

2696

Diag. Chy. No. 1202

Form 504



U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey *Hydrographic*
Field No. Office No. *2696*

LOCALITY

State *Maine*
General locality *Frenchman's*
Locality *Bay*

1904

CHIEF OF PARTY

P. A. Welker

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COAST AND
GEODETIC SURVEY

DEC 23 10 10 AM 1904

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FILED DEPARTMENT OF COMMERCE AND LABOR,
REFERRED ~~Treasury Department,~~
U.S. COAST AND GEODETIC SURVEY.

O. H. Tittmann,
Superintendent.

State: Maine.

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 2696 * 2765

LOCALITY:

Frenchman's Bay.

1904.

CHIEF OF PARTY:

P.A. Welker, Assist., C. & G.S.

U. S. C. & G. SURVEY,
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2696

POST-OFFICE ADDRESS: See address at the Office.

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

Department of Commerce and Labor

COAST AND GEODETIC SURVEY Str. "BACHE",

Navy Yard, Boston, Mass.,

November 29, 1904.

Mr. O. H. Tittmann,

Superintendent, Coast and Geodetic Survey,

Washington, D.C.

ACKNOWLEDGED

DEC 27 1904

C. & G. SURVEY ARCHIVES

S i r :

1. In obedience to Instructions and Memoranda for Descriptive Reports, 1887, I have the honor to submit the following report on Hydrographic Sheet, No. 2696 :

2. The lines shown upon the sheet cover the area of that part of Frenchman's Bay, Maine, over which was swept a wire drag, 1000 feet long, sunk to the average depth of 52 feet. For a full description of the drag and the method in which it was used, reference can be made to that portion of my annual report, covering the period from July 1st. to November 15th., 1904, which has already been transmitted to the office. The endeavor was to sweep all of that portion of the Bay outside of the eight fathom curve. The wire was sunk by weights to the proper depth, and was supported by eleven buoys, approximately 100 feet from one buoy to the next. When the apparatus was in use, it was towed by three launches, one at each end buoy and one attached to the middle buoy. The lines on the sheet represent the courses taken by the two end launches, it being always possible in this manner to locate any

area not covered by the sweep. As it had been demonstrated that the shortening of the depth dragged, due to the resistance of the water while towing, was not over 4 feet, it is certain that it was constantly at a depth of 48 feet, and as the rise and fall of the tide does not exceed 12 feet, it is safe to assume that the drag, while in use, was always at least 36 feet below the surface. When an obstruction was struck with the drag, the spot was marked by a buoy and afterwards carefully developed by the use of sounding lead and line and supplemental drag.

3. Frenchman's Bay with its tributaries is upon an average about ten miles long and five wide, and is situated between Mt. Desert Island and Schoodic Peninsula. The shores are generally bold and rocky with high hills and mountains rising in nearly all directions. The water of the bay is very deep with few obstructions below the surface, navigation is safe for the deepest draft vessels, there are no shifting bars, and generally speaking it is only necessary to keep a reasonable distance from the shores and reefs plainly indicated on the chart. The bay is divided into two nearly equal sections, north and south, by a chain of islands extending from Bar Harbor almost directly east to Stave Island Harbor. North of these islands, navigation is sometimes closed by great obstructions of ice.

4. The entire region around the shores of the bay is a popular summer resort, with many small towns and settlements scattered about, but with no commercial or agricultural importance. Bar Harbor in the town of Eden, the chief centre and most popular resort, is a place of about four thousand permanent inhabitants,

it is situated on the Western side of the bay, on the island of Mt. Desert. Several mountain peaks rise abruptly above the town, the highest of which being Green Mountain, rising to an altitude of 1532 feet. The harbor is located in a cove of the island and is fairly well sheltered to the North and East by a group of islands. From the South it is partially protected by an island and a breakwater. Generally speaking the water in the harbor is very deep, the bottom is rocky and poor holding ground, excepting a small portion near the upper end, with the wind from south to southeast there is always a swell and the harbor could not be considered a safe place for riding out a gale from either of these quarters. The anchorage limit is defined by buoys, as a clear place must be left for vessels coming to and leaving the wharves. At low tide there is from 10 to 13 feet of water alongside of the steamboat wharves.

