

U. S. COAST & GEODETIC SURVEY
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Form 504
Ed. June, 1928

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

State: Massachusetts

DESCRIPTIVE REPORT

~~Tidegraphic~~ } Sheet No. 5630
Hydrographic }

LOCALITY

Buzzards Bay

Goosberry Neck to Mishaum Point ↓

1935

CHIEF OF PARTY

Wm. D. Patterson.

5630

5630

Additional work (1935)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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OCT 17 1935
FIG. NO.
Acc. 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. 7

REGISTER NO. 5630 Additional work (1935)

State Massachusetts

General locality Buzzards Bay

Locality Gooseberry Neck to Mishaum Point to X

Scale 1:10,000 Date of survey June to August, 19 35

Vessel Field Party No. 5

Chief of Party Lieut. Wm. D. Patterson

Surveyed by W.H. Jennings; G.F. Jordan; V.A. Bishop. (Surveyors)

Protracted by J.A. Mc Cormick

Soundings penciled by James McCormick

Soundings in fathoms feet

Plane of reference Mean low water

Subdivision of wire dragged areas by

Inked by James McCormick

Verified by James McCormick

Instructions dated May 14, 19 34

Remarks: Additional work executed in 1935 to be plotted on smooth sheet in the Washington Office.

XWW 10/14/41

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SHEET NO. 5630
1934

GOOSEBERRY NECK TO MISHAUM PT., MASS.

Additional Work
1935

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

DATE OF INSTRUCTIONS:

This survey was made in accordance with the Director's instructions dated May 14, 1934 and supplemental Instructions dated July 11 & July 31, 1934.

SURVEY METHODS:

The standard three point sextant fix was used for obtaining positions. Depths were obtained with the standard leadline, a mahogany wire-center tiller rope, with cupped lead. The line was marked in fathoms and feet.

In the development of shoals and search for least water, the method of drift sounding generally employed was to mark the location with a small buoy, and drift down on the buoy broadside with two or three leadlines over the side. Numerous overlapping drifts were made so that the location was covered within a 50 meter radius of the charted sounding or least water indication.

LIMIT AND EXTENT:

This survey is a continuation of survey No. 5630, covering the waters between Gooseberry Neck and Mishaum Point to a distance of two miles off-shore, and includes the investigation and development of charted and shoal soundings which were not covered within the limits of the 1934 survey. This survey joins hydrographic survey No. 5622 (1934-1935) to the west, and sheet No. 2 to the east.

DISCREPANCIES:

No discrepancies were found upon reviewing the boat sheet.

DANGERS:

There are no dangers to report other than rocks and shoals which are clearly indicated by this survey.

CHANNELS:

There are no channels to report.

ANCHORAGES:

There are no anchorages to report.

*For dispositions of features discussed below see review of
Additional Work of 1935*

COMPARISON WITH PREVIOUS SURVEYS:

Under this heading this report covers matters contained in the review of Hydrographic Survey No. 5630 (1934), and lists the results of investigations specified in the review.

Par. 9a (1), latitude $41^{\circ} 31.5'$, longitude $70^{\circ} 57.9'$, charted 8 foot sounding was investigated by sounding lines and drift sounding. See positions 26, 27 and 28 "P" day, least found depth of 12 feet. Unless there is some doubt as to the original 8 foot sounding, or its position, it is recommended that it be retained for charting, since these small boulders and pinnacles are difficult to find and it may have been missed this year.

Par. 9a (2), latitude $41^{\circ} 30.1'$, longitude $70^{\circ} 58.5'$ charted 16 foot and 19 foot soundings were investigated by drift sounding. Least water of 17 feet at position 4 AA was found on a rocky shoal. Least depth of $18\frac{1}{2}$ feet at position 5 AA was found on a rocky shoal. It is recommended that the original 16 foot sounding be retained and the $18\frac{1}{2}$ foot sounding replace the charted 19 foot sounding.

Par. 9a (3), latitude $41^{\circ} 30.4'$, longitude $70^{\circ} 58.5'$, charted 12, 12 and 13 foot soundings were investigated by sounding lines and drift soundings. Least depths of 12 and 13 feet at positions 49 M to 53 M were found on a rocky shoal. The charted 18 foot sounding, 200 meters to eastward (see bromide) was not disproved and it is recommended that it be retained.

Par. 9a (4), latitude $41^{\circ} 29.9'$, longitude $70^{\circ} 58.6'$, a charted 25 foot sounding. A least depth of 22 feet at position 33 J was found on a rock shoal by drift sounding. In latitude $41^{\circ} 29.9'$, longitude $70^{\circ} 59.1'$ a charted 25 foot sounding was investigated by drift sounding and a least depth of 24 feet, position 47 J, was found on a rocky shoal.

Par. 9a (5), latitude $41^{\circ} 30.2'$, longitude $70^{\circ} 59.5'$, a charted 11 foot sounding was investigated by sounding lines and drift sounding. A least depth of 14 feet, position 97 and 98 J, was found on a rocky shoal. It is believed that the 11 foot sounding should be retained unless its position is doubtful. *13 $\frac{1}{2}$ pos. 101 to pos. 102 J*

Par. 9a (6), latitude $41^{\circ} 30.2'$, longitude $71^{\circ} 00.1'$, 16, 17 and 18 foot soundings were investigated by sounding lines and drift soundings. This area is very rocky and has many pinnacles. Least depths of $11\frac{1}{2}$ and 16 feet, positions 1 and 2 AA; $5\frac{1}{2}$ feet at position 8 Z; and 19 feet at position 7 Z were found. A least depth of 4 feet was found on "Old Skunk", position 62 G.

*For dispositions of features discussed below see
Review of Additional Work of 1935.*

Par. 9a (7), latitude $41^{\circ} 29.9'$, longitude $71^{\circ} 00.3'$, a charted 24 foot sounding was investigated by drift sounding and a least depth of 27 feet, position 68 $\frac{1}{2}$, was found. It is recommended that the 24 foot sounding be retained unless replotting should place it on the shoal to southwestward.

Par. 9a (8), latitude $41^{\circ} 29.7'$, longitude $70^{\circ} 59.7'$, a charted 28 foot sounding was investigated by sounding lines and drift sounding and a least depth of 29 feet, position 3 AA, was found. It is recommended that the 28 foot sounding be retained.

Par. 9a (9), in latitude $41^{\circ} 29.9'$, longitude $71^{\circ} 00.8'$, charted 18 and 22 foot soundings were investigated by sounding lines and drift soundings and least depth of $33\frac{1}{2}$ feet, position 58 $\frac{1}{2}$, and 22 $\frac{1}{2}$ feet positions 8 & 9 G were found respectively. In view of the fact that the 18 foot sounding was doubtful (par. 6a (3) of the review) it is recommended that it be rejected.

Par. 9a (10), in latitude $41^{\circ} 28.6'$, longitude $71^{\circ} 01.4'$, sounding of 10 feet of 1934, was investigated by sounding lines and drift sounding and no less than prevailing depths were found. The bottom is hard sand and it would appear that the leadman read the leadline 1 fathom off or the recorder misunderstood the sounding. If the sounding is O.K.ed in the record it should be retained for future wire drag examination, otherwise it would appear that it should be rejected.

Par. 9a (11), in latitude $41^{\circ} 30.9'$, longitude $70^{\circ} 58.0'$, a rock with 2 feet over it, was searched for at low tide, clear, calm weather, and was not found in the charted position. A rock with a least depth of 4 feet, position 35 M, was found ~~67~~³⁰ meters to west-northwestward. This is probably the same rock, and it is recommended that it be accepted in place of the charted rock.

Par. 9a (12), in latitude $41^{\circ} 30.0'$, longitude $70^{\circ} 58.2'$, further development of the 30 foot shoal was covered in the present survey.

Par. 9b (1), additional development of the rocks and inshore area eastward of Gooseberry Neck was covered by the present survey. This area is very foul and closer development was prevented by rough seas.

Par. 9b (2), The western end of Allen Pond bares at mean low water. The central part and eastern end of the pond has approximately $\frac{1}{2}$ foot at mean low water.

Par. 9b (3), latitude $41^{\circ} 30.3'$, longitude $70^{\circ} 59.5'$, the charted 16 foot sounding was investigated and a least depth of 15 feet, position 20 K, was found by drift sounding.

Par. 9b (4), latitude $41^{\circ} 31.7'$, longitude $70^{\circ} 57.9'$, charted sunken rock was not found. Local fishermen say that there is no rock here, but pointed out rocks about 100 meters to northward which were located this year. It is recommended that the sunken rock symbol be removed from the chart.

*For dispositions of features discussed below see
review of Additional Work of 1935*

Par. 9b (5), vicinity of latitude $41^{\circ} 31.2'$, longitude $70^{\circ} 57.7'$ the charted rocks were investigated at low water and all existing rocks located, positions 74 H to 85 H. The topographer did not locate these rocks in 1934 due to the lack of a boat and the hydrographic party was ordered south before the survey was completed.

Par. 9b (6), the area westward of Mishaum Point was developed this year. Further development of this area and the area to southward of Mishaum Point was prevented by the disbandment of the party.

Par. 9b (7), latitude $41^{\circ} 31.4'$, longitude $70^{\circ} 57.7'$, a rock awash was searched for and not found (see positions 72 H & 73 H). It is recommended that it be removed from the chart.

