5622

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R.S.Patton, *Director*



*State:* Massachusetts

# DESCRIPTIVE REPORT

~~Topographic~~
*Hydrographic* } *Sheet No.* 4 (Field)

5622

LOCALITY

Approaches to Westport Harbor,

Massachusetts.

*193* 4

CHIEF OF PARTY

Wm. D. Patterson, Lieut.,
U. S. Coast & Geodetic Survey.

U. S. GOVERNMENT PRINTING OFFICE: 1933

Form 537
Ed. Dec., 1930

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



REG. NO.

# HYDROGRAPHIC TITLE SHEET

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. 4

REGISTER NO. 5622

State Massachusetts

General locality ~~Vicinity of~~ Buzzards Bay

Locality Approaches to Westport Harbor Range

Scale 1:10,000 Date of survey Sept. to November, 1934

Vessel Field Party No. 5

Chief of Party Lieut. Wm. D. Patterson

Surveyed by Daniel S. Ling, Surveyor

Protracted by J. C. McIlwaine, Draftsman

Soundings penciled by Charles R. Smith, Surveyor

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by M E Cooper

Verified by M E Cooper

Instructions dated May 14 & July 11, 1934

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1931

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SHEET No. 4 (Field Number)

ENTRANCE TO WESTPORT HARBOR, MASSACHUSETTS.

1934

Project HT-179, Lieut. Wm. D. Patterson, Chief of Party.

**********

DATE OF INSTRUCTIONS

The Director's Instructions for this survey are dated May 14, 1934, and Supplemental Instructions, dated July 11, 1934.

SURVEY METHODS

Standard Coast Survey methods were used on this survey. Positions were obtained by sextant fixes on signals located by triangulation and topography. Soundings were all taken with hand leadline marked in fathoms and feet.

DISCREPANCIES

It is noted that check lines in many places disagree by one or two feet from the main line soundings. This is no doubt due partly to the extremely rocky nature of this territory and partly to the fact that some of the hydrography was done in very rough weather.

DANGERS

In general this section is extremely rocky with many pinnacle rocks and it is recommended that all boats having no local knowledge of the section stay outside the five fathom curve.

The most important dangers are as follows:-

1. Lat. 41° 28'.85, Long. 71° 07'.55, rock awash at low water.
2. Lat. 41° 29'.53, Long. 71° 06'.43, rock, least depth 3 feet of water.
3. Lat. 41° 29'.65, Long. 71° 05'.85, rock, least depth 4½ feet of water.
4. Lat. 41° 29'.4-, Long. 71° 05'.25, the outer end of Two Mile Ledge, numerous pinnacles with 2½ to 4 feet of water are just inshore from this point. It is extremely dangerous for any boat to cross this ledge, especially at the outer end. This is a very bad place and it is thought a buoy should be placed here.

DANGERS (continued)

5-Lat. 41° 29'.48, Long. 71° 04'.98, rock, least depth 8½ feet of water.
6-Lat. 41° 29'.25, Long. 71° 04'.75, rock, least depth 10½ feet of water.
7-Lat. 41° 29'.44, Long. 71° 04'.53, rock, least depth 5 feet of water.
8-Lat. 41° 29'.53, Long. 71° 04'.6-, Two Mile Rock, bare at all stages of the tide. This rock is marked by a spindle.
9-Lat. 41° 29'.7-, Long. 71° 05'.2-, rock, least depth 7½ feet of water.
10-Lat. 41° 29'.9-, Long. 71° 05'.55, rock, least depth 7 feet of water.
11-Lat. 41° 29'.9-, Long. 71° 05'.38, rock, least depth 5½ feet of water.
12-Lat. 41° 29'.85, Long. 71° 04'.75, rock, "Joe Burris Ledge", least depth 14 feet of water.
13-Lat. 41° 30'.15, Long. 71° 05'.3-, rock, least depth 4 feet of water. This rock is about 3 meters south of black can buoy No. 3.
14-Lat. 41° 30'.18, Long. 71° 05'.2-, rock, least depth 7 feet of water. Since this rock is inside the limits of the entrance to the harbor as defined by buoys #3 and #4, buoy #3 should be moved eastward enough to keep boats clear of this rock.
15-Lat. 41° 30'.35, Long. 71° 05'.18, rock, least depth 3½ feet of water. This rock is about one meter east of red buoy No. 4.
16-Lat. 41° 28'.6-, Long. 71° 02'.92, rock, "~~Hicks Rock~~" (?), least depth 3 ft.
17-Lat. 41° 28'.45, Long. 71° 02'.85, rock, "Lumber Rock", least depth 4 ft.
18-Lat. 41° 27'.7-, Long. 71° 02'.1-, rock, least depth 4½ feet of water.
19-Lat. 41° 27'.75, Long. 71° 02'.05, rock, "Old Cock", bares about 1 foot at high water. This rock is marked by a spindle.
20-Lat. 41° 27'.8-, Long. 71° 02'.1-, rock, "Little Cock", bares 2½ feet at low water.

Above rocks were all located by drifting over the location until rock was seen and then sounding on the highest peak obtained.

Lat. 41° 28'.2, Long. 71° 01'.7, "Hen and Chickens Reef". This reef consists of many large boulders mostly baring a foot or less at high water. It is in two groups, the southerly group being the larger. Numerous sunken rocks are to be found up to 60 or 80 meters away from the visible part of the reef. A narrow ledge, with from 5 to 13 feet of water, extends northward from the reef up into the limits of the work on Field Sheet No. 7. This ledge is of gravel and small boulders.

Tidal currents are very strong near this reef running in a general north and south direction. As a result tide rips make this territory very rough when there is any sea running against the current.

South, southeast and east from the end of Gooseberry Neck a shoal area extends up to about one-half mile from shore. This shoal is of sand and gravel, with numerous boulders.

CHANNELS

Small local boats pass inside the Hen and Chickens Reef, between it and Gooseberry Neck. However, boats should be careful not to cross the ledge running north from the reef, as mentioned above under "DANGERS". Boats not familiar with these waters are advised not to try this pass.

Boats headed for Westport Harbor can pass Bell Buoy # 1A either right or left but keep black can buoy # 1 and Two Mile Spindle on the left, then head directly for the harbor light, keeping red nun #4 and Half Mile Rock on the right. There is good water west of Two Mile Rock but due to the nearness of Two Mile Ledge, which is unmarked, it is advisable to stay east of the rock.

The entrance to Westport Harbor is shoal and heavy seas break over the entrance bar so boats should not try to enter with strong southerly winds.

COMPARISON WITH PREVIOUS SURVEYS

Lat. 41° 28'.5, Long. 71° 08'.6, rock shown on Chart 1210 between Halfway Rock and shore. Chart shows the rock as being bare. A thorough search was made on two different occasions at low water in addition to watching while running sounding lines and not even a sunken rock was found there. It is recommended that this rock be removed from the charts.

Lat. 41° 28'.85, Long. 71° 07'.55, 18 foot spot east of rock awash and 15 foot spot west of it were searched for but not found. It is however, recommended that they be retained as indications of them were found.

It is recommended that the following soundings shown on existing charts be retained as indications of shoaling was found but probably no sounding was obtained on pinnacle:-

Lat. 41° 26'.4, Long. 71° 06'.4, charted 24 feet, least depth found 27 feet.

