2601 D,C,CX

DEN 12-10-98

Diag. Cht. No. 1210-2

2601a

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

O. H. Tittmann
Superintendent.

State: Mass

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 2601-2601a

LOCALITY:

Buzzards Bay — Brooklyn Rock approaches to New Bedford Harbor. Special localities. —

1902

CHIEF OF PARTY:

R. L. Faris

Sheet 2601 Butler Hole

The Sounding lines were plotted on the sheet, but as the changes were so great a cut & patch was made combining both surveys as far as possible, so as not to change the development of 1902, which was no doubt correct at that date. No drag was used.

F L Dorn

2601.-Brooklyn Rock and approaches to New Bedford Harbor, Buzzards Bay.

The following information is the result of personal observation.

Brooklyn Rock is a rocky pinnacle set in soft bottom. There is ~~18.8~~ 17.9 feet of water above it at low water. The water is six fathoms deep around the rock. The rock is in the following ranges;-Black Rock Spindl with Lookout tower on West Island; and Butler Flat Lt.Ho. with notch in trees back of New Bedford left of a group of four tall factory chimneys. The present charts show no indications of a rock in the place where the Brooklyn Rock was located.

2601a.-Special Localities, Buzzard's Bay.

The following information is the result of personal observation.

Twenty ~~three~~ one feet was the minimum depth on the "range" channel.

Spot #7 was found to be but 35 feet from the surface, while the old chart showed 38 feet. No other material change was found on the other spots investigated.

A drag was used, set to a depth taking into account the tide, such that it should be one foot above the bottom as per old surveys.

The ~~main~~ West channel into New Bedford is in the following range;-White beacon (Egg Island) and standpipe back of Fairhaven.

The channel that is mostly used in going into New Bedford leads very nearly over the "Brooklyn Rock" This rock is directly in the fairway - and is not buoyed.

(2601)

REPORT
on
HYDROGRAPHIC SHEET NO. 2601.

Buzzards Bay,
Entrance to New Bedford Harbor,
Mass.
Assistant Faris.
1902.

The records show that two distinct rocks were found in the vicinity where the Brooklyn struck.

The first rock found is recorded with the position (a 1) September 26, 1902, and with a depth of 18.5 feet. This is the real Brooklyn Rock.

The second rock is recorded as (c 106) September 29, 1902 and has a depth of 20 feet. It was thought to be identical with the Brooklyn Rock, but the plotting shows it to lie about 20 meters to the S.E. of the latter. From the fact that these rocks are surrounded by water from one to three feet deeper, the average depth of the locality shows that they are genuine rocks and act as an obstruction to the flow of the currents.

A. Lindenkohl. (Signed).

The plane of reference was given as .73 ft. while the plane given by the Tidal Division is 1.34 ft., a difference of .6 ft., which had to be added to all reduced soundings.

The part of the survey beyond the limits of Sheet 2601 was protracted and plotted in green ink on Sheet 2229. The part protracted on Sheet 2601a was protracted and plotted on Sheets 2601, 2229 and 2320, which will cancel 2601a. While the soundings cross well, as to the seasons work, there seems

to be a general difference of about one foot (less) water than shown on Sheets 2229 and 2320.

The circles marking the boat positions are too large, and the figures numbering the positions are too near the circle.

The soundings around Brooklyn Rock were plotted as a sub-sketch, scale 1-2,500, to show a special feature.

F. C. Donn. (Signed).

REPORT
on
HYDROGRAPHIC SHEET

No. 2601b.
Buzzards Bay,
Approaches to New Bedford Harbor,
Mass.
Assistant Faris,
1903.

On line 30-31 "B" day a sounding of 14.4 ft. is recorded; the sounding before is 35.2 and the sounding after is 35.2; there is no notice taken of this shoal sounding. It is evidently a mistake of 3 fathoms for 6 fathoms 3 ft. No drag was used at the time this sounding was taken.

On line, "D" day angle 8, the drag struck set at 22 ft. with a sounding by lead line of 20 ft., rocky bottom. The chart shows on this exact spot 22 ft., but within and to the eastward 150 meters Hurshel Rock is shown, with a least depth of 16 ft. The least water shown by this survey, over Hurshel Rock is 22 ft.

Line 131-133, "E" dat, shows 22 ft. the least water found in vicinity is 26 ft., with drag set at 30 ft. The drag was not set while running this line, and as no remark is made in reference to the shoal water, it looks like a mistake of two fathoms on the part of the leadsman. No course is given, neither is a change of course noted, which is shown to be about 12 points when plotted with angles given, deducting 5° from the left hand angle, the one marked doubtful, will locate the position about on a line between 131 and 133, but neither of these positions will make the crossing good. As

this line shows 22 and 23 ft. where other lines show 33 and 37 ft. The party returned to the same locality the next day with the launch and searched around for 2-1/2 hours, about 300 meters to theSd and Wd and the least water found was 28 and 30 ft. The least water shown on old sheet is about 33 ft.

The drag struck at 45 and 46 "F" day on shoal 1300 meters east from Dumplin L.H. with 26 and 27 ft. The cutter returned to the vicinity of these two positions and found 20 ft., but did not take angles to locate position, only noting the fact that they were in the immediate vicinity of positions 45 and 46. See page 12 "F" day, in sounding book for notes.

