

6445

Diagram No. 1000-2 & 1210-3

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. 43
Registry No. H-6445

LOCALITY

State Massachusetts
General Locality West of Marthas Vineyard
Sublocality Approaches to Buzzards Bay
..... and Vineyard Sound

19 39

CHIEF OF PARTY
R.P. Eyma

LIBRARY & ARCHIVES

DATE June 3, 1940

6445

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. H 6445

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.

H6445

Field No. 43

REGISTER NO. H - 6445

State Massachusetts

General locality West of Martha's Vineyard
Approaches to Buzzards Bay and Vineyard Sound

Locality Approaches to Buzzards Bay and Vineyard Sound

Scale 1/40,000 Date of survey June 13 - Sept. 27, 1939

Vessel LYDONIA

Chief of Party Raymond P. Hyman

Surveyed by Ship's Officers

Protracted by J. H. Brittain and Robert M. Rader

Soundings penciled by Robert M. Rader

Soundings in ~~XXXXX~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

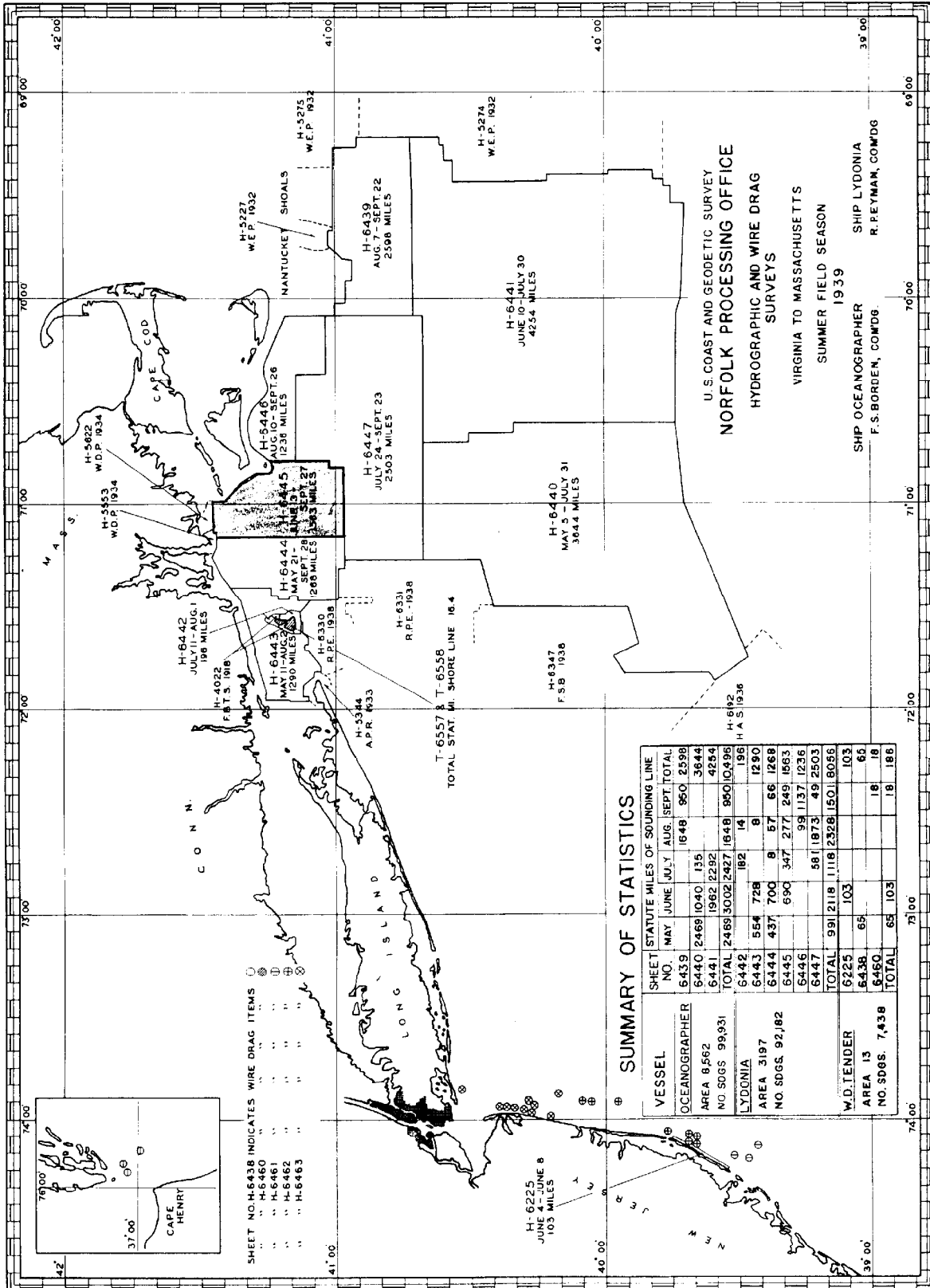
Inked by Francis B. Kelly
William B. Page