Lat. 41° 29'.6, Long. 71° 06'.0, charted 16 feet, least depth found 26 feet.

Lat. 41° 29'.3, Long. 71° 05'.8, "Palmer Ledge", charted depths 13 and 17 feet, least depths found 19 and 23 feet, respectively.

Lat. 41° 28'.5, Long. 71° 04'.2, "Kibby Ground", Charted depths 25 and 29 feet, least depth found 32 feet.

Lat. 41° 27'.6, Long. 71° 03'.6, charted depth 29 feet, least depth found 30 feet.

At Lat. 41° 29'.3, Long. 71° 04'.5, charted depth 28 feet. Soundings of 23 and 17 feet were obtained here and should replace present charted depth.

COMPARISON WITH PREVIOUS SURVEYS (continued)

Near Lat. 41° 30', Long. 71° 06', two rocks charted with 10 feet of water could not be found by drift sounding but since an indication of them was found it is recommended that charted depths be retained. The least depth on one spot is 9 ft. the other 10 has been retained.

Lat. 41° 29'.3, Long. 71° 04'.7, charted rock with 9 feet. Least depth found here was 10½ feet.

When searching for rocks around Gooseberry Neck the aid of a local lobster fisherman was obtained. He had ranges for all rocks in this area. Rocks as found differed slightly from locations shown on chart but as he was very certain these were the only rocks in this area it is recommended that only rocks shown by present survey be charted, except as noted below.

Lat. 41° 29'.0, Long. 71° 03'.0, "Browing Ledge", a rock is known to be here with approximate water charted but could not be located by drift sounding and water was too murky to be visible at time search was made. Recommend retain present charted depth.(6ft)

Lat. 41° 27'.75, Long. 71° 02'.05, "Old Cook Rock", Chart shows a 5 foot sounding just north of this and a 7 foot sounding slightly east. These rocks are known to be here but could not be located at time of survey. Latter rock is known as "Wildcat". Recommend retaining present charted depths.

All other rocks shown within this area were found with soundings agreeing within a foot. A few additional rocks as shown on sheet were also found.

Respectfully submitted,

D. S. Ling

D. S. Ling, Surveyor.

Approved:

Wm. D. Patterson

Wm. D. Patterson, Lieut.,
Chief of Field Party No. 5.

ADDITIONAL NOTES BY CHIEF OF PARTY

HYDROGRAPHIC SHEET NO. 4 (Field Number)

MASSACHUSETTS

**********

Chart No. 1210 shows a bare rock 0.1 mile north of Halfway Rock. This rock does not exist.

Hen and Chickens Reef was sketched in from sextant cuts taken from the hydrographic launch and is shown in pencil on the smooth sheet. Inked on sheet with broken line.

Continual bad weather at the end of the season prevented the inshore skiff hydrography in the vicinity of Gooseberry Neck.

Time did not permit the wire drag examinations of this area called for in the Instructions.

Respectfully submitted,

Wm. D. Patterson

Wm. D. Patterson, Lieut.,
Chief of Field Party No. 5.

# STATISTICS

## HYDROGRAPHIC SHEET NO. 4 (Field Number)

**********

| DAY LETTER | DATE 1934 | COLOR | NUMBER OF SOUNDINGS | NUMBER OF POSITIONS | STATUTE MILES OF SOUNDINGS |
|---|---|---|---|---|---|
| A | Sept. 6 | Red | 203 | 45 | 11.7 |
| B | " 10 | " | 176 | 26 | 5.0 |
| C | " 11 | " | 114 | 17 | 13.7 |
| D | " 13 | " | 108 | 20 | 3.6 |
| E | " 17 | " | 431 | 90 | 16.0 |
| F | " 18 | " | 151 | 29 | 5.8 |
| G | " 19 | " | 725 | 123 | 26.0 |
| H | " 20 | " | 646 | 123 | 23.6 |
| J | " 21 | " | 528 | 118 | 14.8 |
| K | " 24 | " | 328 | 78 | 10.0 |
| L | " 25 | " | 452 | 119 | 16.4 |
| M | " 27 | " | 377 | 65 | 9.3 |
| N | " 28 | " | 212 | 71 | 6.4 |
| P | Oct. 1 | " | 379 | 77 | 14.2 |
| R | " 5 | " | 480 | 102 | 21.4 |
| S | " 9 | " | 138 | 29 | 6.8 |
| T | " 11 | " | 101 | 25 | 4.6 |
| U | " 12 | " | 46 | 16 | 1.6 |
| W | " 16 | " | 483 | 107 | 23.4 |
| X | " 17 | " | 257 | 93 | 7.6 |
| Y | " 18 | " | 25 | 5 | 0.8 |
| Z | " 19 | " | 351 | 94 | 11.4 |
| AA | " 20 | " | 453 | 93 | 22.2 |
| BB | " 24 | " | 167 | 37 | 8.7 |
| CC | " 25 | " | 582 | 127 | 17.1 |
| DD | " 26 | " | 420 | 92 | 22.0 |
| EE | " 30 | " | 21 | 4 | 0.8 |
| FF | Nov. 8 | " | 118 | 35 | 5.1 |
| GG | " 9 | " | 340 | 95 | 13.0 |
| HH | " 10 | " | 450 | 124 | 16.0 |
| JJ | " 14 | " | 354 | 83 | 23.8 |
| KK | " 15 | " | 134 | 41 | 3.8 |
| LL | " 16 | " | 332 | 88 | 14.6 |
| MM | " 19 | " | 133 | 37 | 4.8 |
| NN | " 20 | " | 243 | 69 | 7.1 |
| PP | " 22 | " | 375 | 108 | 19.2 |
| 36 | TOTALS | | 10833 | 2505 | 432.2 |

Area surveyed in square statute miles - 27

Report on H-5622 — Surveyed in Sept.-Nov. 1934
Chief of Party W.D. Patterson — Surveyed by D.S. Ling
Protracted by J.C. McIlwaine — Soundings plotted by C.R. Smith
Verified and Inked by M.D. Cooper

The records are neat, clear, and conform to the requirements in the general instructions. ✓

The usual depth curves can be drawn as there was a very good development of this area. ✓

The field plotting on this sheet was exceptionally accurate. ✓

The drafting on this sheet was very good and very few changes were necessary. ✓

The junctions with the adjoining sheets are satisfactory. ✓

Remarks:

Would like to call attention to the following:

At pos. 32H (41-29.45, 71-05.15) there is a note "Rock 3m. to Port", I showed this as a rock awash, but do not know definitely that this is true, as no additional information was given. The same note appears at pos. 62J (41-29.9, 71-05.3) and again at pos. 37K (41-29.65, 71-05.75). "submerged rock" these notes appear to be sunken rocks. RJB ✱

The two soundings after position 10J are 18 feet which is about one fathom deeper than surounding depths, believed to be fathom mistake therefore was not inked.m(41-29.95, 71-06.7) ✓

Would also like to call attention to note 46CC. Refers to rocks inshore of the hydrography. RJB

M.D. Cooper

Shoreline and adjacent rocks compared with Topographic Sheet #6119. M.D.C.