The projection is either wrong or there is an average shrinkage of 25.2 meters per minute in Latitude and 28.6 meters in Longitude per minute. The nine minutes of Longitude on the middle latitude, parallel 41°34', are short by 14.9—32.9—24.9—25.9—31.9—29.9—29.9—34.9 and 34.9 meters.

The eight minutes of Latitude on the middle meridian 70°53' are short by 37.1—16.6—31.6—21.6—20.6—26.6—23.6 and 23.6 meters. There is nothing in the records to show who made the projection or how it was made, or how the points were located on the sheet, but there are evidences on the sheet which would lead to the belief that the projection and points were drawn on the sheet after being stuck through from a chart.

An attempt was made to make the curves on this sheet agree with the curves on 2380 and 2229. In most cases this

could be done up to 30 ft., but the 36ft. curve could not be joined, therefore the 36 ft. curve was drawn on Sheet 2601b as a guide to the draftsman in selecting soundings, without reference to other sheets.

F.C.Donn. (Signed).

This examination is incomplete and in many instances gives greater minimum depths at critical points than the previous detailed surveys. By reason of the known character of the bottom in this locality and the consequent difficulty, almost impossibility, of finding isolated uncharted dangers or relocating those developed by previous surveys, the work on this sheet is not of a character to warrant the removal from the chart of the critical soundings of previous surveys. (Work off Dumpling Rocks in vicinity of "Dixie" Rock, for instance). Several very doubtful soundings appear in the record that should have been verified in the field.

Some tide reducers were entered and the soundings reduced to hundredths of a foot; which is not good practice.

The drag record is incomplete and often difficult to interpret.

The tide notes are crude and contain glaring errors- they should have been examined and verified by the Chief of Party.

7/25/04 J.T.W. (Signed). G.B. (Signed). 7/26/04

Report
on
Hydrographic Sheet
No. 3601c.
Buzzards Bay,
Examination of Shoals,
Mass.
Assistant Young,
1904.

Shoal south from Dumpling Rock L. H. "A" day drag was set at 21ft., tide reduction, 2 ft., drag depth, 19 ft. , shoalest sounding, 21 ft. An examination was made around this spot; least water found, 24.5 ft.

"B" day. Drag set at 22 ft., tide reduction, 2.8 ft., drag depth 19.2 ft. Drag struck; raised 1.5 ft. Examination was made around this spot in whaleboat; least water found 21.9 ft. There are two soundings of 24 ft. just above where the drag struck.

First Shoal east from Dumpling Rock Lt. Soundings taken in whaleboat without drag, and seems sufficient to prove that the shoal soundings shown in red are not correct.

Second Shoal east from Dumpling Rock Lt. Drag was set at 29 ft., tide reduction, 3.1 ft., drag depth 25.9 ft. A line crosses spot, where 26 ft. is shown, with 45 ft., which seems to prove the non-existence of the depth of 26 ft.

All the shoal soundings transferred to this sheet from 3601b have been left as transferred, and the curves have been joined and corrected on 3601b.

Shoal east by north (approx) from Dumpling Rock Lt. The drag was set at 22 ft., tide reduction, 3.8 and 3.9 ft., drag depth 18.2 and 18.1. Two lines cross the 14 ft. shoal spot, transferred from 3601b, with 37 ft. sounding, which seems to prove that the 14 ft. sounding is not true.

F.C.Donn. (Signed).

Hydrographic Sheet No 2601 cx Dec 19, 1907.

In this examination the least water found was 13 feet where the previous survey shows 16 feet. A drag was used on each days work, set at 13½, 18 & 20 feet. The ground was well covered and the records kept in a satisfactory manner.

J. L. Simons

Sheet 2807 Prince William Sound.

Two days work, Launch (9) are plotted on Sheet one south of Naked Island and the other N.W. of Fox Island. The records for these two days have not been received at office. The sounding N.W. of Fox Island was transferred to Sheet 2628 but the errors were not changed on that sheet because the examination is not complete.

One days work was plotted on Sheet 2741 near Hunter Point, with 2 fathoms as least water.

The various anchorages shown thus ⚓ are located from remarks made in Descriptive Report only.

The hydrography surrounding this work is shown in red.

F. C. Donn.

Found with 2603
Mawle

COAST & GEODETIC SURVEY

260 1c X

O. H. TITTMANN, SUPERINTENDENT.

Examination

Off West Island

Buzzards Bay

Massachusetts.

Begun October 5, 1907.

Ended October 10, 1907.

C. & G. S Str. "BACHE."

L. H. Westdahl, Assistant, Chief of Party.

Scale : 1 : 20,000

STATISTICS, SHEET 16.

2601 cx

Date.	Letter	Vol.	Angles.	Soundings.	Miles.	Boat.
1907.						
Oct. 5,	A	1	158	505	15.0	Str. Bache.
TOTAL	1	1	158	505	15.0	
Oct. 9,	a	1	160	428	5.8	Launch #32.
" 10,	b	1	178	655	6.4	" "
TOTAL.	2	1	338	1083	12.2	
Recapitulation						
Str. Bache	1	1	158	505	15.0	
Launch 32	2	1	338	1083	12.2	
Grd. Total	3	2	496	1588	27.2	