

6844

U. S. COAST & GEODETIC SURVEY

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Form 504-  
Rev. Dec. 1933  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
R. S. PATTON, DIRECTOR

## DESCRIPTIVE REPORT

Topographic }  
~~Hydrographic~~ } Sheet No. "B"

State Maine

### LOCALITY

Great Diamond Island

Casco Bay

1941

### CHIEF OF PARTY

Fred. L. Peacock, C&GS.

U. S. GOVERNMENT PRINTING OFFICE: 1934

6844

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. B

REGISTER NO. **T6844**

State Maine

General locality Casco Bay

Great Diamond Island

Locality ~~Fort Knox, Casco Bay, Maine~~

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

Vessel Ship OCEANOGRAPHER

Chief of party Fred. L. Peacock

Surveyed by Don A. Jones

Inked by Don A. Jones

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

Contour, Approximate contour, Form line interval -- feet

Instructions dated May 7, 1941, 19

Remarks: \_\_\_\_\_

# DESCRIPTIVE REPORT

to accompany

## TOPOGRAPHIC SURVEY FIELD LETTER "B"

### FALMOUTH FORESIDE to LONG ISLAND

#### INSTRUCTIONS:

This survey was executed in accordance with Paragraphs 8, 9 and 10 of the Instructions, Project C.S.-265, dated May 7, 1941.

#### SCALE:

The scale of this survey is 1 : 10,000, which is the scale of the hydrographic and wire drag surveys in this area.

#### LIMITS:

This survey covers the area included within the following: Long Island on the northeast; Peaks Island on the southeast; Mackworth Island on the southwest; and Falmouth Foreside on the northwest.

On this survey, in accordance with Paragraphs 9 and 10 of the Instructions, a limited topographic survey (high water line, low water line, and water front improvements) was made of Great Diamond Island, the northern side of Peaks Island, Cow Island, Long Island west of longitude  $70^{\circ} 10' W.$ , and the islets included within these islands. A graphic control survey only was made of the rest of the area included in this survey.

#### CONTROL:

Triangulation. The triangulation control used in executing this survey consists of sixteen (16) stations shown on the survey by red triangulation symbols. The triangulation was established by C. M. Durgin, 1933, and the geographic positions used on this survey were on the North American 1927 datum (unadjusted).

Following is a list of the triangulation control:

Brothers, 1909  
Moody, 1850  
Golf, 1933  
Falmouth Brown Memorial Ch. Spire, 1933  
Falmouth Standpipe, 1933  
Clapboard, USE, 1909  
Little Chebeag, 1933  
Cow Island Ledge Light, 1933  
Cow Island Search Light Tower, 1933  
Cow, USE, 1909  
Long Island Windmill, 1933  
Long Island Ch. Cross, 1933  
Long, USE, 1933  
Overset, USE, 1933  
McKinley, USE, 1909  
McKinley Water Tank, 1911

Graphic Control. The positions of all control points located on this survey were established by C. A. Schanck, Lieut.(jg), C&GS, and D. E. Sturmer, Ensign, C&GS, in accordance with standard practice on graphic control surveys. All signals were located by three or more cuts or by a combination of two cuts and a rod reading, or from previously located graphic control stations.

All control points located on this survey were for the control of hydrographic, wire drag, and topographic surveys in this area. These control points are indicated on the survey by red circles with hydrographic signal name adjacent thereto, and in red.

#### TOPOGRAPHIC DETAIL:

All detail was shown on this survey in accordance with instructions regarding detailing, Special Publication No. 144, Topographic Manual.

Mean High Water Line. The mean high water line delineated on this survey is extremely irregular, consisting generally of sharp broken rock-bluffs and rock ledges. The high water line frequently is plainly marked by <sup>the</sup> upper limit of the growth of barnacles on these rocks. Along the very few places having a more gentle slope, the character of the sand beaches and vegetation combined with a tidal range of high water of as much as four feet, prevented positive identification of the mean high water line.

Low Water Line. The low water line within the limits of the detailed shore line topographic survey was located and is shown on the survey by standard symbols indicating the character of the area between the high water line and the low water line. All off-lying features are shown and labeled accordingly.

Detail. All water front improvements within the limits of the topographic survey are shown on this survey. The bluff symbol shown on this survey indicates only the presence of a bluff and does not, in general, indicate the height of the bluff or its character.

#### COMPARISONS WITH PREVIOUS SURVEYS:

A comparison of the mean high water line as delineated on this survey was made with the high water line as shown on Topographic Surveys T-735 (1854-57) and T-755 (1854-59).

In general the high water lines agree closely except in minor detail. The northern side of Pumpkin Nob, Latitude  $43^{\circ} 40.5'$ , Longitude  $70^{\circ} 11.0'$  as shown on T-735 extends to a point approximately 45 meters north of the high water line as determined on this survey. The islet 950 meters northeast of Pumpkin Nob is considerably smaller than as shown on T-755. Cow Island also is shown on this survey much smaller than as shown on T-735. The entire shore line of Hussey Sound is subject to current and wave action and despite the substantial character of the rocky shore line some of the discrepancies between this survey and those made in 1854-59 may be due to erosion over an 80-year period.