✱ These rocks were investigated in 1935, Additional Work, and were found to be ~~least~~ sunken rocks with least depths of 4 feet, 4 feet and 7 feet respectively.

RJB

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5622

The following statistics will be submitted with the cartographer's report on the sheet:

| | |
|---|---|
| Number of positions on sheet | 2505 |
| Number of positions checked | 185 |
| Number of positions revised | 10 |
| Number of soundings recorded | 10,833 |
| Number of soundings revised | 22 |
| Number of signals erroneously plotted or transferred | 0 |

Date: April 16, 1935

Verification by M. D. Cooper Time: 80 Hrs

Review by R. J. Christman Time: 36 1/2 hrs

PAC

March 5, 1935

Division of Hydrography and Topography: F.E

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in
7 volumes of sounding records for Cooper

HYDROGRAPHIC SHEET 5622

Locality Approaches to Westport Harbor, Massachusetts

Chief of Party: W. D. Patterson in 1934
Plane of reference is mean low water, reading
1.8 ft. on tide staff at Westport Harbor
6.5 ft. below B.M. 1

Height of mean high water above plane of reference is 3.1 ft.

Condition of records satisfactory except as noted below:

Harrar

Acting Chief, Division of Tides and Currents.

To: H.M. Strong
From: C.F.M.

Date. Feb. 1, 1935

# GEOGRAPHIC NAMES
MASSACHUSETTS

Survey No. H 5622

Chart No. 1210

Diagram No. 1210-3

*, Approved by the Division of Geographic Names, Department of Interior.

¢, Not Approved by the Division of Geographic Names, Department of Interior.

R, Referred to the Division of Geographic Names, Department of Interior.

| Status | Name on Survey | Name on Chart | New Names in local use | Names assigned by Field | Location |
|---|---|---|---|---|---|
| ✓ | Tunipus Beach | Turnipus Beach | | Add the following See 5622(add.work) page 5. | |
| ✓ | ---------- | Quicksand Pt. | | Briggs Rock ✓ | |
| ✓ | Horse Neck Beach | Horseneck Beach | | Pinetree Ground | |
| ✓ | --------- | Gooseberry Neck | ✓ | Inner Mayo Ledge | |
| | --------- ✓ | Buzzards Bay | ✓ | The Wildcat | |
| | ✓ | Little S W Rock ✓ —2 | ✓ | Cutty Wow Rock | |
| | ✓ | Halfway Rock ✓ | | | |
| | Inner ✓ | Church Ledge (add Inner) ✓ | | additions & changes made by KTA 10/22/35 | |
| | ✓ | ~~Briggs Ledge~~ ✓ | | | |
| | ✓ | Palmer Ledge ✓ | | Old Whale Rock | |
| | Twomile Ledge ✓ | Two Mile Ledge ✓ | Added 1/5/37 by Gte | Newet Rocks | |
| | ✓ | HalfmileRock ✓ | | Flat Rock | |
| | ✓ | Joe Burris Ledge ✓ | | Dogfish Ledge | |
| | Twomile Rock ✓ | Two Mile Rock ✓ | | Ship Pond Cove Stony Point | |
| | ✓ | Browing Ledge ✓ | Authority see GN2 (1937) | | |
| | ✓ | Hicks Rock ✓ | | Tripp Ledge | |
| | ✓ | Lumber Rock ✓ | | Markham Ledge | |
| | ✓ | S W Rock ✓ | | Acoaxet | |
| | ✓ | Old Cock ✓ | | | |
| | | Hen and Chickens ✓ | | | |
| | ✓ | Kibby Ground ✓ move | | | |
| | ↓ | Long Rock ✓ | | | |
| | | Bar Rock ✓ | APPROVED NAMES UNDERLINED H.L.F. | | Lat 41°-29¾' M 100 Long 71-02½' |

6. Comparison with Prior Surveys.

a. H-154 (1844).

This survey is on scale 1-20,000 with lines spaced too far apart for a development of this character of bottom. The general agreement with the present survey is very good though many more shoals have been found by the later surveys. All the rocks and shoals shown on H-154 (1844) were covered by later surveys and the sheet need not be considered further for charting purposes. (See next paragraph for bare rock in lat. 41°28.5', long. 71°08.6').

b. H-1791 (1897) and H-1792 (1897).

These two sheets are in good general agreement with the present survey. Practically no change seems to have taken place in the area covered, however, depths over shoals are not in entire agreement. Generally, where a lesser depth was found during the 1887 survey it has been carried forward to H-5622 (1934) in color. The following are the most important differences and dispositions:

(1) The bare rock (charted) in lat. 41°28.5', long. 71°08.6' originates with H-154 (1844) and is not shown on the contemporary topographic sheet T-183 (1844). An examination of the sounding record indicates that the rock was plotted from a sounding line which was very weakly controlled and is noted in the records as "extremely doubtful". It appears to be the same as half-way rock which was shown on T-183 (1844), but apparently no attempt was made to adjust it to the position of the latter rock. During the 1887 survey the rock was searched for and 3 lines of soundings were run across the spot and extensive inquiries were made among the local fishermen but without obtaining any information regarding its existence. The Descriptive Report for H-1791 (1887) states, "I think in view of these facts that the rock can be removed from our charts". Nevertheless, the rock was retained on H-1791 (1887). The present field party searched for the rock on two different occasions at low water and no indication of a bare rock or a sunken rock was found. The rock should therefore be discontinued in future charting.

(2) The 10 foot spot (charted) in lat. 41°28.65', long. 71°08.5' falls in depths of 26 feet on the present survey. It originates with H-1791 (1887) and is a detached shoal outside the 18 foot curve. No examination was made of this spot on the present survey and it has been retained on the latter sheet.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5622 (1934)

Approaches to Westport Harbor, Vicinity of Buzzards Bay, Massachusetts
Surveyed September - November, 1934
Instructions dated July 11, 1934 (W. D. Patterson)

Hand Lead Soundings — 3 Point Fixes on Shore Signals

Chief of Party - W. D. Patterson.
Surveyed by - D. S. Ling.
Protracted by - J. C. McIlwaine.
Soundings penciled by - Charles R. Smith.
Verified and Inked by - M. D. Cooper.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual. A few of the notes are incomplete in that they do not give the estimated depth of water on the rocks observed near the sounding lines.

2. Compliance with Instructions for the Project.

The plan and extent of development are in accordance with the instructions for the project except that:

a. The inshore work at Gooseberry Neck was not accomplished.

b. The wire drag was not used to determine the location and least depth on some of the shoals shown on previous surveys where the usual methods failed to verify their existence.

3. Sounding Line Crossings.

Sounding line crossings are satisfactory, depths generally agreeing within 1 foot. In very irregular bottom some greater differences were noted but very few in excess of 2 feet.

4. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn, including the greater portion of the 6 foot curve.

5. Junction with Contemporary Surveys.

Junction with H-5553 (1934) to the westward is satisfactory.

Junction with H-5628 (1934) to the northward is satisfactory.

Junction with H-5630 (1934) to the eastward will be considered in the review of that sheet.

The shoreline was compared with air photo compilations T-5602 and T-5603 of 1934 and all rocks outside the low water line were transferred to H-5622 (1934). R.J.C. – Nov. 17, 1936.