Verified by Francis B. Kelly

Instructions dated March 4, 1938

Remarks:

K.W.H. 10/23/41



U.S. COAST AND GEODETIC SURVEY
 NORFOLK PROCESSING OFFICE
 HYDROGRAPHIC AND WIRE DRAG SURVEYS

VIRGINIA TO MASSACHUSETTS
 SUMMER FIELD SEASON
 1939

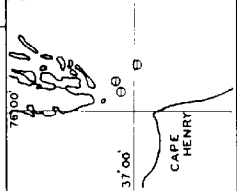
SHIP OCEANOGRAPHER SHIP LYDONIA
 R. REYMAN, COM'DG
 F. S. BORDEN, COM'DG

SUMMARY OF STATISTICS

VESSEL	SHEET NO.	STATUTE MILES OF SOUNDING LINE					SEPT. TOTAL
		MAY	JUNE	JULY	AUG.	TOTAL	
OCEANOGRAPHER	6439			1648	960	2598	
AREA 8562	6440	2469	1040	155		3644	
NO. SDGS. 99,931	6441	1962	2292			4254	
	TOTAL	2469	3002	2827	1648	9901	9901
LYDONIA	6442		182	14	196		
AREA 3197	6443	554	728			1282	
NO. SDGS. 92,182	6444	437	700			1137	
	6445		690	347	277	249	1563
	6446					99	1137
	6447					58	1873
	TOTAL	991	2118	1118	2328	1501	8056
W.D. TENDER	6225		103				103
AREA 13	6438	65					65
NO. SDGS. 7,438	6450						18
	TOTAL	65	103				18
			75100				18

SHEET NO. 6438 INDICATES WIRE DRAG ITEMS

- ⊙ H-6460
- ⊙ H-6461
- ⊙ H-6462
- ⊙ H-6463



T-6557 & T-6558
 TOTAL STAT. MI. SHORE LINE 16.4

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET H - 6445 (1939)

DATE OF INSTRUCTIONS

The work on this sheet was done in accordance with Instructions, Project HT - 207 dated May 16, 1936, and Supplemental Instructions, Project HT - 207, dated March 4, 1938.

LIMITS

(1939) The area covered by this sheet is part of the approaches to Buzzard's Bay and Vineyard Sound. The sheet extends from Latitude $40^{\circ} 58'$ on the south to approximately the 10 fathom curve along the Massachusetts shore on the north and from Longitude $71^{\circ} 10'$ eastward to Cuttyhunk Island, ^{located by triangulation} Marthas Vineyard Island and No Man's Land. It joins Sheet H- 5622 ^{to the north}, Sheet H - 6447 ^{to the south} and Sheet H - 6446 ^{to the east from No Man's Land south to Latitude $40^{\circ} 58'$} . The limits are outlined in red on the attached sketch.

SURVEY METHODS

For the greater part of this sheet the control consisted of three point fixes on shore objects. The southern part was controlled by R.A. R., using sono - radio buoys.

All soundings on this sheet were obtained with the Dorsey No 1 Fathometer.

SMOOTH PLOTTING

Theoretical Velocities of sound in sea water as given in the British Admiralty Tables were used for the R.A.R. distance on this sheet. The Velocities were computed from the bottom temperatures and salinities. Seasonal Velocity curves were then plotted, a separate curve being drawn for each fathom of depth. Then from these curves the velocity corresponding to the average depth between the sono radio buoy and the positions were taken for the day on which the work was done. The velocities ranged from 1472 M/S to 1484 M/S for the period June 13, to July 15.