Par. 6d (4), latitude $41^{\circ} 31.1'$, longitude $70^{\circ} 57.6'$, investigated a rock awash, and found rock bares $\frac{1}{2}$ foot at mean low water. Three sunken rocks were also found on the southeast side of the rock awash and were located by positions 2 Z, 3 Z and 4 Z. A rock with $2\frac{1}{2}$ feet of water over it was found at position 71 H.

Par. 6d (5), the low water line north from Barney's Joy Point is developed by this survey.

Par. 9c, a sunken rock shown on the boat sheet of 1934 was reported by a fisherman in that general area. Search for this rock was made in 1934 and it could not be found, accordingly the report was disregarded.

The charted rock awash in latitude $41^{\circ} 28.68'$ longitude $71^{\circ} 02.0'$ was not seen by the survey party on "P" day, with one foot of tide. It is recommended that this rock be removed from the chart unless the original location is very definite, in which case it should be retained for future investigation.

ADDITIONAL COMPARISONS:

Latitude $41^{\circ} 30.95'$ longitude $70^{\circ} 57.8'$ on chart 249, the 2 & 4 foot rocks. Four rocks were found with least water of 2 feet at position 30 M, the others at positions 31, 32, and 34 M.

Latitude $41^{\circ} 30.72'$ longitude $70^{\circ} 57.45'$ on chart 249, the 12 foot sounding. Least water found by drift sounding was $14\frac{1}{2}$ feet at positions 51, 52, 53 L. *12 carried forward from H-2321 (1897)*

Latitude $41^{\circ} 30.15'$ longitude $70^{\circ} 57.2'$ on chart 249, the 16 foot sounding. Least water found by drift sounding was 16 feet at position 3 U, on a rocky shoal.

Latitude $41^{\circ} 30.7'$ longitude $70^{\circ} 57.1'$ on chart 249, the 18 foot Sounding. Least water found was 17 feet at position 10 T, on a rocky shoal.

Latitude $41^{\circ} 29.7'$ longitude $70^{\circ} 57.0'$ on chart 249, the 23 foot Sounding. Least water found was $22\frac{1}{2}$ feet at position 1 W, on a rocky shoal.

Latitude $41^{\circ} 29.3'$ longitude $70^{\circ} 57.6'$, on chart 249, the 14 foot sounding. Least water found was 15 feet at position 3 W, on a rocky shoal. *14 carried forward from H-2321 (1897)*

Latitude $41^{\circ} 29.4'$ longitude $70^{\circ} 58.0'$ on chart 249, the 8 foot sounding. Least water found was $21\frac{1}{2}$ feet at position 13 Y after one hour of drift sounding. The bottom is rocky and it is recommended that the 8 foot sounding be retained until future wire drag development may be made.

8 ft. rock carried forward from H-2321 (1897) See review

Latitude $41^{\circ} 29.25'$ longitude $70^{\circ} 57.5'$ on chart 249, a 17 foot sounding. Least water found was 16 feet at position 11 Y, on a rocky shoal.

Latitude $41^{\circ} 29.3'$ longitude $70^{\circ} 58.35'$ on chart 249, a 16 foot sounding. Least water found was $18\frac{1}{2}$ feet at position 5 Y, on a rocky shoal. *16 carried forward from H-2321 (1897)*

Latitude $41^{\circ} 29.45'$ longitude $70^{\circ} 58.5'$ on chart 249, an 18 foot sounding. Least water found was $19\frac{1}{2}$ feet at position 6 Y, on a rocky shoal. *18 carried forward from H-2321 (1897)*

Latitude $41^{\circ} 29.55'$ longitude $70^{\circ} 58.35'$ on chart 249, a 14 foot sounding. Least water found was 15 feet at position 7 Y, on a rocky shoal. *14 carried forward from H-2321 (1897)*

Vicinity of latitude $41^{\circ} 29.2'$ longitude $70^{\circ} 59.0'$ on chart 1210, three 30 foot soundings. Least water found on westerly shoal was 28 feet at position 50 X; on middle shoal $28\frac{1}{2}$ feet at position 52 X. A 29 foot rocky sounding was obtained on the easterly shoal at position 65 T.

Latitude $41^{\circ} 28.45'$ longitude $71^{\circ} 00.4'$ on chart 1210, 25 foot sounding on Chickadee Ledge. Least water found was 25 feet at position 49 X, on a rocky shoal. *The charted 25 from H-1792 (1887) is in a different position and was carried forward.*

Note:- The new work of 1935 on this sheet was not completed and requires future development.

GEOGRAPHIC NAMES:

There are no new geographic names to report.

REMARKS:

As previously mentioned, the field party was disbanded before completion of this survey. Development of important shoals by wire drag method, and certain desired split-lines were not accomplished.

Respectfully submitted,

APPROVED & FORWARDED:

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

George F. Jordan,
Surveyor.

*(Jordan discharged before
this Report was typed)*

ADDITIONAL NOTES BY CHIEF OF PARTY

Hydrographic Sheet 5630

1935

Work on this sheet was in progress when orders were received to disband the party due to lack of funds. Many split lines were yet to be run, and development of off shore shoals was not completed. Wire drag examination of shoals, which is very necessary in this rocky area, was not begun.

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.

SIGNALS:

The signals used and the names given are the same as those now appearing on the smooth sheet in the Washington Office, except for the signals along the eastern shore of Smith's Neck which were taken from topographic sheet "C" of this year.

RECORDS:

The records of 1935 consist of 4 sounding records (Volume 8 to 11, continued from last year), a boat sheet, and the bromide of the smooth sheet furnished the party by the Washington Office. The additional work accomplished this year is to be plotted on the smooth sheet of 1934 in the Washington Office.

LANDMARKS FOR CHARTS:

These are submitted as a separate report.

Respectfully submitted,


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

STATISTICS

Supplemental Survey

Hydrographic Sheet No. 5630
1935

Date	Day Letter	Volume	No. of Positions	No. of Soundings	No. of Statute Miles.
June 6	C ^(Green) (red)	8	67	217	5.0
June 8	D	8	88	348	10.8
June 11	E	8	53	230	6.7
June 12	F	8	80	358	10.8
June 14	G	8	86	303	7.6
June 20	H	8, 9	85	274	10.5
June 21	J	9	112	386	13.7
June 24	K	9	109	425	17.2
June 25	L	9	53	202	7.0
June 26	M	9	68	208	7.8
June 27	N	9	19	96	2.3
June 28	P	9	24	87	1.7
July 2	Q	10	118	459	21.5
July 3	R	10	93	362	19.1
July 8	S	10	64	252	11.2
July 11	T	10	101	378	14.6
July 12	U	10	3	3	0.0
July 17	V	10	25	109	5.1
July 18	W	10	37	132	6.1
July 20	X	11	65	224	10.4
July 24	Y	11	13	13	0.0
Aug. 21	Z	11	8	12	0.0
Aug. 22	AA	11	5	5	0.0
Aug. 23	BB	11	19	60	1.2

Totals 1396 5143 190.3

Area in square statute miles 6.71.

HYDROGRAPHIC SURVEY NO. 5630 Add'l Work (1935)

Smooth Sheet none

Boat Sheet 1

Sounding Records 4 Vols. _____

Descriptive Report yes

Title Sheet yes

List of Signals Vol 1

Landmarks for Charts (Form 567) yes

Statistics yes

Approved by Chief of Party yes

Recoverable Station Cards (Form 524) none

Special Chart for Lighthouse Service yes
(Circular Nov. 30, 1933)

Remarks _____

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **5630 Add'l Work (1935)**

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

Number of positions on sheet	...1395
Number of positions checked	...1395
Number of positions revised
Number of soundings recorded	...5143
Number of soundings revised
Number of signals erroneously plotted or transferred?

Date: *December 24, 1935*

Verification by *Jame Cornick*

Time: *120 hr.*

Review by *R. L. Johnston*

Time: *71 $\frac{3}{4}$ hr.*

Lae

TIDE NOTE FOR HYDROGRAPHIC SHEET

November 12, 1935.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
4 volumes of sounding records for

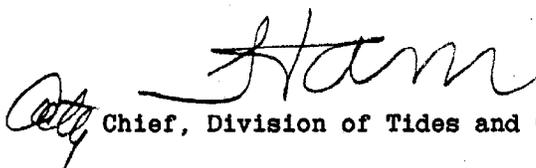
HYDROGRAPHIC SHEET 5650 Additional Work (1935)

Locality Mishaum Point to Gooseberry Neck, Buzzards Bay, Mass.

Chief of Party: W. D. Patterson in 1935,
Plane of reference is mean low water reading
1.1 ft. on tide staff at Clark Point
10.6 ft. below B.M. 1

Height of mean high water above plane of reference is 5.7 feet.

Condition of records satisfactory except as noted below:


Chief, Division of Tides and Currents.

Verifier's Report on H-5630 (Additional Work)

Drafting: Additional work was plotted in this office. Boat sheet is not in very good shape. Position numbers are illegible.

Records: Records conform to specifications.

Junctions: Junction with H-5622 to the westward was revised to conform with the additional work. Junction was made with H-5882 to the eastward.

Control: Topographic signals for the original work are from T-6119 and T-6121. Additional signals and shoreline on Mishaum Point are from T-6373. Two triangulation stations on Mishaum Point were found to be plotted wrong. They were old stations and no correction had been applied to convert them from the North American to the N.A.1927 datum. This error made necessary the replotting of approximately 100 positions divided about equally between the old and new work. Had the field party not used such weak fixes the errors probably would not have been discovered. A change of 20 meters in one signal caused a shift of 200 meters in several positions only a half mile from the signal.