(3) The 7 foot spot (charted) in lat. 41°28.75', long. 71°08.2' from H-1791 (1887) falls in depths of 16 to 19 feet on the present survey. Although there is a definite indication of a shoal at this spot, no attempt was made to determine the least depth. The 7 has therefore been carried forward to the present survey. Several other shoal depths closer in shore, but not charted, have been retained from H-1791 (1887).

(4) In accordance with the recommendation of the field party (see page 3, Descriptive Report), the 18 foot spot east and the 15 foot spot west of the rock awash (charted) in lat. 41°28.9', long. 71°07.55' have been retained from H-1791 (1887). In addition, several other shoal soundings from the latter survey, not included in the recommendations of the field party, have been carried forward in this vicinity, particularly the 3 foot spot in lat. 41°28.85', long. 71°07.50'.

(5) The bare rock (charted) in lat. 41°27.8', long. 71°02.1' was found by the present survey to bare 3 feet at MLW which is practically awash at high water as the range of tide is 3.1 feet. It should be charted with a rock awash symbol.

(6) Several shoal soundings in the vicinity of Old Cock Rock and southwest of Gooseberry Neck have been carried forward from H-1792 (1887). The positions of these rocks were determined by three point fixes during the 1887 survey and although the D. R. (par. 3, page 4) recommends, with certain exceptions, "that only rocks shown by present survey be charted"; it is believed that only a wire drag examination can disprove their existence.

(7) In the inshore area westward of Gooseberry Neck, several rocks awashhave been retained from H-1792 (1887) where they are shown either by soundings or by the reef symbol. In each case the feature was checked against the original sounding records and found to be rocks awash.

(8) The recommendations by the Field Party (D. R., p. 3) regarding the retention of certain charted shoals have been accepted and have been carried forward to H-5622 (1934).

c. H-1788 (1887).

This survey is on a scale of 1-40,000. The present survey makes an adequate overlap with this sheet and the agreement in depth is good. Due to the larger scale and closer development, the present survey should supersede the above survey for charting purposes in the area common to them.

d. H-3668 (1914 W.D.).

This wire drag survey joins the present survey on the south. Several drag soundings are shown in green. The present survey shows generally greater depths than the effective depth of the drag in the area affected.

e. T-2217 (1895) - Reference Par. 4b(2), Review T-6119 (1934).

The sunken rock in lat. 41°30', long. 71°05.97' is probably an erroneous location of the 9 ft. spot shown on the present survey about 100 meters to the northeast. The sunken rock should not be retained in future charting.

The two sunken rocks in lat. 41°29.9', long. 71°06' are probably crude locations for the two rocks awash shown in this vicinity on the present survey. The latter representation should supersede the old location.

f. T-1161 (1870) - Reference Par. 4b(3), Review T-6118 (1934).

The breakers shown on T-1161 (1870) in approximate lat. 41°28.55', long. 71°08.8' are disposed of as follows:

(1) The northerly breaker falls close to a rock awash on the present survey and should not be retained in future charting.

(2) The southerly breaker falls on an undeveloped 8 ft. shoal on the present survey. The notation "Breakers" has been carried forward in color to the present survey at this spot.

7. Comparison with Chart No. 1210.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review.

8. Field Plotting.

The field plotting on this sheet was accurate and the drafting in general very good.

9. Additional Field Work Recommended.

Because of the irregular character and bouldery nature of the bottom, the entire area covered by the present survey should be wire dragged as close inshore as possible. If such drag survey is not feasible, then the following more important shoals and indications originating with either the old or new surveys should have additional lead line development supplemented by drift soundings. The shoals listed do not include those shoals that were adequately developed on the old survey or that were corroborated by shoalings on the new survey or that were drifted over on the new work:

*For results of investigations of the following areas see descriptive report of H-5622 Additional Work, 1935*



a. The 10 foot sounding from H-1791 (1887) in lat. 41°28.65', long. 71°08.5'.

b. The 28 foot shoal and vicinity from H-5553 (1934) in lat. 41° 28.3', long. 71°08.45' to and including the 31 foot sounding 1/10 mile northward.

c. The 15 foot shoal from H-1791 (1887) in lat. 41°28.85', long. 71°07.7'.

d. The 23 foot sounding from H-1791 (1887) in lat. 41°28.7', long. 71°07.5' and the 24 foot sounding 1/10 mile northward.

e. The 36 foot spot on the 1934 survey in lat. 41°27.4', long. 71°05.7'.

f. On Church Ledge, the 30 foot sounding from H-1792 (1887) in lat. 41°29.1', long. 71°06.3'.

g. The 15 foot sounding from H-1792 (1887) in lat. 41°29.8', long. 71°06.15'.

h. On Palmer Ledge in lat. 41°29.3', long. 71°05.8', the 13, 13, and 17 foot soundings ~~are~~ from H-1792 (1887).

i. The 32 foot sounding from H-1792 (1887) in lat. 41°29.05', long. 71°05.8'.

j. The 33 foot sounding on the 1934 survey in lat. 41°28.85', long. 71°05.55'.

k. On Kibby Ground, lat. 41°28.5', long. 71°04.2', the 25, 30, and 29 foot soundings from H-1792 (1887).

l. The 33 foot sounding in lat. 41°27.75', long. 71°03.65; the 31 in lat. 41°27.65', long. 71°03.50'; and the 34 in lat. 41°27.7', long. 71°03.4'. These three soundings are from H-1792 (1887) and are single shoal soundings on the lines.

m. The 35 foot sounding from H-1792 (1887) in lat. 41°28.1', long. 71°02.9'.

n. The 9 foot sounding from H-1792 (1887) in lat. 41°27.9', long. 71°02.0'.

o. The 9 foot sounding from H-1792 (1887) in lat. 41°27.87', long. 71°01.85'.

* See note, page 5

p.* The 15 foot sounding from H-1792 (1887) in lat. 41°27.6', long. 71°01.8'. This sounding was on a detached position, while drift sounding in the vicinity of a buoy marking the 12 foot rock about 100 meters to the northwest, and may be an error in location.

q.* The 17 foot sounding from H-1792 (1887) in lat. 41°27.85', long. 71°01.70'. The position of this sounding is doubtful because the probable course and time do not confirm the angle position.

10. Superseding Old Surveys.

Within the area covered, the present survey, with indicated additions from previous surveys, supersedes the following surveys for charting purposes:

| | |
|---|---|
| H- 154 (1844) | In part. |
| H- 155 (1845) | " " |
| H-1791 (1887) | " " |
| H-1792 (1887) | " " |
| H-1788 (1887) | " " |

11. Reviewed by - R. J. Christman, April, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, C. K. Green.
Chief, Section of Field Records.

L. O. Colbert
Chief, Division of Charts.

F. S. Borden
Chief, Section of Field Work

G. Rude
Chief, Division of H. & T.

applied to drawing of Chart 237 - June 25, 1935 - JFW

5622a

Additional work
WIRE DRAG SURVEY.



Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton *Director*

*State:* Mass.

# DESCRIPTIVE REPORT

~~*Topographic*~~ } *Sheet No.* 5622 add'l Work (1935)
*Hydrographic*

LOCALITY

Buzzards Bay

Approaches to Westport ~~River~~ Harbor

193 5

CHIEF OF PARTY

Wm. D. Patterson, Lieut.