Distance circles were drawn for each sono buoy at intervals of 3 seconds corresponding to a velocity of 1480 M/S. These circles were drawn in pencil. Distance arcs to the positions were drawn with colored ink, each sono radio buoy having a distinctive color.

The distance arcs for the positions were plotted in seconds. Each distance was corrected to the uniform velocity of 1480 M/S. For example position 163B, the distance from buoy CART of 14.08 seconds at a velocity of 1477M/S has a correction of -.03 seconds to bring the distance to a velocity of 1480M/S. The distance was plotted on the sheet as 14.05 seconds.

The sounding lines were dead reckoned on tracing paper and superimposed over the bomb arcs. For small differences the arcs were assumed to be correct but were rejected in the records where they were obviously in error.

The velocity corrections applied to the fathometer soundings were computed in accordance with Field Memorandum No.3, 1936. Monthly average temperature and salinity curves were used.

An index correction based on the average of the fathometer comparison were averaged by months.

A settlement correction of 0.4 ft. was applied to the fathometer soundings. This correction was combined with the index correction under the heading I & S in the sounding records.

COMPARISONS WITH ADJOINING SURVEYS

Junctions with sheet H - 6444⁽¹⁹³⁹⁾ to the west, sheet H - 6447⁽¹⁹³⁹⁾ to the south, and sheet H - 6446⁽¹⁹³⁹⁾ to the east are satisfactory. Junction with sheets H - 5553⁽¹⁹³⁵⁾ and H - 5622⁽¹⁹³⁵⁾ is somewhat irregular due to the rocky bottom. The fathometer soundings on this sheet are in places up to 5 ft. shoaler than the hand lead soundings on the inshore sheet.

COMPARISONS WITH PREVIOUS SURVEYS

A comparison with chart 1210 indicates that the surveys agree very well with the exception, principally, of some of the rocky ledges within the area covered by wire drag.

The principal discrepancies are listed as follows:

<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DEPTH</u> <u>CHART 1210</u>	<u>THIS SHEET</u>
0	0		
41 - 25.0	71 - 08.4	37 ft.	50 ft.
41 - 21.0	71 - 05.0	50 ft. <i>Incorrectly charted See Rev. par. 6a(1)</i>	64 ft.
41 - 21.7	71 - 05.8 ^{4:0}	34 ft.	38 ft.
41 - 23.0	71 - 05.1	50 ft.	59 ft.
41 - 24.0	71 - 04.5	51 ft.	57 ft.
41 - 23.6	71 - 02.2	37 ft.	48 ft. <i>See Revision par. 6a(2)</i>
41 - 24.6	71 - 00.4	37 ft. (Obstruction)	69 ft.
41 - 15.2	70 - 56.3	106 - 118 H-1788	80 ft.

The above sdgs except as indicated are all from Wire Drag Surveys
HWM

REPORTED OBSTRUCTIONS

No evidence of the obstruction reported at Latitude 41° 17.5', Longitude 70° 53.2', and listed as item 2, Instructions, Project HT - 237, to the Commanding Officer, Ship OCEANOGRAPHER, dated August 1, 1939, was found. The area in the vicinity was covered by 400 meter lines at slow speed.

A least depth of 55 ft. was obtained in general depths in excess of 10 fathoms at Latitude 41° 22.2', Longitude 70° 59.0'. This is in the area in which it is believed the S.S. SEACONNET sank. This was given as item 3 in the aforementioned Instructions.

DISCREPANCIES

In general the crossings on this sheet are satisfactory. The crossings in excess of 3 ft. are listed as follows:

83 - 84A and 38 - 39B, 5 ft.; 81 - 82A, ^{position} 11 - 12C, 12 ft. The soundings from 4 sdg's. before position 80A to 84 A were apparently in error and were rejected in the sounding record. *41°14' 71°09'*

no discrepancy between A & B reject D 39 - 40A, 147 - 148B and 2 - 3D, maximum discrepancy 7 ft. The bottom is very irregular here. Line 2 - 3D may be slightly displaced. *41°10' 71°04'*

36 - 37A and 44 - 45D. 4 ft. crossing. *41°15' 71°02'* *lump shows small 3 lines*

1 - 2F and 31 - 32F, 5 ft. crossing; 151 - 152B and 31 - 32F, 4 ft. crossing; 31 - 32F and 74 - 75G, 5 ft. crossing. Possibly soundings between 31 and 32F are 1 fm. in error, ^{but} were not rejected. Rejected in office *41°14' 71°04'*