Remarks: Positions 1-6 D indicate fishtraps. They are not shown on the boat sheet and records do not state on which side of the line they are so the verifier has omitted them. Position 1 D and following sounding (Lat. 41-29.8, Long. 71-01.0) look to be at least a fathom shoal. It is also possible that the boat may have been running so close to the fishtrap as to foul the lead.

Note on Position 8 N says, "Position 2 meters north of rock, Old Silas." (Lat. 41-30.55 Long. 70-58.65) The position is actually 33 meters northwest of ~~the~~ Pawn Rock. The Chief of Party was consulted personally and stated that the hydrographer was probably confused in his names and that he probably saw breakers and thought he was close to the rock.

Verifier has removed soundings and rocks transferred from old surveys wherever the latest work checks them. By consulting the bromide the reviewer may determine just which ones have been removed.

Additional geographic names have not been approved.

December 24, 1935.

Submitted,

JAMES MCCORMICK
J. A. McCormick

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5630 Add. Work (1935) FIELD NO. 7

Mishaum Pt. to Gooseberry Neck, Buzzards Bay, Mass.

Surveyed in June- August 1935

Instructions dated May 14, 1934 (W. D. Patterson)

Supplemental Instructions dated July 11 and 31, 1934 (W.D. Patterson)

Hand Lead Soundings

3 Point fixes on shore signals.

Chief of Party - W. D. Patterson.

Surveyed by - W. H. Jennings, G. F. Jordan, V. A. Bishop.

Protracted and plotted by - J. A. McCormick.

Verified and inked by - J. A. McCormick.

Purpose of Survey.

The purpose of the additional work of 1935 was to further investigate shoal indications and inshore rocks originating both from prior surveys and the season's work of 1934, and to extend the work beyond the limits of the 1934 work. This review is, therefore, divided into two parts, that which pertains to the area of the 1934 work, and that which falls beyond the limits of the 1934 work.

PART I - Additional Work within Limits of 1934 Work.

Results of Survey.

Most 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 less water was found in several cases. The various soundings and rocks involved in the new examinations, mentioned in the original review, have been disposed of as follows, the paragraph numbers corresponding to those in the original review and in the descriptive report of the additional work of 1935.

Par. 9a(1). The 8 foot sounding carried forward from H-2321 (1897) in latitude $41^{\circ}31.5'$, longitude $70^{\circ}57.9'$, was investigated by drift soundings and the least depth found was 12 feet. (Positions 26, 27 and 28F). Since only about 7 minutes was spent on the examination, the 8 is not considered disproved and it has been retained as recommended by the field party.

Par. 9a(2). The 16 and 19 foot soundings from H-2321 (1897) in the vicinity of latitude $41^{\circ}30.1'$, longitude $70^{\circ}58.5'$, was investigated by drift soundings (Pos. 4 and 5AA) and least depths of 17 and $18\frac{1}{2}$ feet obtained. The 16 has been retained and the 19 has been replaced by the new 18 foot sounding as recommended by the field party.

- Par. 9a(3). The 12, 12 and 13 foot soundings in latitude $41^{\circ}30.4'$, longitude $70^{\circ}58.5'$, from H-2321 (1897) were investigated by drift soundings and similar depths in slightly different positions or depths 1 foot deeper were obtained. The 18 foot sounding, 200 meters to eastward, was not closely examined but a 20 foot sounding was obtained adjacent to it. All of the original soundings above are considered to be confirmed and all have been retained.
- Par. 9a(4). The 25 foot soundings from H-2321 (1897) in latitude $41^{\circ}29.9'$, longitude $70^{\circ}58.6'$, and in latitude $41^{\circ}29.9'$, longitude $70^{\circ}59.1'$ were investigated by drift soundings and depths of 22 and 24 feet respectively were obtained. These depths should replace the 25 foot soundings on the charts.
- Par. 9a(5). The 11 foot sounding from H-2321 (1897) in latitude $41^{\circ}30.2'$, longitude $70^{\circ}59.5'$, was investigated by sounding lines and drift soundings. The least depths found were $13\frac{1}{2}$ and 14 feet. Although the 11 is a single sounding on a line, its position falls among the shoalest depths found in 1935. In view of the rocky character of this shoaling, the 11 is not considered disproved and has been retained as recommended by the field party.
- Par. 9a(6). The 16 foot sounding from the 1934 season's work and the 17 and 18 foot sounding from H-2321 (1897) in vicinity of latitude $41^{\circ}30.2'$, longitude $71^{\circ}00.1'$ were investigated by sounding lines and drift soundings. The area is described as being very rocky with many pinnacles. The depths on most of these rocks were greatly reduced. The least depths found were $11\frac{1}{2}$ and 16 feet (pos. 1 and 2AA), $5\frac{1}{2}$ feet (pos. 8z), 19 feet (pos. 7z) and a depth of 4 feet on "Old Skunk", (pos. 62G). The only prior sounding retained in this area is an 18 foot sounding from H-2321 (1897) adjacent to the present 19 foot sounding.
- Par. 9a(7). The 24 foot sounding from H-2321 in latitude $41^{\circ}29.9'$, longitude $71^{\circ}00.3'$, was investigated by drift sounding and a least depth of 27 feet (pos. 6Z) was found, however, the depth on a shoaling to the southwest was reduced to 22 feet. As the bottom is rocky and irregular the old 24 has been retained as recommended by the field party.
- Par. 9a(8). The 28 foot sounding from H-154 (1844) in latitude $41^{\circ}29.7'$, longitude $70^{\circ}59.7'$, was investigated by sounding lines and drift soundings and the least depth obtained was 29 feet. (Pos. 3AA). This is a rocky shoal and the 28 foot sounding has been retained as recommended by the field party.

Par. 9a(9).

An investigation was called for of the 18 and 22 foot sounding from H-154 (1844) in vicinity of latitude $41^{\circ}29.9'$, longitude $71^{\circ}00.8'$. (See par. 6a(3) and par. 9a(9) of the original review). The 18 foot sounding was not shown on H-154 (1844) but was found in the records. A replotting of the line containing these soundings (pos. 27 to 29V) showed that the portion of the line where the 22 appeared was in fair agreement but the portion of the line adjacent to the 18 was very much shoaler than the present depths as well as the surrounding soundings on the old survey. The 18 foot sounding is considered doubtful. These soundings were investigated by sounding lines and drift soundings. The 22 was confirmed by depths of 22-1/2 and 23 feet, but the least depth found in the vicinity of the 18 was 33-1/2 feet, hard bottom. (pos. 5Z). The 22 foot sounding has been retained but in view of the doubtful character of the 18 foot sounding and the intensive nature of the present examination, the 18 foot sounding is considered disproved. It has been replaced by the present 33 foot sounding as recommended by the field party.

Par. 9a(10).

The 10 foot sounding from the season's work of 1934 on H-5622, in latitude $41^{\circ}28.6'$, longitude $71^{\circ}01.4'$, was investigated by sounding lines and drift soundings and the least depth found was 16 feet, hard sand bottom. The 10 is a single sounding on a line and is recorded as 2 fathoms 0 feet between soundings recorded as 2 fathoms 5 feet and 3 fathoms 3 feet, and the 10 was not OK'd in the records. It is considered highly probable that the 10 foot sounding is erroneous. However, since the area is infested with numerous rocks and boulders, the 10 is being retained until such time as it is disproved by a wire drag.

Par. 9a(11).

The 2 foot rock (charted) from H-2321 (1897) in latitude $41^{\circ}30.9'$, longitude $70^{\circ}58.0'$, was searched for at low tide and not found in the position shown. A rock with a least depth of 4 feet (pos. 35M) was found 30 meters west northwest. The fix locating the rock on H-2321 (1897) (pos. 15b green) depends on two sextant located signals while the angles on the present fix are between two triangulation stations and a topographic signal. Both fixes evidently locate the same rock and the present location, which is considered more accurate, is accepted. The rock is said to be a small isolated pinnacle and the present sounding may not represent the least depth. The 2 foot depth from H-2321 (1897) has, therefore, been retained in the position determined on the present survey.

- Par. 9a(12). The northern limits of the 30 foot curve in latitude 41°30.0', longitude 70°58.2', was satisfactorily defined.
- Par. 9b(1). Numerous rocks awash were located in the area eastward of Gooseberry Neck, latitude 41°29.4', longitude 71°02.2'. (Par. 6b(2) of original review).
- Par. 9b(2). The approximate general depths in Allens Pond were reported from inspection. The western end bares at mean low water and the central part and eastern end has approximately 1/2 foot at mean low water.
- Par. 9b(3). The area around the 16 foot sounding from H-2321 (1897) in latitude 41°30.3', longitude 70°59.5', was examined and a least depth of 15 feet was found by drift soundings. (pos. 20K).
- Par. 9b(4). The area of the sunken rock carried forward from T-183 (1884) in latitude 41°31.7', longitude 70°57.9', was examined at low tide and no rock was found. Rocks were located about 100 meters northward. (pos. 1 and 2P and pos. 13F). The old sunken rock is considered disproved and has been removed from the sheet as recommended by the field party.
- Par. 9b(5). The rocks in the vicinity of latitude 41°31.2', longitude 70°57.7', were investigated at low water and all existing rocks located. Some of the rocks originally located by sextant fixes on H-2321 (1897) were not found at all or found in slightly different positions. It is possible that being boulders they have shifted in position. The present delineation of these rocks should supersede that shown on H-2321 (1897), T-183 (1844), T-193 (1844) and T-2216 (1895). (See par. 6c(4) of the original review).
- Par. 9b(6). The area westward of Mishaum Point was further developed. The 8 foot rock shown on the 1934 work in latitude 41°30.9', longitude 70°57.6', was not investigated, however, a new 8 foot depth was found about 100 meters south of the old one and several new rocks were located.
- Par. 9b(7). The rock awash carried forward from T-193 (1844) in latitude 41°31.4', longitude 70°57.7', was searched for by drift soundings when there was 1½ feet of tide and not found. (pos. 72 and 73H). This rock is considered disproved as a rock awash but on account of its definite character on the original survey it is being carried forward as a sunken rock.