U. S. GOVERNMENT PRINTING OFFICE: 1928

5622a
Additional work
WIRE DRAG SURVEY.

WIRE DRAG SURVEY.

Form 537
Ed. Dec., 1930

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



# HYDROGRAPHIC TITLE SHEET

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. 4

REGISTER NO. 5622 5622 add'l Work (1935)

State Massachusetts

General locality Buzzards Bay

Locality Approaches to Westport ~~River~~ Harbor

Scale 1:10,000 Date of survey June-July, 1935

Vessel Field Party No. 5

Chief of Party Lieut. Wm. D. Patterson

Surveyed by D. S. Ling and G. F. Jordan, Surveyors.

Protracted by J.a.mc Cormick

Soundings penciled by

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by JameCormick

Inked by JameCormick

Verified by JameCormick

Instructions dated May 14, 1934, and S. E. July 11 & ~~31~~ 34

Remarks:

Additional work of 1935 to be plotted in the Washington office.

U. S. GOVERNMENT PRINTING OFFICE: 1931

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SHEET NO. 5622 add'l Work (1935)
1934

APPROACHES TO WESTPORT HARBOR; Mass.

Additional Work
1935

Field Party No. 5 Project HT-179 Wm. D. Patterson, C. of P.

**********

DATE OF INSTRUCTIONS

Director's Instructions dated May 14, 1934, and Supplemental Instructions dated July 11 & 31, 1934.

SCOPE OF WORK

The work consisted of additional development of shoals as directed by the Office Review of the Smooth Sheet, dated April 1935, and as indicated on a Bromide of the smooth sheet furnished the party. This bromide is being returned to the office with the boat sheet of this year.

RECORDS

The records of 1935 consist of a Sounding Record (vol. 8), a Wire Drag Record (vol. 1), a Boat Sheet, and the Bromide mentioned above. The additional work accomplished this year is to be plotted on the smooth sheet of 1934 in the Washington office.

SIGNALS

The signals used and the names given are the same as those now appearing on the smooth sheet in the Washington office. Signal Kap of last year (a small white shed) was found to have been moved. When the fixes on this object failed to check, the site was visited and the new location determined by sextant angles (see p. 72, vol. 8) and the signal re-named Kap-2. All other signals used are listed on the title page of Vol. 1, 1934.

SURVEY METHODS

The work consisted of leadline and wire drag examination of shoals to determine least depth. Very few lines of soundings were run. When feeling for least depth by leadline, a buoy was

placed on the shoal and the boat allowed to drift repeatedly over the shoal with two or three leadlines in contact with the bottom, until least depth was found.

WIRE DRAG

A ~~p~~portable wire drag was used to investigate shoal areas. It was intended to drag several areas and work was in progress on July 31st when a telegram was received from the Director to disband the party due to lack of funds.

The wire drag work is shown on the boat sheet in yellow ink. The work accomplished on each shoal is described below.

SHOALS INVESTIGATED

The 10 foot sounding (see Par. 9-a of the Review) in lat. 41° 28.65', long. 71° 08.5', was investigated by drift sounding and a least depth of 5 feet (pos. 4D) was found with bottom visible.

The 28 foot shoal and vicinity (see par. 9-b of the Review) in lat 41° 28.3', long. 71° 08.45', to and including the 31 foot sounding 1/10 mile to northward, were investigated and no lesser depths found (pos. 5 to 16 D). This area was not properly developed, since it appears that the hydrographer investigated the 29 foot and 34 foot spots (shown in red on the bromide) and failed to investigate the 28 foot and 31 foot spots. It was intended to drag this area but the season closed before this could be done. *Development insufficient, additional work required*

The 15 foot shoal (see Par. 9-c of the Review) in lat. 41° 28.85', long. 71° 07.7', was investigated by drift sounding and a least depth of 12½ feet found (pos. 25 D).

The 23 foot sounding (see par. 9-d of the Review) in lat. 41° 28.7', long. 71° 07.5', and the 24 foot sounding 1/10 mile to northward, were investigated by drift sounding (pos. 17 to 23 D) and least depths of 19 feet (pos. 18D) and 10½ feet (pos. 23D) were found, respectively. This area is full of jagged peaks and lesser depths may be present. Wire drag examination was prevented by the disbandment of the party. *Future dragging recommended*

The 36 foot spot (see par. 9-e of the Review) in lat. 41°27.4' long. 71° 05.7', and the entire ledge (locally known as Inner Mayo Ledge) was examined by leadline and wire drag. The least depth found by lead was 31½ feet (pos. 16 G). This area was covered by a wire drag with an effective depth of 29 feet (C day, pos. 1 to 11) without grounding, so it is believed that the least found depth of 31½ feet is the least depth on the ledge.

On Inner Church Ledge, the 30 foot sounding (see par. 9-f of the Review) in lat. 41° 29.1', long. 71° 06.3', was investigated by drift sounding and a least depth of 28½ feet (pos. 39 B) was found. This area was covered by a wire drag on "B" day with an effective depth of 24 feet without grounding, so it is believed that 28½ feet is about the least depth on the ledge.

The 15 foot sounding (see par. 9-g of the Review) in lat. 41° 29.8', long. 71° 06.15', was investigated by drift sounding and a least depth of 12½ feet found (pos. 2 H).

On Palmer Ledge (see par. 9-h of the Review) in lat. 41° 29.3' long. 71° 05.8', the 13, 15 and 17 foot soundings were investigated by drift soundings and least depths of 11½ feet (pos. 9 B), 13½ feet (pos. 11 and 12 B), and 15 feet (pos. 15 B) were found, respectively.

The 32 foot sounding (see par. 9-i of the Review) in lat. 41° 29.05', long. 71° 05.8', was investigated by sounding lines and by drift sounding and a least depth of 25 feet (pos. 35 B) was found with a 25½ foot spot (pos. 34 B) about 100 miters to southwestward. This area was covered by wire drag (B day) with an effictive depth of 24 feet so it is believed that the least depths were found.

The 33 foot sounding (see par. 9-j of the Review) in lat. 41° 28.85', long. 71° 05.55', was investigated by leadline and wire drag. The least depth found was 31 feet (pos. 52 B). The area was covered by a wire drag with an effective depth of 24 feet.

On Kibby Ground (see par. 9-k of the Review) in lat. 41°28.5' long. 71° 04.2', the 25, 30, and 29 foot soundings were investigated by leadline and wire drag. The least found depths were 28½ feet (pos. 6 C), 31 feet (pos. 8 C), and 29½ feet (pos. 10 & 11 C), respectively. The area was covered by a wire drag with an effective depth of 23 feet (B day). On A day, wire drag, the drag grounded at #2 buoy at an effictive depth of 25½ feet. The tender was broken down and unable to sound. It is recommended that a depth of 25½ feet be charted here. The area was covered on B day with an effective depth of 23 feet.