37 - 38D and 28 - 29M, 4 ft. crossing. *41°05' 71°01'* *Hole on each line, accept deeper sounding on M day*

19 - 20J and 51 - 52Q, 4 ft. crossing. *41°10' 71°05'* *accept shallower sdg on better controlled*

54B and 70 - 71Q, 6 ft. crossing. Irregular bottom. Apparently Q day line is slightly out of position. *41°08' 71°07'* *accept B*

57 - 58G and 46 - 47X, 13 ft. crossing. Irregular bottom. *41°21' 71°05'* *Speed + Course changes improve crossing*

55 - 56G and 66 - 67X, 9 ft. crossing. Irregular bottom. *Hole on each line accept deeper sound.*

18 - 19E and 43 - 44BB, 5 ft. crossing. Steep slope. *41°24' 71°00'* *use both on slope*

(1939)
Sheet H-6445 was smooth plotted at the Norfolk Processing Office under the supervision of Lieutenant (j.g.) John H. Brittain, who was one of the officers engaged on the actual field work.

In areas previously covered by wire drag work no attempt was made to find the least depths. Split lines and closer development was done only to afford a better bottom delineation in the immediate vicinity of these rocky ledges as it was assumed the wire drag work had probably located the least depths.

The areas of reported obstructions were likewise covered by closer development and split lines to determine the general nature of the bottom but without attempting to make a thorough examination to verify or disprove the obstruction as such work had already been instructed for the wire drag subparty.

Raymond B. Egan
Chief of Party

STATISTICS FOR SHEET NO. H-6445

LYDONIA 1939

Project HT - 207

<u>Letter Day</u>	<u>Date</u>	<u>Statute Miles</u>	<u>Soundings</u>	<u>Positions</u>	<u>Volume No.</u>
A	June 13	73.8	818	88	1
B	" 14	117.2	1719	167	1 & 2
C	" 15	46.3	476	55	2
D	" 16	53.4	693	80	2
E	" 24	51.7	545	95	2 & 3
F	" 25	139.7	1407	193	3
G	" 26	153.0	1557	269	3 & 4
H	" 28	15.0	251	53	4
J	" 29	39.5	394	38	4
K	July 7	5.2	74	8	5
L	" 11	17.7	184	34	5
M	" 12	75.9	769	79	5
N	" 13	159.1	1563	260	5 & 6
P	" 14	39.7	515	55	6
Q	" 15	49.6	515	73	6
R	Aug. 2	51.4	151	76	6 & 7
S	" 3	81.5	872	153	7
T	" 9	29.3	433	72	7
U	" 10	63.2	742	143	7 & 8
V	" 14	34.0	390	66	8
W	" 19	17.4	222	44	8
X	Sept. 6	66.1	811	158	8
Y	" 7	81.0	897	197	8 & 9
Z	" 19	55.5	692	138	9
AA	" 20	27.3	574	102	9 & 10
BB	" 27	18.8	278	56	10
TOTALS FOR SHEET	26	1562.3	17,537	2752	10

Total Square Statute Miles 618

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6445**

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

Number of positions on sheet 2752
Number of positions checked 15
Number of positions revised 1
Number of soundings recorded 176537
Number of soundings revised 49
Number of soundings erroneously spaced 64
Number of signals erroneously plotted or transferred 0

Date: Sept. 27, 1940 *Harold W. Murray*
Verification by *Frank B. Kelly*
W. B. Page
Review by *Harold W. Murray*

Time: $\left. \begin{array}{l} 9 \text{ hrs} \\ 66 \text{ hrs} \end{array} \right\} 149$
 $\left. \begin{array}{l} 74 \text{ hrs} \\ 140 \text{ hrs} \end{array} \right\}$
Time: 55 hrs