Par. 6d(4). Rocks shown on T-183 (1844) and H-154 (1844) in latitude 41°31.1', longitude 70°57.6' were investigated. A rock awash at M. L. W. (actually bare 1/2 foot) was located (pos. 1Z) as well as several sunken rocks with depths of 2 feet over them at M. L. W. (pos. 2, 3 and 4Z and pos. 71H). The present delineation of these rocks should supersede that shown on the old surveys.

Par. 6d(5). The low water line north from Barneys Joy Point has been determined satisfactorily.

Par. 9c. The sunken rock, noted as "reported rock", on the boat sheet of 1934, in latitude 41°30.4', longitude 70°59.6', was reported by a fisherman in that general area. It was put on the boat sheet for investigation and was searched for in 1934 and not found. The sunken rock symbol on the boat sheet should be disregarded. This was noted in par. 1c of the original review.

A rock symbol shown on T-2217 (1895-6) in latitude 41°28.68', longitude 71°02.0', was carried forward to H-5630 (1934) and T-6119 (1934) as a rock awash. (See par. 6e(1) of original review). This area was investigated in 1935 by sounding lines when there was 1 foot of tide (pos. 18 to 19P and pos. 23 to 24P) and no rock was seen. A detached position (pos. 15c) over the spot also failed to find a rock. In view of the fact that the supposed rock symbol on T-2217 (1895-6) was very indefinite and may be an ink smudge, the present investigation is considered sufficient to disprove the existence of a rock in this position. The rock symbol was removed from H-5630 (1934-5) and T-6119 (1934) as recommended by the field party and an appropriate note added to T-2217 (1895-6).

PART II - Additional Work beyond Limits of 1934 Work.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual.

The Descriptive Report is clear and comprehensive and adequately covers all matters of importance.

2. Compliance with Instructions for the Project.

Although the wire drag was not used, practically all of the investigations called for in the original review were satisfactorily accomplished by drift sounding. In the area covered by the 1935 work beyond the limits of the 1934 work, the survey is incomplete and requires further development.

3. Junctions with Contemporary Surveys.

There are no contemporary surveys south of this survey. The present survey is in fairly close agreement on its southern limits with the last hydrographic surveys H-1792 (1887) and H-2320 (1897).

The junctions on the west with H-5622 (1934) and on the north-east with H-5882 (1935) are satisfactory.

4. Comparison with prior Surveys.

a. H-154 (1844), H-158 (1845), H-163 (1845).

H-158 (1845) and H-163 (1845) cover only a small area east and south of Mishaum Point. They show no critical features and need no further consideration. H-154 (1844), on a scale of 1:20,000, covers most of the area of the present survey with rather widely spaced soundings. In view of the fact that survey methods had not been perfected at the time of this survey, the depths are generally in fair agreement with the present ones. Some of the soundings on Mishaum Ledge differ in depth and position, the greatest difference being an 8 foot rock in latitude $41^{\circ}29.4'$, longitude $71^{\circ}58.0'$, which was not found on the present survey. The 8 foot rock was more strongly located in a different position on a later survey, H-2321 (1897), and it has been carried forward in the latter location. Except for the soundings considered in the original review and those disposed of in par. 9a(9), Part I, of this review, no other soundings from this survey need be discussed. In the areas beyond the limits of the season's work of ¹⁹³⁴~~1844~~, the information shown on this survey has been superseded on the charts by later surveys and it need not be considered further.

b. H-1792 (1887).

This survey, on a scale of 1:10,000, covers the area west of longitude $71^{\circ}00'$. The area covered by the season's work of 1934 was considered in the original review. In the area covered exclusively by the 1935 work, the depths are in excellent agreement. The 25 foot sounding (charted) in latitude $41^{\circ}28.57'$, longitude $71^{\circ}00.45'$, falls in blank area on the present survey, and other soundings adjacent to the 25 show that the 30 foot curve extends further north than the present soundings indicate. These soundings have been carried forward. This survey can be used to supplement, where necessary, soundings on the present survey.

c. H-2320 (1897).

This survey, on a scale of 1:10,000, covers a narrow strip along the southern limits of the present survey. Except for occasional differences of 2 or 3 feet the soundings are in

agreement with the present depths. Where necessary they may be used to supplement the new work.

d. H-2321 (1897).

This survey, on a scale of 1:10,000, covers the area of the present survey east of latitude 71°00.5' and most of the information on the present charts in this area originates with it. The average depths on this survey are in general agreement with the present soundings. However, the depths on numerous isolated shoal spots are in many cases less than were obtained on the present survey. Since the present development, in the area covered by the 1935 work only, was not completed and is not considered sufficient to disprove these shoaler depths, all of them have been carried forward. The least depth shown on Mishaum Ledge is an 8 foot sounding (charted) in latitude 41°29.4', longitude 70°58.0'. After an hour of drift sounding the least depth found on the present survey was 21-1/2 feet at position 13Y. The 8 foot sounding was strongly located (pos. 66e blue) and a note in the record states "locates shoalest water on Mishaum Ledge, 23 feet along side of it". A buoy was placed over the spot and radial lines run through it. The 8 is confirmed by a similar depth, shown in a different position on H-154 (1934). The 8 foot rock has been carried forward and should be retained on the chart pending a wire drag examination.

In the area close inshore from the southern tip of Mishaum Point, numerous minus soundings are shown. Examination of the record shows that these soundings were obtained on small rocks at a time when there was 4 feet of tide. (pos. 1 to 8b green). The present examination, made at low water, verified the existence of some but not all of these rocks. (pos. 1 to 6 P). The Chief of Party states verbally that the remaining rocks would have been seen if showing at low water, therefore, those rocks not located by the present survey were carried forward as sunken rocks.

This survey is not superseded in the areas extending beyond the limits of the season's work of 1934.

e. H-3556 W.D. (1913-5), H-3668 W. D. (1914).

These wire drag surveys cover a strip along the southern edge of the present survey. The present soundings are consistent with the effective depths of the drag. All of the soundings found by the drag and shown on H-3556 W.D. (1913-5) were added to the present survey. None of the shoal soundings from H-3668 W.D. (1914) fall within the limits of the present survey.

5. Comparison with Chart No. 249 (New Print dated June 20, 1935)
and Chart No. 1210 (New Print dated Nov. 7, 1935)

a. Hydrography.

Within the area of the present survey the charts are based on surveys discussed in the foregoing paragraphs and contain no additional information that needs consideration in this review.

b. Aids to Navigation.

The (FLW) bell buoy "3", which is charted in latitude $41^{\circ}29.22'$, longitude $70^{\circ}57.36'$, marking the offshore limits of Mishaum Ledge, was located on the present survey about 340 meters southwest of its charted position. The present position of the buoy while marking the present limits of the shoal area, would best serve the interests of navigation if replaced in its charted position. This matter has been referred to the Lighthouse Bureau. The marker buoy S "3" is not shown on the chart.

*Bromide sent to L.H.;
L.H. reports on March 19,
that buoy was replaced,
in charted position on March 7.*

6. Field Plotting.

The additional work of 1915 was plotted in the Washington Office. (See verifier's report).

7. Additional Field Work Recommended.

In view of the fact that the field party was disbanded before the completion of the additional work of 1935 and no wire drag examinations were made or split lines run, additional work is necessary. All of the examinations called for in the original review in the area of the 1934 work were satisfactorily accomplished by sounding lines and drift soundings with the exception of the 18 foot sounding described in par. a below. The area which is beyond the limits of the 1934 work and is covered by the 1935 work only is considered incomplete. Because of the irregular character and nature of the bottom with boulder formation, the entire area covered by the present survey should be wire dragged as close inshore as possible. If such drag survey is not feasible, the following more important shoals and indications should have additional lead line development supplemented by drift soundings or the short wire drag:

- a. The investigation of the 18 foot sounding from H-2321 (1897) in latitude $41^{\circ}30.45'$, longitude $70^{\circ}58.3'$, was not made. (Called for in original review, par. 9a(3)). A drift sounding examination should be made in the vicinity of this sounding.