5. Vessels of low draft can obtain coal and water at the wharves, but for over eight feet draft, coal should be obtained from lighters, and water from the boat in the harbor which is prepared to supply vessels upon short notice. During the working season of 1904, the price of coal delivered on board of the steamers "Bache" and "Blake", was \$5.75 for a ton of 2000 lbs., and the price of water delivered on board was from 35 to 50 cents per one hundred gallons. There are no machine shops or facilities for repairs to vessels anywhere about the entire bay, the nearest and best place for machine work being Bangor. Provisions can be obtained in abundance at Bar Harbor, but the prices are rather high. The nearest railroad connection is at Mt. Desert Ferry, in Sulliv-

ans Harbor, about eight miles to the northward of Bar Harbor, which is connected by a regular steamboat line; communication by steamboat, rail, mail and telegraph are good over the entire locality about the bay.

6. Mt. Desert Ferry is a terminus of the Maine Central Railroad; further than the facilities to be obtained from the railroad, there is nothing of importance at this station. It is situated on Sullivans Harbor in the vicinity of which there is at all times a good safe anchorage. Flanders Bay and a portion of Eastern Bay are also good safe anchorages, but here the facilities for supplies and general communication are not so good.

7. Stave Island Harbor on the Eastern side of Frenchman's Bay, is by far the safest place in that region for a vessel to ride out a gale, and when the ice does not prevent an entrance, it should be selected by vessels seeking a safe shelter from storms. There is good holding ground in from 4 to 6 fathoms.

8. During a severe winter, when the ice makes it very difficult to enter the upper part of the bay, Winter Harbor should be selected in seeking shelter. It is exposed from the southward, but there is good holding ground, and a very heavy swell seldom enters the upper part of the harbor.

9. During the months of August and September while engaged in this region, the weather was generally fair and very favorable for work, there were few storms and these could not be considered unusually severe. During the month of October, there were many fresh to heavy wind strong enough to prevent field work, but oth-

erwise not dangerous. The October winds were usually from north-west around to northeast.

10. A vessel in going ashore upon the outer coast would not hold together long, and upon such an occurrence it would be advisable to abandon it as soon as possible.

11. The nearest Marine Hospital is at Portland, Maine,

12. The following is a summary of the work accomplished as represented upon the sheet:

Area dragged in square statute miles -----	43.5
Number of statute miles dragged-----	331.5
Number of angles measured -----	8490.
Number of soundings-----	433.
Number of tidal stations established -----	2.
Number of signal poles erected -----	17.
Number of stations occupied for determining points--	17.
Number of geographical positions determined with plane table-----	39.

Very respectfully,

P. A. Welker -

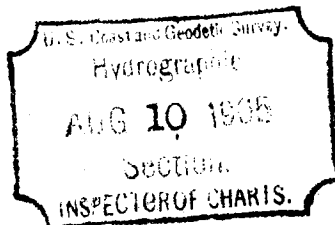
Assistant, C. & G. Survey,
Commanding.

Report
on
Hydrographic Sheet
No. 2696.
Frenchmans Bay,
Drag Sheet,
Me.
Assistants Welker and Faris,
1904,

The protracting and plotting were well done and the records well kept.

The blue tinted surface shows ground not covered by drag. The drag was set to measure a depth of 36 ft. at mean low water.

H.L.Simons. (Signed).



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COAST AND
GEODETIC SURVEY

2696

DEC 23 10 16 AM 1904

FILE:
REFERRED:

ASSISTANT IN CHARGE

Treasury Department,
U. S. COAST AND GEODETIC SURVEY.

C. H. Tittmann

Superintendent.

State: *Maine*

DESCRIPTIVE REPORT.

Plane Table Triangulation Sheet
to accompany
Hydrographic Sheet No. 2696

LOCALITY:

Frenchman's Bay

1904

CHIEF OF PARTY:

L. A. Wilkes, Assistant

U. S. C. & G. SURVEY,
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POST-OFFICE ADDRESS: See address at office.

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

Department of Commerce and Labor

COAST AND GEODETIC SURVEY Str. "Bache",

Boston, Mass.,

Nov. 26th, 1904.

Mr. O. H. Tittmann,

Superintendent, Coast and Geodetic Survey,

Washington, D. C.