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H

Verified and Inked by *W. B. Page*
F. B. Kelly

Date *Sept. 14, 1940*

1. The descriptive report was consulted and appropriate action taken. ✓
2. Soundings originating with the survey and mentioned in the descriptive report have been verified, including latitude and longitude. ✓
3. All references to survey sheets mentioned in the descriptive report include the registry number and year. ✓
4. Geographic names of hydrographic features are in slanting lettering and of topographic features in vertical lettering. *No names.*
5. All items effecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken. ✓
6. All positions verified instrumentally were check marked in the sounding records. ✓
7. All critical soundings are clear and legible. ✓
8. The metal protractor has been checked within the last three months. ✓
9. The protracting and plotting of all bad crossings were verified. ✓
10. All detached positions locating critical soundings, rocks or buoys were verified. ✓
11. The boat sheet was compared with the smooth sheet. ✓
12. The spacing of soundings as recorded in the records was closely followed. ✓
13. The bottom characteristics *where given* were shown on outstanding shoals. ✓
14. The reduction and plotting of doubtful soundings were checked. ✓

15. The transfer of contemporary topographic information was carefully examined. *No. shoreline*
16. All junctions were transferred. ✓
17. The notation "JOINS H" was added for all contemporary adjoining or overlapping sheets now registered. ✓
18. The depth curves have been drawn to include the significant depths. ✓
19. All triangulation stations and transfer of ~~topographic and~~ hydrographic signals were checked by the field party. ✓
20. Heights of rocks were checked against range of tide. *No rocks* ✓
21. Rocks transferred from topographic survey have a dotted curve where shown thereon. *None* ✓
22. Unnecessary pencil notes have been removed. ✓
23. Objects on which signals are located and which fall outside of the low water line have been described on the sheet. ✓ *None*
24. The low water line and delineation of shoal areas have been properly shown (see letter of October 20, 1934). *Offshore sheet* ✓
25. Degree and minutes values and symbols have been checked. ✓
26. Source of shoreline and signals (When not given in report). *No shoreline* ✓
27. Depth curves were satisfactory ~~except as follows:~~ ✓

28. Sounding line crossings were satisfactory except as follows: *See D.R.* ✓
29. Junctions with contemporary surveys were satisfactory ~~except as follows:~~ ✓
30. Condition of sounding records was satisfactory ~~except as follows:~~ ✓
31. The protracting was satisfactory ~~except as follows:~~ ✓
32. The field plotting of soundings was satisfactory ~~except as follows:~~ ✓
33. Notes to reviewer:

The verification and about $\frac{3}{4}$ of the soundings were inked by F.B. Kelly, the balance of the soundings were inked by W.B. Pace & he drew the curves & made the junctions ✓

Francis B. Kelly
Sept 14, 1940

HYDROGRAPHIC SURVEY NO. H6445

Smooth Sheet Yes

Boat Shoet Yes

Records; Sounding 10 Vols., Wire Drag Vols., Bomb 3 Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes

Landmarks for Charts (Form 567) No

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) --

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

Hydrography: Total Days 26 ; Last Date Sept. 27, 1939

Remarks _____

Remarks

Decisions

	Remarks	Decisions
1	For title	U.S.G.B
2		"
3	For title	"
4		
5		
6		
7		
8		
9		
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12		
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22		
23		
24		
25		
26		
27		
M 234		

GEOGRAPHIC NAMES

Survey No.

H6445

Name on Survey

	A	B	C	D	E	F	G	H	K
	On Chart No.	On previous survey No.	On U. S. Quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
<u>Buzzards Bay</u>									1
<u>Marthas Vineyard</u>									2
<u>Vineyard Sound</u>									3
<u>No Mans Land</u>									4
<u>Cuttyhunk I.</u>									5
									6
									7
									8
									9
									10
									11
									12
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									23
									24
									25
									26
									27

Names underlined in red approved by L. Heck on 10/5/40

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

No. H **H6445**
~~No. I~~

{ received **May 29, 1940**
registered **June 3, 1940**
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22	✓ <i>Conrad Egan</i>	<i>CE</i>	
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
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✓ *TBR*

TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Hydrography and Topography:

June 5, 1940

✓ Division of Charts: Attention: Mr. H. R. Edmonston

Tide Reducers are approved in
13 volumes of sounding records for

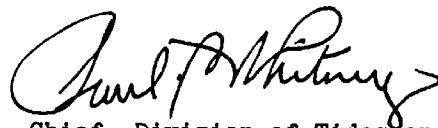
HYDROGRAPHIC SHEET 6445

Locality Approaches to Buzzards Bay and Vineyard Sound, West of
Marthas Vineyard

Chief of Party: R. P. Eyman in 1939
Plane of reference is mean low water reading
2.8 ft. on tide staff at Block Island
11.4 ft. below B.M. 2

Height of mean high water above plane of reference is 3.0 feet.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

DIVISION OF CHARTS

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6445 (1939) FIELD NO. 43

Massachusetts, West of Marthas Vineyard, Approaches to
Buzzards Bay and Vineyard Sound

Surveyed in June - September 1939, Scale 1:40,000

Instructions dated May 16, 1936 and March 4, 1938

(LYDONIA)

Soundings:
Dorsey Fathometer No. 1

Control:
Three point fixes on shore signals.
R.A.R. with sono-radio buoys.

