

4892

Diag. Cht. No. 1206-2

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

....., Director

State: New Hampshire

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 4892
Hydrographic } ^{2nd}

LOCALITY

Newburyport

Hampton Harbor

1928

CHIEF OF PARTY

C.K. Green

GOVERNMENT PRINTING OFFICE

4892

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET #2

Instructions dated - August 1, 1928.

SURVEY METHODS

All soundings in the vicinity of Hampton Beach and in the entrance of Hampton Harbor to the bridge, were obtained using the hand lead in Launch #66. With the exception of stopping the launch for a number of soundings near the outer limits of the work, all soundings were obtained when the launch was underway.

The skiff with the hand lead was used for the work in the harbor and Hampton River. This work was done at approximate low water.

Soundings on Old Cellar Rock were obtained with the sounding pole.

DISCREPANCIES

No serious discrepancies were noted outside of the harbor. Two discrepancies of two and three feet were ^{found} in the upper part of Hampton River between channel lines and cross lines. This is probably due to changes in course between positions and variations in speed. As this work was done in the skiff with one man pulling in variable currents, it can be readily seen that the sounding speed was not always constant, nor the course a straight line.

The channels in this vicinity are narrow with soft bottom.

It is recommended that the shoaler sounding be kept in both cases.

DANGERS

Dangers other than the two reefs or groups of rocks awash are as follows:

- (1) Old Cellar Rock, least depth $\frac{1}{2}$ foot in Lat. $42^{\circ} - 53'$ - 1706 m.
Long. $70^{\circ} - 48'$ - 40 m.
- (2) A 3 foot sounding on rock in - - - - Lat. $42^{\circ} - 53'$ - 1260 m.
Long. $70^{\circ} - 48'$ - 103 m.
- (3) Two 6 foot soundings on rocks midway Lat. $42^{\circ} - 53'$ - 1300 m.
between the two larger reefs in - - - Long. $70^{\circ} - 47'$ - 1155 m.
- (4) A 14 foot sounding in - - - - - Lat. $42^{\circ} - 53'$ - 1668 m.
Long. $70^{\circ} - 47'$ - 564 m.
- (5) A 16 foot sounding in - - - - - Lat. $42^{\circ} - 53'$ - 1196 m.
Long. $70^{\circ} - 47'$ - 623 m.

CHANNELS

A channel with a controlling depth of 5 feet leads into the bridge. It is not advisable to pass between the reefs and shore or to enter into Hampton Harbor without local knowledge. The hand draw on the bridge is not operated, but 5 feet clearance can be obtained under the bridge at high water. Hampton Harbor bares at low water with the exception of two or three channels and a small area just inside of the bridge. Hampton River channel is very shoal and good for very small craft only.

ANCHORAGES

Small craft anchor just inside of the bridge.

COMPARISON WITH PREVIOUS SURVEYS

Extensive changes have occurred in the vicinity of the entrance to the harbor and river. Instead of the bar making out towards Old Cellar Rock, it has been shifted and extends in a southeasterly direction from Town Rocks. The soundings in this vicinity, obtained in the recent survey, are entirely different from those shown on sheet #1069.

The new position of Old Cellar Rock is approximately 20 meters east of the position shown on sheet #1069. There is only one rock. In addition to this, a 11 foot sounding on a rock was obtained in that vicinity, about 100 meters WxN of Old Cellar Rock. This is not shown on sheet #1069.

Additional shoal soundings were found on rocks in the vicinity of the reef, the more important ones being listed under dangers.

14' and 15' foot soundings were found in the vicinity of the 14 and 17 foot soundings shown on sheet #1069 in approximate Lat. $42^{\circ} - 53' - 1700m$. Long. $70^{\circ} - 47' - 560m$. While the recent soundings do not plot in the same position as those of the previous survey, it is believed that they are all on the same shoal.

A 16' foot sounding was obtained in Lat. $42^{\circ} - 53' - 1196m$, Long. $70^{\circ} - 47' - 623m$. The previous survey shows a least depth of $8\frac{1}{4}$ fathoms in that vicinity. ✓

A 23 foot sounding was obtained in Lat. $42^{\circ} - 52' - 1840m$, Long. $70^{\circ} - 48' - 287m$, where the previous survey shows a least depth of 28 feet.

The soundings at the outer limits of the survey check favorably with the soundings of the old work.

GEOGRAPHIC NAMES

See report for Topographic Sheet # 2.

NOTES

Positions 117 - 125C and 95 - 115G were plotted on tracing cloth. 96G is shown on the smooth sheet. The tracing is attached to the sheet.