ACKNOWLEDGED

DEC 27 1904

C. & G. SURVEY ARCHIVES

S i r :-

In obedience to Instructions and Memoranda for Descriptive Reports, 1887, I have the honor to submit the following report on *Plane Table Triangulation to accompany Hydrographic Sheet* Topographic Sheet, No. 2696 :

2. The work consists of a plane table triangulation for the location of points for hydrographic purposes in Frenchman's Bay, Maine. The shore line shown upon the sheet was roughly sketched at the office. No further description is considered necessary.

Very respectfully,

P. A. Walker.

Assistant, C. & G. Survey,

Commanding.

2696

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DEPARTMENT OF COMMERCE AND LABOR

Coast and Geodetic Survey

O. H. Tittmann, Supt.

PLANE TABLE SHEET

Showing Plane Table Triangulation

in

Connection with Hydrography

of

Frenchman's Bay

Maine

BY

Assistant P. A. Welker, Chief of Party

C. & G. Survey Steamer "Bache"

August, 1904

Scale: 1/20,000

NOTE = Shore line roughly sketched
in by office.

PLANE TABLE POSITIONS.

NAMES	SIGNALS - DESCRIPTION	LAT.	D.M.	LONG.	D.P.
POINT	Cup.of Mouse, Crabtree Point	44° 27'	1745	68° 13'	672
MASON	Hyd. Signal, Crabtree Point	44° 27'	1552	68° 13'	1135
CUP	Fl'g pole on Cupola, Sorento	44° 28'	634	68° 11'	682
SPIRE	Church Spire at Sorento	44° 28'	795	68° 11'	432
STACK	Iron Smoke Stack at Sorento	44° 28'	740	68° 11'	253
LITTLE	Hyd. Sig. on Little Calf Id.	44° 27'	503	68° 09'	204
PEN	Chimney on Ho., Meadow Point	44° 27'	749	68° 16'	829
STAF	Flagstaff at Naval Coaling Sta.	44° 27'	81	68° 17'	1132
SAL	Church Spire, Salisbury	44° 25'	1600	68° 17'	412
POT	Pavillion, Pot & Kettle Club Ho	44° 26'	228	68° 15'	349
SMOKE	Iron Smoke Stack	44° 25'	1593	68° 07'	197
VENT	Ventilator on White Building	44° 25'	1266	68° 06'	1308
BLAKE	Hyd. Signal on Stave Island	44° 25'	1026	68° 08'	638
BALD	Hyd. Sig. on Bald Rock Ledge	44° 25'	415	68° 12'	920
OBS	Observing Tower	44° 24'	342	68° 05'	1157
RED	Peak of Red Roof	44° 24'	1160	68° 06'	886
WINDOW	Prominent Dormer Window	44° 24'	1126	68° 07'	230
EAST	East Gable of Small House	44° 24'	392	68° 07'	1034
SOUTH	South Gable of Large House	44° 24'	361	68° 07'	1022
BACHE	Hyd. Signal on The Hop	44° 24'	1433	68° 09'	486
LONG	B.& W.Flag in tree, Long Por?I	44° 24'	332	68° 10'	34
BURNT	B.& W.Fl'g in tree,Burnt Por.Id	44° 24'	563	68° 10'	953
SHEEP	B.& W.Fl'g in tree,Sheep Por.Id	44° 23'	1829	68° 11'	802
BAR	On Bar Island	44° 23'	1684	68° 12'	411
HIGH	Cupola of House	44° 23'	820	68° 13'	518
PIKE	Hyd.Sig.on Bald Porcupine Id.	44° 23'	385	68° 10'	1166
IRON	Hyd.Sig.on Iron Bound Island	44° 23'	1117	68° 08'	1116
TREE	Prominent Tree	44° 23'	291	68° 08'	169
PIPE	Standpipe on Grindstone Neck	44° 22'	1680	68° 05'	982
CROW	Hyd.Signal on Crow Island	44° 22'	1580	68° 06'	483
BOUND	Hyd.Sig. on Iron Bound Island	44° 22'	1220	68° 08'	584
TAR	Hyd. Signal	44° 21'	1620	68° 04'	807
TURTLE	Hyd. Sig. on Turtle Island	44° 21'	280	68° 05'	1039
POLE	Pole in Tree	44° 21'	1533	68° 06'	218
THRUM	Hyd. Sig. on Thrumpcap	44° 21'	1503	68° 10'	843
TOWER	Tower of House	44° 21'	1677	68° 11'	240
MID	Middle Chimney	44° 21'	1291	68° 11'	29
FLAG	Flagstaff, residence,Mrs.Franci	44° 20'	1500	68° 10'	995
STAKE	Hyd. Signal, Iron Bound Id.	44° 23'	1661	68° 07'	831