Chief of Party - Raymond P. Eymann.
Surveyed by - Ships' Officers.
Protracted by - J. H. Brittain and Robert M. Rader.
Soundings plotted by - Robert M. Rader.
Verified and inked by - F. B. Kelly and W. B. Page.
Reviewed by - Harold W. Murray, September 27, 1940.
Inspected by - H. R. Edmonston.

1. Shoreline and Signals.

- a. This is an offshore survey and no shoreline is shown.
- b. The control used is discussed in the descriptive report, page 1.

2. Sounding Line Crossings.

General agreement of cross lines is very good. The descriptive report, however, lists several disagreements in excess of 3 feet. Most of these apparent disagreements are attributed to irregular bottom.

3. Depth Curves.

The usual depth curves may be satisfactorily drawn.

4. Junctions with Contemporary Surveys.

- a. The junctions on the east with H-6446 (1939), on the south and southeast with H-6447 (1939) and on the west with H-6444 (1939) are very good.
- b. The junctions on the northwest with H-5553 (1934) and on the north with H-5622 (1934) are satisfactory.
- c. The present survey completely covers and surrounds H-6528 (1939) in lat. $41^{\circ}26.0'$, long. $71^{\circ}02.4'$.

Agreement of depth with this 1:10,000 scale survey is very good.

- d. There are no contemporary surveys to the north-eastward of the present survey at this time. Satisfactory junctions for charting purposes, however, are made with older surveys covering this area.

5. Comparison with Prior Surveys.

- a. H-154 (1844), H-163 (1845-46), H-204 (1847), H-344 (1852), H-378 (1853) and H-596 (1857).
Scales 1:20,000 and 1:40,000.

In general a fringe of soundings from these surveys fall within the north and northeastern limits of the present survey. These surveys are among the earlier surveys made by this Bureau. Most of the information has been superseded by later surveys except a few soundings on H-154 the more important of which are as follows:

- (1) The two detached 60 foot soundings in lat. $41^{\circ}26.8'$, long. $71^{\circ}08.6'$ (Charts 237 and 353, one on Chart 1210) fall in depths of 64 to 67 feet on the present survey. These soundings were indicated on Chart 1210 in 1921 when this chart (compiled in feet) superseded old Chart 113 (in fathoms). The soundings were not previously shown on Chart 113. These charted soundings appear to originate with two lines of soundings, depths of 60 to 61 feet on H-154. Since other soundings on line are of the same depth, the line appears to be too shoal and should be disregarded.
- (2) A charted 52 foot sounding in lat. $41^{\circ}26.4'$, long. $71^{\circ}00.7'$ (Charts 237 and 1210) was carried forward on the present survey since it falls squarely between two shoal indications of 57 and 61 feet surrounded by depths of 72 to 74 feet on the present survey. This sounding was not verified as the original sounding records could not be readily located.
- (3) A charted 58 foot sounding in lat. $41^{\circ}26.7'$, long. $71^{\circ}00.2'$ (Chart 237) falls close to a detached 60 foot spot on the present survey. It is not being carried forward because the 58 is one of a series of soundings of like depth obtained on line which are all shoaler than the present survey depths.

The present survey with the indicated additions supersedes these surveys.

- b. H-283 (1851) and H-1782 (1887); scales 1:100,000 and 1:300,000.

These small scale surveys which cover a considerable portion of the present survey contain no information that needs consideration in this review. They should be superseded by the present survey.

- c. H-670 (1859) scale 1:400,000.

This sheet is a general chart compiled from surveys previous to the year 1859 and contains no original information.

- d. H-1787 (1887), H-1788 (1887), H-1843 (1888) and H-1941 (1889), scales 1:40,000.