- b. The 8 foot rock from H-2321 (1897) in latitude $41^{\circ}29.4'$, longitude $70^{\circ}58.0'$, should be covered by the wire drag with an effective depth of at least 15 or 16 feet. It should be noted that the 8 foot rock is shown on an old survey, H-154 (1844), about 190 meters, 335° (true), from its charted position and the wire drag examination should include both positions of this rock. (See par. 4a and 4d, Part II of this review).
- c. Practically all of the shoals within the area of Mishaum Ledge should be further developed, especially the 19 foot sounding in latitude $41^{\circ}29.99'$, longitude $70^{\circ}58.14'$, the 18 foot soundings in the vicinity of latitude $41^{\circ}29.5'$, longitude $70^{\circ}58.0'$, and the shoals with least depths of 14, 16 and 17 feet in the vicinity of latitude $41^{\circ}29.3'$, longitude $70^{\circ}57.55'$.
- d. Chickadee Ledge in latitude $41^{\circ}28.5'$, longitude $71^{\circ}00.4'$ should be further developed.
- e. A single sounding of 17 feet of the 1935 work, in latitude $41^{\circ}30.56'$, longitude $70^{\circ}57.5'$, should be investigated.
- f. The 3 shoals west of Mishaum Ledge in the general vicinity of latitude $41^{\circ}29.2'$, longitude $70^{\circ}59.0'$, with least depths of 27, 28 and 28 feet should be further developed.
- g. The 10 foot sounding from H-5622 (1934) in latitude $41^{\circ}28.6'$ longitude $71^{\circ}01.4'$, should be wire dragged.
- h. Split lines should be run in the vicinity of latitude $41^{\circ}29.1'$, and $2'$, longitude $70^{\circ}57.4'$.
- i. The rock awash in latitude $41^{\circ}31.38$, longitude $70^{\circ}57.72'$, from T-193 (1844), which was carried forward as a sunken rock, should be investigated, (par. 9b(7) Part I of this review).

8. Note to Compiler.

Since the season's work of 1934 was applied to Chart 249 and Chart 237 (in stage of construction), the compiler's attention is called to the following features which are now considered disproved by the additional work of 1935 and should be removed from the above charts unless otherwise noted below.

- a. The 18 foot sounding from H-154 (1844) in latitude $41^{\circ}29.87'$, longitude $71^{\circ}00.65'$, was removed. (Par. 9a(9) Part I of this review).
- b. The position of the 2 foot rock from H-2321 (1897) has been shifted about 30 meters west northwest. (Par. 9a(11) Part I of this review).

- c. The sunken rock from T-183 (1884) in latitude $41^{\circ}31.75'$, longitude $70^{\circ}57.9'$, has been removed. (Par. 9b(4), Part I of this review).
- d. Two rocks awash from H-2321 (1897) in latitude $41^{\circ}31.24'$, longitude $70^{\circ}57.8'$, and other rocks inshore from them were removed and replaced by rocks awash located on the present survey in 1935. (Par. 9b(5), Part I of this review).
- e. The rock awash, from T-193 (1844) in latitude $41^{\circ}31.38'$, longitude $70^{\circ}57.72$ is now shown as a sunken rock. (Par. 9b(7) Part I of this review).
- f. A rock awash from T-183 (1844) and H-154 (1844) in latitude $41^{\circ}31.1'$, longitude $70^{\circ}57.6'$, was removed and replaced by rocks located in 1935. (Par. 6d(4) Part I of this review).
- g. A rock awash originating with T-2217 (1895-6) in latitude $41^{\circ}28.68'$, longitude $71^{\circ}02.0'$, was removed. (Par. 9c, Part I of this review).
- h. The compiler's attention is called to a new 5 foot rock, located in 1935, in latitude $41^{\circ}30.18'$, longitude $71^{\circ}00.12'$.
- i. The compiler should comb the areas within the 1934 work (shown in black) on which soundings from the 1935 work (shown in red) appear. The accompanying bromide will show the 1934 work as it appeared before the 1935 work was plotted.

9. Superseding Prior Surveys.

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

H-154	(1844)	in part
H-158	(1845)	" "
H-163	(1845-6)	" "

Within the area covered by the additional work of 1935 beyond the limit of the 1934 work the following surveys are not superseded:

H-1792	(1887)
H-2320	(1897)
H-2321	(1897)

10. Reviewed by - R. L. Johnston, Jan. 20, 1936.

11. Inspected by - A. L. Shalowitz.

See Addenda attached to this Review.

Examined and approved:

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

L. O. Robert.
Chief, Division of Charts.

Fred. L. Peacock
Chief, Section of Field Work.

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

applied to drawing of chart 237 - Dec. 1, 1936 - J.F.W.

Addenda to Review of H-5630 (1934-5)

Changes in Shoreline and Rocks

The comparison of air photo compilations T-5603 and T-5604 of 1934 with plane table surveys T-6119 and T-6121 of 1934 by the Air Photo Section, disclosed a number of errors in shoreline and rocks on the latter. Since the air photo compilations are accepted as the basic topographic surveys of this area, H-5630 (1934-5) has been made to conform to those surveys. Where changes were necessary on H-5630 (1934-5) the original condition of the shoreline and rocks, as transferred from T-6119 and T-6121 of 1934, is shown on a tracing accompanying the sheet. This tracing should be destroyed when the necessary corrections are applied to the chart.

Corrections - R. J. Christman, Nov. 16, 1936.

Inspected by - A. L. Shalowitz

Applied to drawing of Chart 237 - Dec. 1, 1936 - J.F.W.

5630

and Additional work (1935)

U. S. COAST & GEODETIC SURVEY
 LIBRARY AND ARCHIVES

JAN 27 1935

Ac. No. _____

Form 504
Ed. June, 1928

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

State: Massachusetts

DESCRIPTIVE REPORT

~~Hydrographic~~ } Sheet No. 7 5630
 Hydrographic }

LOCALITY

Vicinity of Buzzards Bay

Gooseberry Neck to Mishaum Point

1934

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

U. S. GOVERNMENT PRINTING OFFICE: 1928

5630

and Additional work (1935)

sp

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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REG. NO.
JAN 27 1935
Acc. 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. 7

REGISTER NO. **5630**

State Massachusetts

General locality Vicinity of Buzzards Bay
Bristol County

Locality Gooseberry Neck to Mishaum Point

Scale 1:10,000 Date of survey Sept., Oct. & Nov. 19 34

Vessel Field Party No. 5

Chief of Party Lieut. Wm. D. Patterson

Surveyed by Lieut. (j.g.) G. E. Morris, V. A. Bishop,
Wm. H. Jennings, G. F. Jordan & D. S. Ling, Surveyors

Protracted by J. C. McIlwaine

Soundings penciled by J. C. McIlwaine

Soundings in 14 fathoms feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by _____

Inked by A. M. Uzefovich

Verified by A. M. Uzefovich

Instructions dated May 14 & July 11, 19 34

Remarks: _____

1

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SHEET NO. 7 (Field Number)
VICINITY OF BUZZARDS BAY AND SLOCUM RIVER, MASS.

1934

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

DATE OF INSTRUCTIONS

Director's Instructions dated May 14, 1934; Supplemental Instructions dated July 11, 1934.

SURVEY METHODS

Standard methods of hydrographic surveying were followed. Three point sextant angles were taken on shore objects located by triangulation or planetable topography for position. Depths were measured with a phosphor bronze stranded wire centered mahogany tiller rope hand leadline, marked in fathoms and feet.

Owing to lack of time, it was impossible to fully determine the inshore hydrography and develop the low water line. It was also impossible to develop the following shoals shown on the chart within the limits of this survey because of lack of time.

11 foot shoal at Lat. 41° 30'.1, Long. 70° 59'.5.
16 foot shoal at Lat. 41° 30'.1, Long. 70° 58'.7. ✓
2 foot shoal at Lat. 41° 30'.9, Long. 70° 57'.8. ✓
8 foot shoal at Lat. 41° 31'.0, Long. 70° 57'.7.
4 foot shoal at Lat. 41° 31'.0, Long. 70° 57'.75. ✓

In the vicinity of Black Rock, Lat. 41° 30'.4, Long 71° 00'.7, weather and time did not permit any skiff hydrography. ✓

LIMIT AND EXTENT

This survey extends from a point approximately $\frac{1}{4}$ of a mile southeast of Gooseberry Point, Lat. 41° 28'.6, Long. 71° 02'.0, northeast to Mishaum Point, Lat. 41° 30'.7, Long. 70° 57'.4. It includes a survey of Allen Pond and the Slocum River as far north as Lat. 41° 32'.3, Long. 70° 59'.0 in the west branch, and Lat. 41° 32'.4, Long. 70° 58'.1 in the east branch. ✓

DANGERS

✓
A rock in Lat. 41° 30'.7, Long. 71° 58'.6, the first sounding before Pos. 91-C Blue. The rock is covered with 4 feet at mean low water.

✓
A rock in Lat. 41° 30'.6, Long. 70° 58'.6, the second sounding after Pos. 62-C Blue. The rock is covered with 5.5 feet at mean low water.

✓
A rock in Lat. 41° 30'.6, Long. 70° 58'.7, the fourth sounding after Pos. 63-C Blue. The rock is covered with 4 feet at mean low water.

✓
A rock in Lat. 41° 30'.9, Long. 70° 57'.6, the second sounding before Pos. 55-C Blue. The rock is covered with 8.5 feet at mean low water.

✓
A rock in Lat. 41° 30'.5, Long. 70° 59'.2, Pos. 75-D Blue. The rock is awash at mean low water.

✓
A rock located at Lat. 41° 32'.1, Long. 70° 58'.2, Pos. 17-H Purple. This rock is awash at high water.

✓
A rock located at Lat. 41° 30'.0, Long. 71° 01'.7, Pos. 30-A Green. This rock is 25 feet in diameter and bares 1/2 foot at mean low water.

