>436701</td>
</tr>
<tr>
<td></td>
<td>437701</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td>Pending with U.S.R.B: leave space for 2</td>
<td></td>
</tr>
<tr>
<td>letters after Chebague, in case it approves</td>
<td></td>
</tr>
<tr>
<td>Chebague</td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>437701</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>436701</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>U.S.R.B</td>
</tr>
<tr>
<td></td>
<td>436700</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td></td>
<td>437700</td>
</tr>
<tr>
<td>Name on Survey</td>
<td>A</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Basin Point</td>
<td></td>
</tr>
<tr>
<td>Bates Island</td>
<td></td>
</tr>
<tr>
<td>Broad Sound</td>
<td></td>
</tr>
<tr>
<td>Crotch Island</td>
<td></td>
</tr>
<tr>
<td>Crow Island</td>
<td></td>
</tr>
<tr>
<td>Eagle Island</td>
<td></td>
</tr>
<tr>
<td>Great Chebeag Island</td>
<td></td>
</tr>
<tr>
<td>Great Mark Island</td>
<td></td>
</tr>
<tr>
<td>Haddock Island Rock</td>
<td></td>
</tr>
<tr>
<td>Haskell Island</td>
<td></td>
</tr>
<tr>
<td>Horse Island</td>
<td></td>
</tr>
<tr>
<td>Little Bangs Island</td>
<td></td>
</tr>
<tr>
<td>Little Birch Island</td>
<td></td>
</tr>
<tr>
<td>Little Mark Island</td>
<td></td>
</tr>
<tr>
<td>Luckas Sound</td>
<td></td>
</tr>
<tr>
<td>Ministerial Island</td>
<td></td>
</tr>
<tr>
<td>Potts Harbor</td>
<td></td>
</tr>
<tr>
<td>Potts Point</td>
<td></td>
</tr>
<tr>
<td>Sand Island</td>
<td></td>
</tr>
<tr>
<td>Stave Island</td>
<td></td>
</tr>
<tr>
<td>Stockman Island</td>
<td></td>
</tr>
<tr>
<td>Upper Flag Island</td>
<td></td>
</tr>
<tr>
<td>Whale Rock</td>
<td></td>
</tr>
<tr>
<td>Casco Bay</td>
<td></td>
</tr>
<tr>
<td>West Brown Cow</td>
<td></td>
</tr>
<tr>
<td>Thrumcap</td>
<td></td>
</tr>
<tr>
<td>Goose Nest</td>
<td></td>
</tr>
</tbody>
</table>

Names underlined in red are approved by L. Back on 4/30/42

M 234
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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 ... Bach Cove

Scale 1:5000 Date of survey July-August, 1941

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 ...

Remarks: ... Project C.S. - 265

...
DESCRIP TIVE 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.-285

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 1883. 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 planimeter survey methods were used throughout.
The signals were first cut in from triangulation stations, and
these were used as additional control points. No traverses were run
on this survey.

DESCRIPTION:

(In the following paragraphs triangulation stations 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 OH. Then a long wooden bulkhead extends from signal OH to signal NAT. 75 meters northwest of signal NAT the fill and riprap for Baxter Boulevard begins.

Baxter Boulevard extends all around the western and northern side of Back Cove to signal RIS. 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 protected 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 extending about 200 meters to the south of signal RIS. The bridge starts and extends to a point about 60 meters north of signal HOB. 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 openings of the draw being used by water traffic. The draw span has a clearance of 67 feet, and a vertical clearance of 3 feet when closed. The roadway is 40 feet wide.

The railroad bridge 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 rodded 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 rodded 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 declinatioro for alidade No. 104, 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° 41' plus 545 m.  
Long 70° 14' " 1039 m.

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 riddled 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 GOL, FAT, NDN 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.
STATISTICS:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of statute miles of high water line</td>
<td>7.0</td>
</tr>
<tr>
<td>Number of statute miles of low water line</td>
<td>0.3</td>
</tr>
<tr>
<td>Number of statute miles of roads</td>
<td>2.9</td>
</tr>
<tr>
<td>Number of statute miles of railroads</td>
<td>2.0</td>
</tr>
<tr>
<td>Number of hydrographic signals located</td>
<td>57</td>
</tr>
</tbody>
</table>

Respectfully submitted,

Dale E. Sturmer
Ensign, C&GS.
US.C. & G.S.S. Oceanographer

December 12, 1941

Approved and forwarded:

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

This survey has been incorporated in T-5957 (1941-47). A comparison has been made with contemporaneous hydrographic surveys. No further review by the Hydrographic Survey Section is necessary at the present time.

R.H. Carstens 6/14/46
ADDENDUM

to accompany

DESCRIPTIVE REPORT

T - 6349 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.

3/11/42
Norfolk Processing Office,
Norfolk, Virginia.
<table>
<thead>
<tr>
<th>Name on Survey</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back Cove</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Baxter Blvd.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>East Deering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Portland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Turkey Bridge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Grand Trunk Railway Bridge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Names underlined in red approved by 4/12/1942 on
MEMORANDUM
IMMEDIATE ATTENTION

SURVEY DESCRiptIVE REPORT

No. T 6849 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.

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>Initial</th>
<th>Attention called to</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RETURN TO

82 R. W. Knox

[Signature]