*25 foot grounding shown at position of buoy No.2*

The 33 foot sounding (see par. 9-l of the Review) in lat. 41° 27.75', long. 71° 03.65', and the 31 and 34 foot soundings to eastward, were investigated by leadline and wire drag. The least depths found were 34 feet (pos. 30 E), 34 feet (pos. 27 E), and 36 feet (pos. 29E), respectively. Additional soundings were taken on the bank extending to southward. The entire area was covered with a wire drag at an effective depth of 27½ and 28 feet, D day. On the bank to southward, the drag grounded at effective depths of 30 feet, C day, and 27 feet, D day, although this area was later covered with an effective depth of 27½ feet on D day. The least depths found by leadline were 29 feet (pos. 2 K) and 29½ feet (pos. 1 L). At position 15 C, wire drag, the drag grounded at about the 34 foot sounding of 1934, at an effective depth of 29½ feet. A drag set at 28 feet effective depth cleared this spot on D day. No soundings were taken at this spot since the drag cleared itsself and the exact spot of grounding could not be found.

*Position of grounding at pos.15C too indefinite to plot. Retained the 31 from 1887 survey*

The 35 foot sounding (see par. 9-m of the Review) in lat. 41° 28.1', long. 71° 02.9', was investigated by leadline and wire drag. The least depth obtained by drift sounding was 38½ feet (pos. 23 C). This area was covered by a wire drag at an effective depth of 33½ feet on D day and 31½ feet on E day. However, the drag grounded on both D and E days at new shoals, the least depths being 30½ feet (pos. 2 L) and 33 feet (pos. 3 M). The abrupt close of the season prevented further investigation of this area.

*The 35 foot sounding from the 1887 survey retained. No clearance obtained over part of this area, however the portion not covered is close to known shoaler area and additional dragging is not considered necessary*

The 9 foot sounding (see par. 9-n of the Review) in lat. 41° 27.9', long. 71° 02.0', was investigated by drift sounding and least depths of 16 feet and 17 feet (pos. 32 & 33 A) were found. It was intended to drag this spot and also the other shoal spots to eastward and southward, but this was prevented by the disbandment of the party. It is recommended that the 9 foot sounding be retained since it is believed that drift sounding alone does not disprove it.

*9 foot sounding retained*

The 9 foot sounding (see par. 9-o of the Review) in lat. 41° 27.87', long. 71° 01.85' was investigated by drift sounding and a least depth of 12 feet (pos. 30 A) was found. It is recommended that the 9 foot sounding be retained for the same reason as given in the paragraph above, However, this area is gravel bottom with boulders and subject to some scouring and the 9-foot spots may no longer be there.

*9 foot sounding retained*

The 15 foot sounding (see Par. 9-p of the Review) in lat. 41° 27.6', long. 71° 01.8' was investigated by drift sounding and a least depth of 16 feet (pos. 18A) was found. The buoy marking this spot ha s been moved southeastward and the new location is determined by positions 1 and 2 A. The spar #1 has been changed to can #1.

*15 foot sounding from H-1792 (1887) retained also*

Two new rocks were located to eastward of Old Cock beacon, one a group of three rocks with a least depth of 5½ feet (pos. 15A), known locally as The Wildcat, and the other with a least depth of 5 feet (pos. 11A) lying about 100 meters to northward.

The 17 foot sounding (see par. 9-q of the Review) in lat. 41° 27.85', long. 71° 01.70' was investigated by drift sounding and a least depth of 18½ feet (pos. 29 A) was found.

*17 foot sounding from H-1792 (1887) retained also*

The two 6 foot soundings (see par. 9 of Review of sheet No. H-5628) were investigated and disproved. The bottom is sandy here and clearly visible. The closest rocks to the channel here are located at positions 1 and 2 F, with least depths of 6 7 and 5½ feet, respectively. A depth of 10 feet sandy bottom was found at the location of the two 6 foot soundings. *Further comparison indicates general change in vicinity of old 6 ft. sdgs which are considered disproved and have been removed from H-5628 (1934)*

The inshore hydrography at Gooseberry Neck was prevented by the sudden close of the season. Some additional rocks were located here on J day. The shoreline is foul and cannot be approached very closely. Position 9-J is the location of a rock with ½ foot of water over it. The charted rock to eastward, from a former survey, was not found. The charted rock, from a former survey, about 200 meters to southward was not found. The rock, located last year about 60 meters S.W. of pos. 7-J, bares 2½ feet at low water. A new rock, baring 1 foot at low water, was found 20 meters S.E. of this rock. (See note after position 7-J). Positions 1 and 2 J are the locations of 1½ foot spots on a former sounding of 2 feet, and on a last years sounding of 3 feet, respectively.

The charted 6 foot spot in lat. 41° 28.95', long. 71°03.05' was investigated by drift sounding and a least depth of 9½ feet (pos. 25 C) was found. It is recommended that the 6 foot sounding be retained since the hydrographer was not sure that least water was found.

*The 6 foot sounding retained*

Three rocks awash are shown on the bromide in lat. 41° 29.7', long. 71° 05.75'; lat. 41° 29.9', long. 71°05.35'; and lat. 41° 29.45', long. 71° 05.15'. There are no rocks awash at these points. It is believed that the hydrographer of last year saw submerged rocks while on a sounding line and made a note in the record for later attention. The least depths found this year with the rocks clearly visible were 7 feet (pos. 5 E), 4 feet (pos. 1 E), and 4 feet (pos. 6 & 7 E), respectively. *The 1934 sounding record noted "rock" without any estimated elevation. The new examinations are considered conclusive and rock awash symbols have been expunged.*

The charted 7 foot sounding in lat 41° 29.35', long. 71° 04.55' was checked (pos. 27 C).

NEW PLACE NAMES

The 3-foot rock on Briggs Ledge is locally known as Briggs Rock. Local people do not use the name Briggs Ledge.

Local fishermen call the bank in lat. 41° 28.8', long. 71° 05.6' "Kibby Grounds". The bank with the charted name of "Kibby Grounds" is locally known as "Pine Tree Grounds."

Church Ledge is locally called "Inner Church Ledge."

The rock in lat. 41° 28.9, long. 71° 07.6' is locally known as "Cutty Wow Rock."

The ledge in lat. 41° 27.4', long. 71° 05.7' is locally known as "Inner Mayo Ledge."

The three rocks, having a least depth of 5½ feet, located this year about 300 meters east of Old Cock Beacon, are locally known as "The Wildcat". The rocks are grouped closely together and have long streamers of sea grass.

REMARKS

The hydrographer had been discharged before this Descriptive Report was begun, so it is being written by the Chief of Party from a careful study of all available records.

Field work was in progress on this sheet when orders were received to disband the party due to lack of funds. Hydrography in the vicinity of Gooseberry Neck and wire drag examination of shoals were not completed.

This area is very rocky, with numerous pinnacles and boulders, and it would be a very lucky coincidence if any party found all the shoals and least depths in one season. Charts of this area should be made from the latest surveys with the addition of all unquestionable lesser depths from previous surveys.

Respectfully submitted,

Wm. D. Patterson

Wm. D. Patterson, Lieut.
Chief of Party.