Statistics for sheet, field No. 2

Date 1928	Letter	Volume	Positions	Soundings	Miles Stat.	Vessel
Sept. 5	A	1	207	524	14.8	Launch #66
" 6	B	1	184	522	12.7	" "
" 10	C	1	134	292	6.6	" "
" 11	D	1&2	153	352	6.9	#66 & Skiff
" 13	E	2	98	314	2.3	Skiff
" 15	F	2	82	283	2.4	"
" 17	G	2	226	360	8.1	#66 & Skiff
" 18	H	2&3	<u>159</u>	<u>522</u>	<u>7.9</u>	" " "
Totals			1243	3169	61.7	

TIDAL DATA

Automatic portable tide gauge #166 located in Lat. $42^{\circ} - 54'$
Long. $70^{\circ} - 49'$

Plane of Reference 0.84 feet on gauge.
Highest tide observed 10.5 feet " "
Lowest tide observed -0.1 " " "

Respectfully submitted,

Carl F. Eller

Jr. H. & G. Eng'r.

Through;

Chas. K. Green

Chas. K. Green,
Chief of Party.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Washington, D.C.

March 5, 1929

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Chas. K. Green
Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED		
	Latitude			Longitude				Datum	
	°	'	D. M. meters	°	'				D. P. Meters
Church Cross	42	- 48	739.6	70	- 48	879.8	N.A.	Trian.	1206; 331
Roller Coaster	42	- 50	916.4	70	- 49	75.0	" "	" "	1206; 331
Tall Stack	42	- 48	1259.6	70	- 51	1165.4	" "	" "	1206; 331
Standpipe	42	- 51	1587.6	70	- 52	753.4	" "	" "	1206
Water Tank	42	- 52	503.9	70	- 51	1073.7	" "	" "	1206
*Spire	42	- 54	1772.4	70	- 48	905.9	" "	" "	1206
*Cupola	42	- 54	1037.1	70	- 48	966.3	" "	" "	1206
*Objects shown on Hydrographic Sheet # 2.									

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaves and like objects are not sufficiently permanent to chart.

Sec. of Field Records. ✓

EAZ

June 18, 1929.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
volumes of sounding records for

4892

HYDROGRAPHIC SHEET

Hampton River, New Hampshire.

Locality:

C. K. Green in 1928.

Chief of Party:

mean low water, reading

Page of reference is

Hampton River Entrance, N. H.

~~ft. on tide staff at~~

ft. below B. M.

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

Paul C. Whitney

Chief, Division of Tides and Currents.

Section of Field Records.
Report on Hydrographic Sheet No. 4892.
Hampton Harbor, New Hampshire.
Surveyed in 1928
Instructions dated August, 1, 1928 (H. E. Funnegau)

Chief of Party, C. K. Green.
Surveyed by H. E. Funnegau.
Projected and soundings plotted by
C. F. Ehlers.
Verified and inked by J. D. Torrey.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development conform to the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions.
4. Sounding line crossings are adequate and soundings at crossings agree closely.
5. The information is sufficient for drawing the depth curves.
6. The usual field plotting is excellent.
7. There are no junction sheets.
8. The surveying is satisfactory, all dangers are well developed and the general channels in the Harbor and River are well defined.

9. No further surveying is required.
10. The field drafting is excellent.
11. Sheet H-1069 surveyed in 1870 show such extensive changes in shore line and rocks that a comparison with it appears of no value.
12. Reviewed by J. O. Torrey

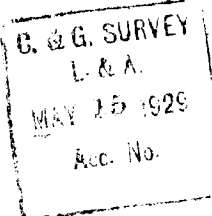
Comparison with H. 1069, surveyed in 1870, shows very extensive changes near the entrance to the harbor and river. On the outer limits some differences were also noted. Capt. Sobieralski is of the opinion that this sheet, H. 4892, should entirely supersede the old work.

Inspected by R. L. Johnston

July 30, 1929.

U/p.
A. M. Sobieralski

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



HYDROGRAPHIC TITLE SHEET

REG. NO. 4892

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 2

REGISTER NO. ⁴⁸⁹² **4892**

State New Hampshire

General locality Newburyport Mass.

Locality Hampton Harbor

Scale 1 - 10,000 Date of survey September 5 - 18, 1928.

Vessel Launch #66 Launch Ogden

Chief of Party C.K. Green

Surveyed by H.E. Finnegan

Protracted by C.F. Ehlers

Soundings penciled by C.F. Ehlers

Soundings in fathoms- feet

Plane of reference MLW

Subdivision of wire dragged areas by _____

Inked by J.D. Torrey

Verified by J.D. Torrey

Instructions dated August 1, _____, 1928

Remarks: _____