#### JUNCTIONS:

Satisfactory junctions were made with Topographic Survey Letter "D" on the south and Graphic Control Surveys "A" and "E" on the north.

#### MAGNETIC MERIDIAN:

A magnetic meridian was determined by C. A. Schanck by declinoire (Alidade No. 208) on this survey on May 6, 1941 at 1:50 P.M. (60th meridian time) at Triangulation Station Little Chebeag, 1933. The unadjusted magnetic variation for this determination equaled  $16^{\circ} 08' W$ .

#### RECOMMENDATIONS FOR ADDITIONAL WORK:

The shore line topography executed on this survey is believed to be complete in all detail of importance for charting and no additional surveys are required.

A complete topographic re-survey of the area covered only by graphic control on this survey is recommended. The present high water line in these areas appears to vary in minor detail at many points from the high water line as shown on Topographic Survey T-755 (1854-59).

#### GEOGRAPHIC NAMES:

The geographic names shown on this survey in pencil are listed in the appendix.

#### LANDMARKS:

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

Three landmarks within the limits of this survey were recommended for deletion, namely: PROMINENT TANK, Great Chebeag Island; WINDMILL, Long Island; and TOWER, Cow Island.

Three objects within the limits of this survey located by triangulation by C. M. Durgin, 1933 and shown on Chart No. 201 as landmarks, namely: CHURCH CROSS, Long Island; TOWER, Falmouth; and COW ID. LEDGE LT. were recommended for retention as landmarks.

Six control points located on this survey were also recommended as landmarks for charting. These six points are:

FLAG POLE, Gr. Diamond Id.,	Hydro Signal	FLAG
LIGHT (Priv. Maint'd.) Gr. Dia. Id.,	"	POT
DOCK HOUSE (POLE), Long Id.,	"	POL
CROW ISLAND LIGHT, Crow Id.,	"	LIT
BLDG.(S.E. Gab.), Falmouth Foreside,	"	MET
CUPOLA (School), Long Id.,	"	LOG

RECOVERABLE HYDROGRAPHIC AND TOPOGRAPHIC STATIONS:

The above six control points recommended as landmarks were also submitted on Form 524 as recoverable topographic stations. In addition, the following control points were also submitted as recoverable stations on Form 524:

POD (Hydrographic Mark)  
PUM (Hydrographic Mark)  
POI (Hydrographic Mark)  
WALL, USE  
GRANITE, USE  
WOOD  
TWO  
UBI  
CUP  
PEW  
ZIG  
DOOR

The mark established at Signal POD is set 4.27 meters from Signal POD on range with Signal NOB.

STATISTICS:

Field work began. . . . . May 6, 1941  
Field work was completed. . . . . June 18, 1941  
Number of days of field work. . . . . 8  
Statute miles of shore line . . . . . 9.1  
Number of hydrographic signals located. . . . 85  
Number of recoverable  
    topographic stations submitted. . . . . 18  
Number of triangulation stations recovered. . 16

Respectfully submitted,

October 31, 1941

*Don A. Jones*

Don A. Jones, Ensign, C&GS,  
U.S.C. & G.S.S. OCEANOGRAPHER.

Approved and forwarded:

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

# APPENDIX

to

## REPORT FOR TOPOGRAPHIC SURVEY FIELD LETTER "B"

GEOGRAPHIC NAMES	C&GS CHART 201	LOCAL INFORMATION
Great Diamond Id.	✓	✗ X
Cow Id.	✓	X
Peak Id.	✓	✗ X
Pumpkin Nob	✓	✗ X
Overset Id.	✓	X
Long Id.	✓	✗ X
Crow Id.	✓	X
Diamond Cove	✓	X
Hussey Sound	✓	✗ X
Soldier Ledge	✓	X
Ponce Ldg.		Sign on Landing
Fort McKinley Military Res.		Sign & X

✗ Sgt. S. A. Wheelden, Fort McKinley, Portland, Maine.

✗ Fred McKeel, Peaks Island, Portland, Maine.



## Remarks.

## Decisions

1		436 700 U.S.G.B
2		437 701
3		436 701
4		"
5		436 701
6		436 701 U.S.G.B
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9		"
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## GEOGRAPHIC NAMES

Survey No. **T6844**

GEOGRAPHIC NAMES											
Survey No. T6844											
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	K		
Casco Bay											1
Clapboard Island											2
Cow Island											3
Crow Island											4
Diamond Cove											5
Great Diamond Island											6
Hussey Sound											7
Long Island											8
Overset Island											9
Peak Island											10
Pumpkin Nob											11
Soldier Ledge											12
The Brothers											13
Ponce Landing											14
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											27

Names underlined in red approved

by L. Hew on 3/13/42

M 234

Names underlined in red approved

by L. Heck on 3/13/42

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
DESCRIPTIVE REPORT  
~~PHOTOGRAPH~~

~~NO. 44~~

No. T T6844

received Nov. 10, 1941  
registered Dec. 18, 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.

ROUTE		Initial	Attention called to
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RETURN TO

82	R.W. Knox
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*Paul.*