STATISTICS

HYDROGRAPHIC SHEET NO. 5622 addl Work (1935)

1935

| Date | Day Letter | Volume | No. of Positions | No. of Soundings | No. of Statute Miles. |
|---|---|---|---|---|---|
| June 3 | A (blue) | 8 | 33 | 88 | 1.4 |
| " 6 | B | 8 | 53 | 100 | 2.0 |
| " 8 | C | 8 | 27 | 44 | 0.9 |
| " 11 | D | 8 | 25 | 40 | 0.9 |
| " 12 | E | 8 | 30 | 66 | 1.6 |
| " 13 | F | 8 | 2 | 2 | 0.0 |
| " 14 | G | 8 | 16 | 34 | 0.7 |
| " 19 | H | 8 | 3 | 5 | 0.0 |
| July 25 | J | 8 | 7 | 25 | 0.4 |
| " 27 | K | 8 | 2 | 2 | 0.0 |
| " 29 | L | 8 | 2 | 2 | 0.0 |
| " 31 | M | 8 | 3 | 3 | 0.0 |
| | Totals | | 203 | 411 | 7.9 |

WIRE DRAG

| | | | | | |
|---|---|---|---|---|---|
| July 23 | A | 1 | 4 | - | 0.3 |
| " 26 | B | 1 | 28 | - | 2.5 |
| " 27 | C | 1 | 15 | - | 1.5 |
| " 29 | D | 1 | 16 | - | 1.5 |
| " 31 | E | 1 | 5 | - | 0.5 |
| | Totals | | 68 | - | 6.3 |

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5622 add'l Work (1935)

The following statistics will be submitted with the cartographer's report on the sheet:

| | |
|---|---|
| Number of positions on sheet | 271 |
| Number of positions checked | 210 |
| Number of positions revised | |
| Number of soundings recorded | 411 |
| Number of soundings revised | |
| Number of signals erroneously plotted or transferred | 0 |

Date: Oct. 3, 1935.

Verification by J. A. McCormick Time: 33 hr.

Review by R. L. Johnston Time: 17 hrs.

verification 7¾ hrs.

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

# TIDE NOTE FOR HYDROGRAPHIC SHEET

September 23, 1935

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
2 volumes of ~~sounding records for~~ of wire drag and sounding records for

HYDROGRAPHIC SHEET 5622add'l Work (1935)

Locality Approaches to Westport Harbor, Mass.

Chief of Party: Wm. D. Patterson in 1935
Plane of reference is mean low water reading
2.7 ft. on tide staff at Westport Harbor
6.4 ft. below B.M. 1
1.1 ft. on tide staff at Clark Point
10.6 ft. below Bench Mark 1

Height of mean high water above plane of reference is 3.1 feet at Westport Harbor, 3.7 feet at Clark Point.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Verifier's Report on H-5622 (Additional Work)(1935)

Records:

Records are in good shape.

Drafting:

No smooth sheet was plotted in the field. All positions and soundings were plotted on H-5622 by the verifier.

Soundings transferred to this sheet from H-1791 and H-1792 were removed only when absolutely necessary. Pencil notes were placed on the sheet to call the reviewer's attention to places where these soundings had been removed.

Four overlays were drawn up by the verifier to show drag work accomplished. Drag grounded at position 15 C. no soundings were taken and there were no notes in the records to indicate location of shoal. A 31 foot sounding transferred from H-1791 on H-1792 looked like a possible location so verifier plotted a grounding of 29 feet in the position of the 31 foot sounding. Similarly no sounding was taken at position 5 D. no location along drag was given for shoal so verifier plotted a grounding on the position of a shoal obtained in previous soundings. This grounding of 27 feet does not agree with a subsequent strip which clears the shoal with 28 feet. Groundings at pos 15 C and pos 5 D considered too indefinite to plot. See par 16 and par 4 of reviewer RZJ

Verifier has plotted all drag soundings on H-5622 but has not transferred soundings for which soundings were not obtained. Grounding at pos 3A transfered by reviewer. Other groundings too indefinite in position to use from the overlays to H-5622 and 7 foot RZJ

Attention is called to rocks at Lat. 41-30.4 Long. 71-05.3. These rocks fall on H-5628 but were not transferred to that sheet by the verifier. The 2 and 7 foot rocks transferred to H-5628 by reviewer. RZJ

See descriptive report for comment.

Attention is called to "New Place Names" on which no action has been taken as yet.

Fixes taken by field party on D sky are extremely weak accounting for appreciable difference between boat and smooth sheets.

Oct. 3, 1935. Submitted,

J. A. McCormick

Tracing No. 1

# 5622

Add'l Work (1935)

Tracing No. 2

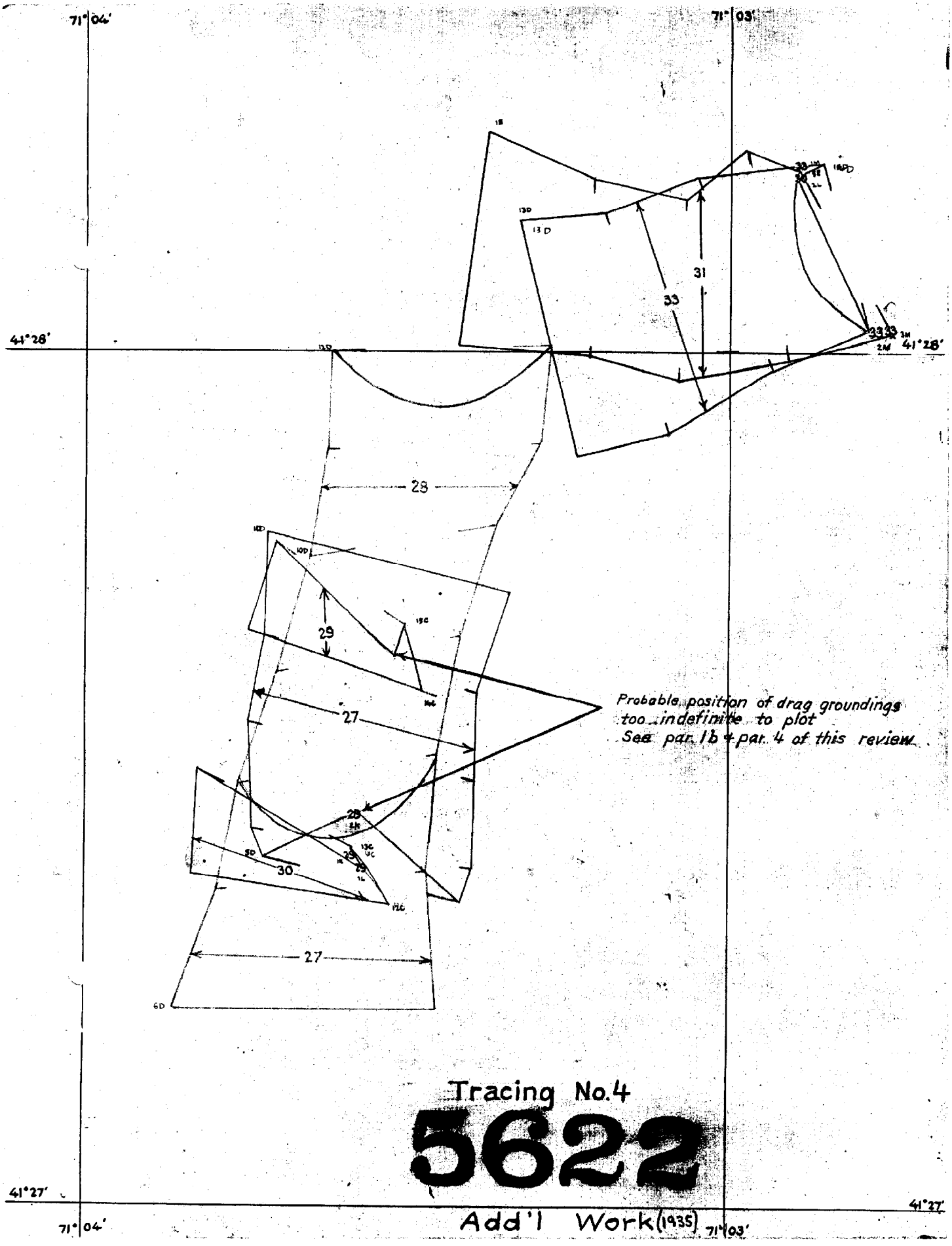
5622

Add'l Work (1935)

Tracing No. 3

5622

Add'l Work (1935).