Number of signals of which the locations were determined - 39



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DEPARTMENT OF COMMERCE AND LABOR, Census Department.	
U. S. COAST AND GEODETIC SURVEY.	
O. H. Tittmann	
Superintendent.	
State: Maine	
DESCRIPTIVE REPORT.	
Hydrographic	Sheet No. 2696
	267
	14535
	2765
LOCALITY	
Frenchman's Bay	
and	
Tributaries	
1905	
CHIEF OF PARTY:	
P. A. Walker, Assistant	

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2696

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POST-OFFICE ADDRESS: Foot of Covington Street, Baltimore, Md.

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

U. S. COAST AND GEODETIC SURVEY. Str. "Bache",

Baltimore, Maryland,

Dec. 14th, 1905.

Mr. O. H. Tittmann,

Superintendent, Coast and Geodetic Survey,

Washington, D. C.

S i r :-

In obedience to Instructions and Memoranda for Descriptive Reports, 1887, I have the honor to submit the following report on Hydrographic Sheets Nos. 2696, 2673, 1453^b and 2765:

The work consists of special examinations in the vicinity of Frenchman's Bay and Tributaries, Maine. A complete report of this region was made in the Descriptive Report on Hydrographic Sheet No. 2696, dated November 29th, 1904, and no further descriptive report is considered necessary.

Very respectfully,

P. A. Walker

Assistant, C. & G. Survey,

Commanding.

Department of Commerce and Labor

Hyd Sheet #2765
with 2696

The plotting was well done and the records
kept in a satisfactory manner.
Good work is shown by the colored sounding
lines.

A. L. Simmons

Jan 6 '1906

2696bis

U. S. C. & G. SURVEY,
LIBRARY AND ARCHIVES,

NOV 7 - 1905

DEPARTMENT OF COMMERCE AND LABOR Acc. No.

Coast and Geodetic Survey

O. H. Tittmann, Supt.

-----000-----

FRENCHMAN'S BAY

MAINE

Examination of Shoals

-----000-----

P. A. Welker, Assistant, Chief of Party

STEAMER "BACHE"

-----000-----

BEGUN Sept. 19

ENDED Oct. 9

1905

-----000-----

SCALE; 1:20,000

-----000-----

Positions protracted by Wm. Sanger, C. C.

Soundings plotted " " " "

S T A T I S T I C S

Date	Let.	Vol.	Angles	Soundings	Miles	Boat
Sept.19	A	1	74	53	5.1	Str. Bache
" 20	B	1	52	0	3.4	" "
" 22	C	1	88	28	9.1	" "
Total----		1	214	81	17.6	
Sept.25	a	1	164	320	5.7	Launch #31
" 27	b	1	130	289	4.8	"
" 28	c	1&2	206	706	10.4	"
Total----		2	510	1315	20.9	
Sept.21	a	1	240	300	10.4	Coal Burning Launch
" 25	b	1	146	280	5.1	"
" 27	c	1	90	150	4.2	"
Total----		1	476	730	19.7	
Grand Total		4	1200	2126	58.2	1 Sq. Mile

*Verified and inked by
H. L. Simmons*

Department of Commerce and Labor

In all of this work the ground is well covered. The colored sounding lines show where drag was used.

In the examination between Lat. $44^{\circ}26'5''$ and $44^{\circ}27'$ and Long. $68^{\circ}17'$ and $68^{\circ}18'$ the 24 ft spot shown on Hyd. Sheet #1245^a was not dragged. The lead line shows nothing less than 44 ft.

The position of the 16 ft sounding in the same vicinity, near #14 blue C day is doubtful the sounding having been taken while boat was drifting. The records indicate however that it was taken very near if not at the position plotted.

The records were well kept.

A. H. Simmons

306 Records. App. thru 306-205 + 204 Helmer 7/15/62