✓
A rock located at Lat. 41° 30'.0, Long. 71° 01'.7, Pos. 31-A Green. This rock is 25 feet in diameter and is covered with 1.5 feet at mean low water.

✓
A rock located at Lat. 41° 30'.5, Long. 70° 59'.3, the second sounding before Pos. 89-B Green. This rock bares 2 feet at mean low water.

✓
A rock located at Lat. 41° 30'.5, Long. 70° 59'.0, the second sounding after Pos. 90-B Green. This rock bares 3 1/2 feet at mean low water.

Verifier check accepted - 10/1/50

COMPARISON WITH PREVIOUS SURVEY

See DANGERS.

A. The charted 5 foot spot, Lat. 41° 30'.3, Long. 71° 00'.1, was found with a least depth of 6 feet, Pos. 80, 81 & 82-D Blue. About 30 minutes of drift sounding was spent in locating this spot with the 6 foot result so it is recommended that it be charted as such.

B. The shoal charted as 14 feet at Lat. 41° 30'.6, Long. 70° 58'.3, was examined and the least depth found was 15.5 feet at mean low water. The second sounding before Pos. 51-C Blue. It is recommended that the 14 foot depth remain until a more complete investigation can be made.

*14' Retained
K.M.M.*

COMPARISON WITH PREVIOUS SURVEY (continued)

C. The 18 foot shoal charted at Lat. 41° 30'.2, Long. 71° 00'.1 was fully investigated and the least depth found in that particular area was 16 feet at mean low water. The first sounding before Pos. 29-E Blue. As at least 15 minutes drift sounding was spent as well as close development of soundings, it is recommended that the 18 foot depth be replaced with the 16 foot.

D. The 12 foot ledge located at Lat. 41° 30'.4, Long. 70° 59'.7 was completely investigated both by close development of soundings and by 20 minutes of drift sounding. It is recommended that the 12 foot depth be changed to 14 feet.

*OK. Sounded in
Rev. X.M.*

E. The 11 foot shoal spot, Lat. 41° 30'.3, Long. 71° 00'.4, was fully investigated and found to be covered by 12.5 feet of water at mean low water. Pos. 47-E Blue. It is recommended that the charted depth be changed as found by this survey.

F. The 12 foot shoal charted at Lat. 41° 30'.2, Long. 71° 00'.6 was investigated and several shoal soundings were obtained in slightly different positions. The least depth obtained was 11.5 feet at mean low water, the second sounding after Pos. 22-D Blue. A mean low water depth of 12.5 feet, Pos. 60-E Blue, was found after a period of 15 minutes drift sounding. It is recommended that the charted depth be changed as found by this survey.

G. The 24 foot shoal charted at Lat. 41° 29'.8, Long. 71° 00'.3 was investigated as fully as time permitted but the shoalest sounding found was 26.5 feet, the second sounding after Pos. 18-H Blue. It is recommended that the 24 foot sounding be retained until further investigation can be made.

*24' Retained which
is 140m. NNE of 26'.
See sketch here.*

H. The 2 foot shoal charted at Lat. 41° 30'.9, Long. 70° 58'.0 was thoroughly investigated and the least depth obtained was 7.0 feet at mean low water, Pos. 24-B Green. It was impossible to locate a more shoal position in spite of the fact that the area was thoroughly drift sounded for more than an hour. Since a rock or shoal could very easily be seen at the charted depth at low water it is recommended that the new depth found by this survey be charted.

*Sdg. on final chart
Retained - see Rev.
X.M.*

I. The ledge that lies north of the Hen and Chickens Lightship was investigated as far as time permitted and the shoal soundings found as charted in Lat. 41° 28'.6, Long. 71° 01'.4. The second sounding after Pos. 69-F Blue and the first sounding before Pos. 99-B Red. It is recommended that the soundings be retained until further investigation can be made.

charted this is a 14 ft. dg. which will replace charted 15 - X.M.

Respectfully submitted,

Wm. H. Jennings

Wm. H. Jennings, Surveyor.

Approved:

Wm. D. Patterson

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

STATISTICS

HYDROGRAPHIC SHEET NO. 7 (Field Number)

DAY LETTER	DATE 1934	COLOR	NUMBER OF SOUNDINGS	NUMBER OF POSITIONS	STATUTE MILES OF SOUNDINGS
A	Nov. 7	Blue	167	31	2.0
B	" 8	"	670	147	19.7
C	" 9	"	498	96	12.4
D	" 10	"	480	114	13.7
E	" 12	"	552	138	12.8
F	" 14	"	423	95	15.4
G	" 19	"	77	19	2.2
H	" 28	"	59	20	2.0
a	Nov. 15	Violet	573	99	14.3
b	" 16	"	601	103	14.1
c	" 19	"	632	108	14.5
d	" 20	"	332	57	8.1
e	" 21	"	135	24	3.6
f	" 22	"	179	39	5.6
g	" 23	"	81	16	2.5
h	" 24	"	114	17	2.8
j	" 26	"	72	14	2.6
k	" 27	"	208	43	6.1
A	Oct. 30	Red	409	69	12.5
B	Nov. 24	"	519	124	15.8
C	" 28	"	158	41	7.0
A	Nov. 24	Green	162	31	4.4
B	" 28	"	441	91	10.4
23	TOTALS		7542	1536	204.5

Area surveyed in square statute miles - $8\frac{1}{2}$

FE

200
5

March 5, 1935

Division of Hydrography and Topography:

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

Tide Reducers are approved in
7 volumes of sounding records for

HYDROGRAPHIC SHEET 5630

Locality Mishaum Point to Goseberry Neck, 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:



Acting Chief, Division of Tides and Currents.

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

b

GEOGRAPHIC NAMES

Date: Feb. 6, 1935 MASS.

Survey No. H5630

Chart No. 1210

Diagram No. 1210-3

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

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

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Gooseberry Neck	<u>Gooseberry Neck</u> ✓			✓
	-----	* <u>Barneys Joy Point</u> ✓			✓
	-----	<u>Mishaum Point</u> ✓		✓	✓
		<u>Black Rock</u> S ✓	see GN 2 (1937)		✓
		<u>Old Skunk</u>			✓
		<u>Pawn Rock</u>		✓	✓
		Names underlined in red approved by <u>C. F. M.</u> on 1-28-35			
	<i>Add</i>				
	<u>East Horse Neck Beach</u>	1/6/37 by <u>W.E.</u> see GN 2 (1937)			
	<u>Little Beach</u>	" "			
	<u>Slocums Neck</u>	G. N. S.			
	<u>Slocums River</u>	(U.S.G.B.)			
	<u>Little River</u>	(U.S.G.B.)			
	8-16-38 L.H.				

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5630

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

Number of positions on sheet	..1536
Number of positions checked27
Number of positions revised5
Number of soundings recorded	..7542
Number of soundings revised46
Number of signals erroneously plotted or transferred

Date: April 20, 1935

Verification by A.M. Uzefovich

Time: 104 hours

Review by H.W. Murray

Time: 34 "

April 23, 1935.

Section of Field Records
Report on H-5360 (1934)

1. The records conform to the requirements of the General Instructions.
2. The field plotting was completed to the extent prescribed in the General Instructions.
3. The hydrography is complete, and the usual depth curves can be drawn *except as noted in the review.*
4. The office cartographer did not have to improve any part of the drafting done by the field party.
5. The junction with adjacent sheet H-5622 (1934) was ^{made} verified and it is satisfactory *except as noted in the review.*

REMARKS:

A visual inspection of the course lines, and location of the positions on the Smooth sheet, in comparison with the Boat Sheet was performed. Both sheets agree satisfactorily, except in some positions, plottings of which were verified.

~~0 Nor on the Smooth Sheet is omitted (North of 0 Sou; See T. 6121).~~

Vol. 6, page 5 notes: "Fish nets", which do not show on the Boat and Smooth Sheets (position 11A, South of 0 Pig). *Note added on sheet. xmm*

A symbol for rock awash was used on the Smooth Sheet, as the sounding on top of the rock is 1 1/2 feet (See: Vol. 7, p. 10, pos. 31 A green, Lat. 41° 30' ; Long. 71° 01' .8).

The Descriptive Report mentioned the rock bares two feet (at Lat. 41° 30' .5; Long. 70° 59' .3). This rock was shown on the Smooth Sheet as a rock awash, according to Vol. 7, page 29.

The Descriptive Report mentioned the rock bares 3 1/2 feet (Lat. 41° 30' .5; Long. 70° 59'). This rock was shown on the Smooth Sheet as a bare rock 1 foot, according to Vol. 7, page 29. *Corrected xmm*

There is a note in red pencil on the Boat Sheet: "Rock reported here". (520 meters South of 0 Lam). *discussed in Rev. xmm*

On the Smooth Sheet and Topo. 6121 (1934) there are (650 meters south of 0 Gul) four rocks awash. On the Boat Sheet there are nine rocks awash. *generalized xmm*

Vol. 4, p. 23, pos. 1 b, 0 Rug, mentions: "very rocky", and Vol. 4, p. 37, pos. 76b, 0 Row - "Rocky area". The Topo. 6121 (1934) and Boat Sheet do not show these rocks. *Note "foul" added - xmm*

Report on H-5630 (1934) - 2.