Tracing No. 4

5622

Add'l Work (1935)

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5622 Add'l. Work 1935 FIELD NO. 4

Approaches to Westport Harbor, Buzzards Bay, Massachusetts.
Surveyed in June - July, 1935
Instructions dated May 14, 1934 (W. D. Patterson)

Wire Drag and Hand Lead Soundings. 3 Point Fixes on Shore Signals.

Chief of Party - W. D. Patterson.
Surveyed by - D. S. Ling, G. F. Jordan.
Protracted by - J. A. McCormick.
Verified and inked by - J. A. McCormick.

1. Purpose of Survey.

The purpose of the additional hydrographic and wire drag examinations of 1935 was to further examine important shoals and indications originating both with the surveys of 1887 and the season's work of 1934. These are enumerated under paragraph No. 9, Additional Field Work Recommended, in the review of H-5622 (1934).

2. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual and S. P. 118, except as follows:

a. Position angles in shoals were not checked by taking an angle to a fourth object (page 33 - S. P. 118).

b. A cut to the grounding was not recorded and in some cases the nearest buoy to the grounding was not recorded. In those cases where the drag fouled and pulled off before the tender could obtain a sounding, the position of the grounding was too indefinite to warrant plotting a grounding depth.

c. In some cases no bottom characteristics were recorded on soundings obtained at groundings.

The Descriptive Report was written by the Chief of Party after the hydrographer had left. However, it is clear and very comprehensive and adequately covers all matters of importance.

3. Results of Survey.

Practically all of the investigations called for in the original review resulted in a verification of the shoals carried forward to the 1934 work from prior surveys. In addition materially less water was found in a number of cases, the most noteworthy of which are the following:

a. The 10 foot shoal from H-1791 (1887), in latitude 41° 28.65', longitude 71°08.50' was reduced to 5 feet. Depths on 1934 work, 26 feet.

b. The 24 foot shoal from H-1791 (1887) in latitude 41° 28.75', longitude 71°07.55', was reduced to 10 feet. Depths on 1934 work, 38 feet.

c. The 15 foot shoal from H-1791 (1887), in latitude 41° 28.85', longitude 71°07.70', was reduced to 12 feet. Depths on 1934 work 43 feet.

d. The depths on Palmer Ledge (approx. latitude 41°29.3', longitude 71°05.7') was reduced to 11 feet. The shoalest depth on the 1934 work was 19 feet.

e. The 6 foot shoal from H-1792 (1887) in latitude 41° 30.37', longitude 71°05.25', was disproved, but a sunken rock with 2 feet over it was found 50 meters to the southwestward. Depths on the 1934 work were 8 to 10 feet. This rock is close to the main channel leading into Westport Harbor. (See H-5628).

A detailed description of each of the separate investigations is contained in the descriptive report for the additional work. When necessary, notations have been made after each paragraph regarding the office dispositions and a repetition of the information in this review is omitted. Some of the examinations are not as complete as desirable, due to the disbanding of the party before the completion of the work.

4. Field Plotting.

The additional work of 1935 was plotted on the smooth sheet in the Washington office. The drag work was not plotted on the smooth sheet because it was done merely for the purpose of supplementing the hydrographic work on some of the shoals and not as a general drag survey of the area. The drag strips have, however, been plotted on four small pieces of tracing cloth and are attached to the Descriptive Report. Because of the very indefinite positions of the 29-1/2 foot grounding at position 15C and the 27-1/2 foot grounding at position 5D, (see tracing No. 4) and the fact that actual soundings of only 1-1/2 feet deeper are available, neither of these groundings have been shown on the smooth sheet. They are shown on the drag strip tracing in their most probable positions, but should not be charted. Both of these groundings were cleared by a 28 foot drag strip.

The 25 foot grounding at position 3A, (see Tracing No. 1), on Kibby Ground (latitude 41°28.56', longitude 71°04.01') has been shown on the smooth sheet and should be charted, although its position is also somewhat indefinite. (See recommendation by Chief of Party - par. 5 page 3, of this Descriptive Report).

5. Additional Field Work Recommended.

In spite of the fact that the field party was disbanded before the entire completion of the work, practically all of the examinations of importance have been accomplished and no additional work is immediately necessary. When feasible a further examination of the following areas is desirable:

a. The 28 foot shoal and vicinity in latitude 41° 28.3', longitude 71° 08.45', to and including the 31 foot sounding 1/10 mile to the northward should be further investigated or wire dragged. (See par. 4, page 2 of this Descriptive Report).

b. A wire drag examination of the area of the 19 foot sounding and the 10 foot sounding in approximate latitude 41° 28.7', longitude 71° 07.5', should be made (See par. 4 under "Shoals Investigated," page 2 of this Descriptive Report).

6. Note to Compiler.

Attention is called to the fact that H-5622 (1934 ), as well as H-5628 (1934) which overlaps H-5622 (1934) have been applied to chart No. 237 (in stage of construction) before the additional work of 1935 had been received. In the light of the additional work, it was necessary to remove from these sheets some soundings brought forward from the 1887 surveys (shown in red) as well as a few soundings from the season's work of 1934 (shown in black). The compiler should, therefore, examine all the areas where the additional soundings (shown in blue) of 1935 appear. It is only in these areas that any old soundings have been removed from the sheet. The compiler's attention is particularly called to the three rocks awash, located in 1934, which have been expunged and replaced by the soundings of 1935. (Described in par. 1, page 5 of this descriptive report). The compiler's attention is also called to the 2 foot rock and 7 foot rock which were located in 1935 west of Halfmile Rock. These rocks fall within the area of H-5628 (1934) and two old 6 foot soundings that were shown in red on that sheet have been removed on the strength of the new investigation. (See par. 6b (2) in the review of H-5628 (1934) and par. 6, page 4 of this descriptive report). The bromide of H-5622 (1934-5), returned by the field party, will show the appearance of the sheet before the additional work of 1935 was done.

7. Reviewed by - R. L. Johnston, October 9, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green.

C. K. Green,
Chief, Section of Field Records.

L. O. Colbert

Chief, Division of Charts.

F. P. Borden
Chief, Section of Field Work.

G. W. Lude
Chief, Division of H. & T.

Applied to Chart 237 (compilation) 2 M.Q. 3/17/26 25 for 15, 1936

Eads

copied to Chart 1210 Records 11-14-61 MR