

3982

Diag. Cht. No 1222-2

Date L. G. M. No. 9 Acc. No.

Original

Form 504
 DEPARTMENT OF COMMERCE
 U. S. COAST AND GEODETIC SURVEY

State: VIRGINIA

11-5813

DESCRIPTIVE REPORT
 And List of Statistics
 HYDROGRAPHIC Sheet No. 3982

LOCALITY:
 New Naval Base, Sewall Point

1917.

CHIEF OF PARTY:
 Paul C. Whitney, C. of P.

3982



DESCRIPTIVE REPORT
TO ACCOMPANY HYDROGRAPHIC SHEET
NEW NAVAL BASE, SEWALL POINT,
VIRGINIA.

AUGUST - SEPTEMBER, 1917

U.S.S. BACHE.

PAUL C. WHITNEY, CHIEF OF PARTY.

SCALE, 1/5000.

The hydrography executed on this sheet was done at the request of the Navy Department and was made with the purpose in view of meeting any condition for exact information for basing, dredging and filling operations on. It covers the water areas adjacent to the Naval Base, including a part of Boush Creek. As so many changes are contemplated along this water front and these changes would so alter the present hydrographic and topographic conditions, it would be of little value to dwell upon the results of this survey in relation to the sailing directions and the finish chart.

The survey was made in much detail as regards density of soundings. Bottom specimens were taken at frequent intervals to insure a knowledge of this characteristic. Current observations were made at the ship's anchorages off Sewall Point. These current stations were very close to the end of the contemplated piers, and will give information relative to the strength, duration and direction of the flood and

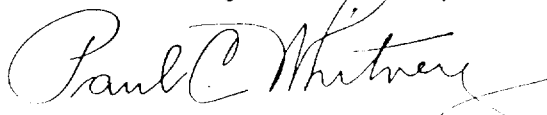
ebb currents. It may be expected, however, that the extensive improvements may produce a change in the tidal conditions along this point. Sounding lines were all run on located ranges so as to give as even a density of soundings as possible. On the scale of this sheet slight deviations from a straight line showed up so prominently these ranges were absolutely necessary to reach this condition. Owing to topographic conditions it was necessary, without undue cost of time and money, to change the system of lines to enable natural ranges to be used. Even in some instances at the outer ends of the lines great difficulty was experienced in keeping lines straight, owing to the strong tides encountered. Most of the work was done in a whaleboat, but the areas North and East were executed in the launch.

The signals used are based upon a scheme of triangulation served to cut in all the hydrographic signals as well as other objects located on the topographic sheet.

Tides were read at a staff erected inside of the small basin along the north shore. This staff was connected by a very carefully run line of levels to the U. S. Army Engineers Bench Mark at the outer end of the Virginian Railroad Pier, Sewall Point. The plane of reference reads 4.8 feet on the tide staff. Three permanent Coast and Geodetic Survey Bench Marks were placed at points shown on the topographic sheet. Special attention was made to establishing these marks far enough back from the water front so as not to be influenced

by any change in level of the earth due to excessive loading at the points of fill. Construction work at the Base made it necessary that the general contractors establish grade lines, etc., to which end a net work of levels were run through the grounds. I tapped in on this line by occupying three of their Bench Marks, a complete list of which accompanies my Leveling Record.

Respectfully submitted,

A handwritten signature in cursive script, reading "Paul C. Whitney". The signature is written in dark ink and is positioned above the typed name and title.

Hydrographic & Geodetic Engineer,
Chief of Party.

LIST OF STATISTICS,
HYDROGRAPHIC SHEET,

Naval Base, Sewalls Point, Virginia,
August - September, 1917,
U.S.S. BACHE - Paul C. Whitney, Chief of Party.

DATE	LETTER	VOL.	POSITIONS	SOUNDING	MILES	BOAT USED
August 2, 1917	a	1	40	348	3.2	Whaleboat
3,	b	1	18	149	2.2	"
4,	c	1	40	336	4.5	"
7,	d	1	87	649	8.0	"
8,	e	1	43	360	4.5	"
8,	e	2	33	259	2.3	"
9,	f	2	71	428	6.0	"
10,	g	2	71	492	6.0	"
11,	h	2	34	238	2.2	"
14,	k	2	81	589	6.7	"
14,	k	3	9	78	0.7	"
15,	l	3	26	311	2.0	"
16,	m	3	121	1075	9.0	"
17,	n	3	46	525	2.1	"
17,	n	4	39	446	7.0	"
18,	o	4	32	152	1.0	"
20,	p	4	90	999	9.0	"
21,	q	4	34	367	2.8	"
21,	q	5	18	162	6.5	"
22,	r	5	51	438	5.25	"
23,	s	5	116	959	8.5	"
24,	t	5	29	252	2.3	"
24,	t	6	34	316	3.2	"
25,	u	6	76	686	7.3	"
26,	v	6	91	761	10.0	"
28,	w	6	26	174	1.5	"
28,	w	7	98	677	10.75	"
29,	x	7	41	276	3.6	"
30,	y	7	109	929	10.0	"
31,	z	7	15	83	1.5	"
31,	z	8	74	515	6.5	"
Sept. 1, 1917	a'	8	57	481	5.25	"
5,	b'	8	108	860	7.25	"
6,	c'	9	98	751	7.5	"
7,	d'	9	79	648	2.5	Skiff & Whaleboat
8,	e'	10	139	1467	9.0	Whaleboat
12,	f'	10	50	495	4.0	"
18,	g'	10	48	475	4.0	"
18,	g'	11	103	827	10.5	"
19,	h'	9	85	741	16.2	Launch No. 52
19,	h'	12	149	579	7.5	Launch No. 52
20,	j'	11	55	589	3.8	Whaleboat
20,	j'	13	55	504	6.2	"
21,	k'	12	102	584	11.5	"
TOTAL			2821	23000	257.9	

ADDRESS
U. S. COAST AND GEODETIC SURVEY
WASHINGTON, D. C.

REFER TO NO.

5-EMK

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

May 20, 1918.

LIBRARY

CHARTS (H) ✓

Place with descriptive report
of hydrographic sheet No. 3982

Drawing Section. 7

Division of Hydrography and Topography: HCA

Division of Charts:

Tidal reductions have been approved
in 13 volumes of Sounding records for

HYDROGRAPHIC SHEET 3982

Naval Base, Sewall Point, Hampton Roads,
Virginia, P. C. Whitney in 1917.

Plane of reference is
Mean low water, reading

4.7 ft. on staff at Sewall Point,
Virginia.

L. P. Shidy

Acting Chief, Section of
Tides and Currents.