On the Boat Sheet there are in many places symbols for sunken rocks which are not shown on the Topo. 6121 (1934) and on the Smooth Sheet. There is no indication about them in sounding volumes.

These + represent
the s.d.g. X. 1934
minus

Vol. 7, pages 12, 14 and 17 mentioned: "Breakers", which ^{was} ~~were~~ ~~drawn~~ on the Smooth Sheet. ~~according to this information.~~

Respectfully submitted,

Alexis M. Uzefovich

Alexis M. Uzefovich,
Jr. Cartographic Engineer,
U. S. C. & G. S.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5630 (1934)

Misshaum Point to Gooseberry Neck, Buzzards Bay, Mass.

Surveyed September - November, 1934

Instructions dated July 11 and 14, 1934 (W. D. Patterson)

Hand Lead Soundings

3 Point Control on Shore Signals

Chief of Party - W. D. Patterson.

Surveyed by - G. E. Morris, V. A. Bishop, W. H. Jennings, G. F. Jordan,
and D. S. Ling.

Protracted and Plotted by - J. C. McIlwaine.

Verified and Inked by - A. M. Uzefovich.

1. Condition of Records.

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

- a. No copy of Landmarks for Charts on Form 567 accompanied this particular sheet. (Par. 168).
- b. Appropriate remarks were not consistently entered in the "Remarks" column when sounding lines passed near to important features, such as rocks awash. (Par. 75).
- c. A sunken rock accompanied by the notation "reported rock" appears in red on the boatsheet in lat. $41^{\circ}30.4'$, long. $70^{\circ}59.6'$, together with other soundings in a similar color. The latter are traceable to the chart, but no authority could be found for the sunken rock. The rock falls in fairly well developed depths of 17 feet on the present survey, but is neither noted in the sounding records nor in the Descriptive Report, nor is it shown on any of the prior surveys. This matter has been referred to the field party. See *D.R. and par. 9c^{Part I}* of review of H-5630 Add. Wk. 1935

2. Compliance with Instructions for the Project.

This survey, as explained in the Descriptive Report (page 1), is incomplete, which fact necessitated the carrying forward of a number of soundings from prior surveys, in addition to recommendations for additional field work.

3. Sounding Line Crossings.

While no general system of cross lines was run, as required in the instructions for the project, such cross lines as were run as well as those which result from the work, agree satisfactorily with the main system of lines.

4. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn, except portions of the low water, 6, and 12 foot curves. The more important of such areas are discussed in paragraph 9 of this review.

5. Junctions with Contemporary Surveys.

a. The junction on the southwest with H-5622 (1934) is satisfactory, except as follows:

- (1) Insufficient development of the inshore area in the general vicinity of lat. $41^{\circ}28.8'$, long. $71^{\circ}02.0'$.
- (2) Insufficient development of the 10 foot sounding on H-5622 (1934) in lat. $41^{\circ}28.6'$, long. $71^{\circ}01.4'$.

Recommendations regarding the above are made in paragraph 9 of this review.

b. There are no contemporary surveys, at the present time, to the south and eastward of the present survey.

6. Comparison with Prior Surveys.

A number of shoals and rocks from various prior surveys have been carried forward to the present survey wherever the present development was insufficient to disprove them and where the present work showed no material change to have taken place.

The more important ones are itemized below under the specific surveys considered.

a. H-154 (1844) and H-163 (1845-46).

Considering the fact that the above surveys were made when field and office methods were in an experimental stage, soundings are generally in fair agreement with the present survey, although a few areas vary 1 to 4 feet deeper in some cases and 1 to 3 feet shoaler in others. In addition, several sounding lines are clearly out in position, for soundings in some cases vary as much as 16 feet shoaler than those of the present survey. Differences noted in connection with H-154 (1844) are as follows:

- (1) The shoal with least depth of 28 feet in lat. $41^{\circ}29.7'$, long. $70^{\circ}59.7'$ is confirmed by a 32 foot sounding on H-2321 (1897) and a 33 on the present survey. Although there is evidence of a general deepening in this vicinity, there is a definite indication of a shoal on the present survey and the 28 has been carried forward pending further examination.

29' found in 1935 See review of Additional Work of 1935, par. 9a (8) Part 1

- (2) The 17 foot sounding at position 11a (red) in lat. $41^{\circ}30.1'$, long. $71^{\circ}01.3'$ is incorrectly protracted (error of $30'$ in left angle). It has been transferred to the present survey in its correct position.
- (3) Five shoal soundings which fall in relatively undeveloped areas on the present survey, as well as on H-1792 (1885) and H-2321 (1897), were carried forward to the present survey. However, in view of the fact that the soundings could not be readily verified in the records of the 1844 survey, they are likely to vary slightly in correctness, which fact should be given cognizance when these soundings are investigated in the future. In this connection, soundings of line 27 to 29v (red) in lat. $41^{\circ}29.9'$, long. $71^{\circ}00.8'$ appear to be incorrectly plotted with respect to time and number of soundings. Although corrected soundings of this line vary 1 to 3 feet shoaler than the present survey, this difference is not sufficient to discredit the 22 and 18 foot soundings (18 not plotted on old survey) and they have been transferred to the present survey.

See review of Additional Work of 1935, par. 9a(9) Part 1

b. H-1792 (1887).

Soundings of the above survey are generally in good agreement with the present survey, although a few areas vary 1 to 3 feet shoaler in some cases and 1 to 4 feet deeper in others. It was found that in several instances, the soundings on H-1792 (1887) were incorrectly plotted with respect to time. Whenever it was necessary to transfer such soundings to the present survey, they were transferred in their correct positions. Discrepancies noted are as follows:

- (1) The bare rock in lat. $41^{\circ}29.5'$, long. $71^{\circ}02.3'$ was not located on the present hydrographic or topographic survey and no authority for the rock could be found in the records of H-1792 (1887) nor on the old topographic surveys. Although the rock falls in an undeveloped area on the present survey, it should be disregarded in future chartings.
- (2) The numerous bare rocks shown in lat. $41^{\circ}29.4'$, long. $71^{\circ}02.2'$ were verified in the original sounding records and found to be rocks awash located during low tides, with definite locations for several of them. These bare rocks are also shown on T-183 (1844) and T-2217 (1895-96) in slightly different positions and number. Neither the present hydrographic survey nor the present topographic survey (T-6119) shows rocks in this area, although sounding lines were run in the immediate vicinity during tides of $\frac{1}{2}$ to 1 foot (Position 3 to 5 and 8 to 10a, green). As there is some doubt as to the exact locations of these rocks, one rock from the 1887 survey (Position 45L, blue) representing the off-shore limits and accompanied by the notation "foul" was transferred to the present survey and should be so used for charting purposes pending a further examination in this area. *See review of Add. Wk. of 1935 par. 9 b (1) Part 1*

c. H-2321 (1897).

This survey shows considerably more detail than the present survey. Generally speaking, soundings are in good agreement, although a few spots vary 1 to 6 feet deeper than those of the present survey and others vary 1 to 3 feet shoaler.

- (1) The 5 foot sounding (charted) in lat. $41^{\circ}30.3'$, long. $71^{\circ}00.1'$ (pos. 57r, red) falls 25 m. due south of two 6 foot depths on the present survey. However, in view of the fact that the hydrographer of the present survey spent 30 minutes drifting in this vicinity (see D. R., page 2), it is reasonably certain that he has obtained the least depth. The 6 foot depth on the present survey should be used for charting purposes. *Depth reduced to 4 feet in 1935 Add. Wk.*
- (2) The 2 foot sounding (charted) in lat. $41^{\circ}30.9'$, long. $70^{\circ}58.0'$ falls in depths of 13 to 18 feet on the present survey, but within a shoal area with least depth of 7 feet. The field party reports having drifted over this area for an hour without finding less than 7 feet and recommends its removal from the chart (see D. R., page 3). From the development on the sheet it appears that the immediate vicinity of the 2 foot spot was not closely examined. The 2 foot sounding was verified in the original records (pos. 15b, green) and found to be a "small isolated pinnacle, 6 feet of water on it" at a 3.4 foot tide. Pending a further examination on this spot, the 2 will be retained on the charts and has been carried forward to the present survey with the notation "Rk."
See review of Additional Work of 1935 Par. 9a (II) Part I
- (3) A number of soundings on the 1897 survey in the vicinity between BARNEYS JOY POINT and PAWN ROCK vary 2 to 5 feet shoaler than those of the present survey and although soundings on both surveys are in good agreement in some areas, there are such marked differences in others that it was not considered advisable to transfer any specific soundings. In this connection, the 6 foot sounding (charted) in lat. $41^{\circ}30.4'$, long. $70^{\circ}58.8'$ is indeterminate as to position, for it was obtained on a turning line. The sounding falls in depths of 9 to 10 feet on the present survey, and as soundings in the immediate vicinity indicate a small deepening, it should be disregarded in future chartings. *Sounding lines in 1935 confirm 1934 soundings*
- (4) The numerous minus soundings in the vicinity of lat. $41^{\circ}31.2'$, long. $70^{\circ}57.7'$ were verified in the original records and found to be locations of rocks bearing 1 to 6 feet at MLW. A number of these rocks are variously indicated as bare and sunken rocks on T-183 (1844), T-193 (1844)

and T-2216 (1895). The 1934 survey shows but one rock in this vicinity (a rock bearing 3 feet at LW in lat. $41^{\circ}31.2'$, long. $70^{\circ}57.7'$ from T-6121), although the area was surveyed during tides of 1.5 to 2.5 feet. It is not quite clear how both the hydrographer and topographer on the present survey could miss these rocks unless they have disintegrated and do not bare quite as much as when originally located. For the present these minus soundings have been carried forward to the present survey as rocks awash and should be so charted until disproved. Details regarding the individual rocks are shown on a broadside of this sheet and sent to the field party in connection with additional work in this area.

See review of Additional Work of 1935, par. 9b(5) Part 1

- (5) A number of shoal soundings on the 1897 survey falling in insufficiently developed areas on the present survey, were carried forward in color. Several of these soundings were incorrectly plotted with respect to time interval on the 1897 survey and were transferred to the present survey in their correct positions. Those so changed are as follows:

15 feet; line 39 to 40e (red);	lat. $41^{\circ}30.2'$,	long. $70^{\circ}59.4'$
15 " " 48 " 49p (red) "	$41^{\circ}30.2'$,	" $70^{\circ}59.4'$
24 " " 139 " 140c (red) "	$41^{\circ}29.9'$,	" $70^{\circ}00.3'$
2 & 3 " " 16 " 17d (blue) "	$41^{\circ}31.2'$,	" $70^{\circ}57.7'$
6 " " 12 " 13c (blue) "	$41^{\circ}30.9'$,	" $70^{\circ}57.8'$

- d. T-183 (1884), T-193 (1884), T-2216 (1895), and T-2217 (1895-96)
- Reference Paragraph 4a and 4b, Review of T-6121(1934).

- (1) The bare rock shown on T-183 (1884) in lat. $41^{\circ}31.9'$, long. $70^{\circ}58.0'$, is confirmed by a rock bare $1\frac{1}{2}$ feet at MLW on H-2321 (1897). The topographic rock has been transferred to the present survey as a rock awash.
This rock located in 1935
- (2) The sunken rock shown on T-183 (1884) in lat. $41^{\circ}31.7'$, long. $70^{\circ}57.9'$ and the bare rock on T-193 (1884) in lat. $41^{\circ}31.4'$, long. $70^{\circ}57.7'$, were not observed on other surveys in this area and are not mentioned in the sounding records of the present survey. However, they have been carried forward to the present survey, pending a further investigation.
See review of Additional Work of 1935, par. 9b(4) and par. 9b(7) Part 1
- (3) The bare rocks shown on T-183 (1844), T-193 (1844), and sunken rocks on T-2216 (1895) in the vicinity of lat. $41^{\circ}31.2'$, long. $70^{\circ}57.7'$ have been considered in paragraph 6c(4) of this review.
See review of Additional Work of 1935, par. 9b(5) Part 1
- (4) The bare rock shown on T-183 (1844) in lat. $41^{\circ}31.1'$, long. $70^{\circ}57.6'$ is represented by a group of three sunken rocks on H-154 (1844). However, according to the sounding records of that survey, one rock was actually seen as awash during a minus 1 foot tide. (Pos. 14b, red). The topographic rock has been transferred to the present survey as a rock awash.

See review of Additional Work of 1935, par. 6d(4) Part 1

- (5) The low water line shown on T-183 (1844) from BARNEYS JOY POINT to a point approximately 1 mile due north which falls inshore of the inshore limits of the present hydrographic survey, may be used wherever necessary, for charting purposes, to supplement the hydrography on H-5630 (1934).

See review of Additional Work of 1935, par. 6 d (5) Part 1

- (6) The group of sunken rocks shown on T-2216 (1895) in lat. $41^{\circ}30.5'$, long. $70^{\circ}59.3'$ is probably a generalized representation of a boulder strewn area extending offshore. A rock awash located on the present survey falls in the center of this development and is sufficient for future charting purposes.

- (7) The bare rock shown on T-183 (1844) in lat. $41^{\circ}30.3'$, long. $71^{\circ}01.3'$ and another on T-2217 (1895-96) in lat. $41^{\circ}30.2'$, long. $71^{\circ}01.3'$ have been transferred to the present survey as rocks awash.

These rocks located in 1935 in nearly same position, Old rocks removed.

- e. T-183 (1844) and T-2217 (1895-96) - Reference Paragraph 4a and 4b(2), Review of T-6119 (1934).

- (1) The bare rock shown on T-183 (1844) in lat. $41^{\circ}29.6'$, long. $71^{\circ}02.2'$, as well as another on T-2217 (1895-96) in lat. $41^{\circ}28.7'$, long. $71^{\circ}02.0'$, has been transferred to the present survey as rocks awash, since there is no information on the latter sheet to disprove their existence.

Former rock located in 1935. Latter rock not found. See par. 9 c Part 1 Review of Additional Work of 1935

- (2) The numerous bare rocks shown on T-183 (1844) and T-2217 (1895-96) in the vicinity of lat. $41^{\circ}29.4'$, long. $71^{\circ}02.2'$ have been considered in paragraph 6b(2) of this review.

See Review of Additional Work of 1935, par. 9 b (1) Part 1

7. Comparison with Chart No. 249 and 1210.

Within the area of the present survey the charts are based on surveys discussed in the foregoing paragraphs and contain no additional information that needs consideration in this review.

8. Field Plotting.

Field protracting and plotting were very accurate and conform to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

- a. Because of the irregular character and nature of the bottom with boulder formation, the entire area covered by the present survey should be wire dragged as close inshore as possible. If such drag survey is not feasible, 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 these examinations and dispositions
of features involved see Descriptive Report and Review of*

Additional Work of 1935
H-5630 (1934) - 7

- (1) The 8 foot sounding from H-2321 (1897) in lat. $41^{\circ}31.5'$, long. $70^{\circ}57.9'$.
 - (2) The 16 and 19 foot soundings from H-2321 (1897) in vicinity of lat. $41^{\circ}30.1'$, long. $70^{\circ}58.6'$.
 - (3) The two 12's and 13 foot soundings from H-2321 (1897) in lat. $41^{\circ}30.4'$, long. $70^{\circ}58.5'$, as well as the 18 foot sounding about 200 meters to the eastward.
 - (4) The 25 foot soundings from H-2321 (1897) in lat. $41^{\circ}29.9'$, long. $70^{\circ}58.6'$ and lat. $41^{\circ}29.9'$, long. $70^{\circ}59.1'$.
 - (5) The 11 foot sounding from H-2321 (1897) in lat. $41^{\circ}30.2'$, long. $70^{\circ}59.5'$.
 - (6) The 16 foot sounding of the present survey, as well as the 17 and 18 from H-2321 (1897) in lat. $41^{\circ}30.2'$, long. $71^{\circ}00.1'$.
 - (7) The 24 foot sounding from H-2321 (1897) in lat. $41^{\circ}29.9'$, long. $71^{\circ}00.3'$.
 - (8) The 28 foot sounding from H-154 (1844) in lat. $41^{\circ}29.7'$, long. $70^{\circ}59.7'$, discussed in paragraph 6a(1) of this review.
 - (9) The 18 and 22 foot soundings from H-154 (1844), discussed in paragraph 6a(3) of this review (in vicinity of lat. $41^{\circ}29.9'$, long. $71^{\circ}00.8'$).
 - (10) The 10 foot sounding from H-5622 (1934) in lat. $41^{\circ}28.6'$, long. $71^{\circ}01.4'$.
 - (11) The rock with least depth of 2 feet discussed in paragraph 6c(2) of this review (lat. $41^{\circ}30.9'$, long. $70^{\circ}58.0'$).
 - (12) The 30 foot soundings of the present survey in the vicinity of lat. $41^{\circ}30.0'$, long. $70^{\circ}58.2'$ at the northern edge of MISHAUM LEDGE. While marked changes in depth are noted here on prior surveys, the limits northward of the 30's should be further developed.
- b. In addition to the above, the following inshore rocks and areas should be further investigated:
- (1) The undeveloped inshore area around Gooseberry Neck including the rocky area discussed in paragraph 6b(2) of this review.
 - (2) A field inspection (no hydrography necessary) to determine the general depths in Allens Pond.

- (3) The area around the 16 foot rocky sounding, H-2321 (1897), in lat. $41^{\circ}30.3'$, long. $70^{\circ}59.5'$, for the least depth.
- (4) The sunken rock from T-183 (1884) in lat. $41^{\circ}31.7'$, long. $70^{\circ}57.9'$.
- (5) The numerous rocks awash from H-2321 (1897) discussed in paragraph 6c(4) of this review (lat. $41^{\circ}31.2'$, long. $70^{\circ}57.7'$).
- (6) The undeveloped area westward of MISHAUM POINT including the rock with least depth of 8 feet on the present survey in lat. $41^{\circ}30.9'$, long. $70^{\circ}57.6'$.
- (7) The rock awash from T-193 (1884) in lat. $41^{\circ}31.4'$, long. $70^{\circ}57.7'$, which falls in depths of 15 feet on the present survey.

10. Superseding Previous Surveys.

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

H- 154 (1844)	In Part
H- 163 (1845-46)	" "
H-1792 (1887)	" "
H-2321 (1897)	" "

11. Reviewed by - Harold W. Murray, May 3, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

L. O. Pollock
Chief, Division of Charts.

Fred. L. Peacock
Chief, Section of Field Work.

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

applied to drawing of Chart 237 June 29/1935-JFW

25 Jan 15, 1936

Reconst. Chart 1210 - Appl'd thru chart 237

11-14-61
EHP
mR