The above surveys taken together cover the entire area of the present survey. Agreement of depths with the present survey is very good. In the south portion, differences of as much as 7 feet are noted which is to be expected as the present survey has much stronger control. Several soundings were carried forward from H-1788 and H-1843. None of these soundings are critical but as they fall in areas of lumpy bottom and furthermore on several shoal indications obtained on the present survey, they are therefore essential in conveying a more complete picture of the bottom.

Several errors noted in the smooth plotting of charted soundings on H-1788 and H-1843 are listed below. The revised soundings are in good agreement with the present survey depths.

<u>Sheet</u>	<u>Sounding</u>	<u>Revised Sounding</u>	<u>Position</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Chart</u>
H-1788	48 feet	55 feet	2-3X	41°20'	71°06'	1210
H-1788	48 "	54 "	73H	41°27'	71°05'	237
H-1843	87 "	94 "	92-93c	41°09.6'	70°57.9'	1210
H-1843	84 "	89 "	80c	41°09.7'	70°57.1'	1210

There is no authority in the sounding records (line 44-45T) of H-1788 for the charted 42 foot sounding (Chart 237) plotted in lat. 41°26', long. 71°00'. Since the present survey shows a 42 foot spot about 150 m. southward and a 34 foot spot carried forward from a wire drag survey about 225 m. southwestward, the 42 is unimportant and may be disregarded.

The present survey with the indicated additions supersedes the above surveys.

- e. H-1791 (1887), H-1792 (1887), H-1802 (1887) and H-2320 (1897), scales 1:10,000 and 1:20,000.

A fringe of soundings from these surveys falls just within the north and northeast limits of the present survey. The soundings are generally in close agreement except in the case of H-1802 covering the northeast on which they vary as much as 9 feet shoaler in depths as large as 112 feet. A 69 foot depth was carried forward from H-1802 in lat. 41°17.5', long. 70°51.8'. This sounding could not be verified as the original sounding records could not be readily located. The present survey with the indicated addition, supersedes these surveys.

- f. H-3668 (1914) W.D., H-3668a (1914-17) W.D., H-4005 (1917) W.D. and H-4006 (1917) W.D. Scales 1:20,000, 1:30,000 and 1:50,000.

These wire drag surveys taken together completely cover the northern part of the present survey. Complete reliance in this drag work is not advisable because of the numerous splits. All groundings and soundings, including bottom characteristics when given, were transferred to the present survey. The effective drag depths do not conflict with the present survey soundings.

On H-3668 W.D., it was noted that a number of tender soundings were plotted in lieu of the shoaler drag groundings. The soundings so revised in transferring to the present survey are as follows:

<u>Grounding</u>	<u>Position</u>	<u>Latitude</u>	<u>Longitude</u>
30 feet	59 L	41°26.3'	71°01.9'
26 "	7 F	41°26.7'	71°01.8'
25 "	14 F	41°26.8'	71°02.6'
40 "	29 C	41° 26.8'	71°02.2'

- g. H-4822a (1928), scale 1:80,000.

This survey is a section of Chart 1210 which consists of a single reconnaissance sounding line crossing the present survey in the northwest portion. It should be superseded by the present survey.

6.	<u>Comparison with Chart 237 (New Print dated Sept. 14, 1939)</u>			
	Chart 353	(" " "	July 2, 1940)	
	Chart 1210	(" " "	June 5, 1940)	
	Chart 1107	(" " "	Dec. 15, 1939)	
	Chart 1108	(" " "	Aug. 17, 1940)	

a. Hydrography.

Hydrography shown on the above charts originates with surveys discussed in the preceding paragraphs except as follows:

- (1) A 50 foot sounding with notation "rky" in lat. $41^{\circ}21.0'$, long. $71^{\circ}05.0'$, which is shown on Chart 1210 could not be traced as originating with any previous survey. This sounding was not charted on old Chart 113 but is shown on the first edition of Chart 1210 in 1921. The 50 falls in depths of 80 feet on the present survey. In addition, this spot was cleared by a 64 foot drag strip on H-3668a W.D. in 1914-17. It is also noted that a similar sounding is shown exactly one mile further north and in the same longitude on H-4005 (1917) W.D. The southernmost 50 is apparently an incorrect charting of the 50 on H-4005 W.D. and should be expunged from the chart.
- (2) A charted obstruction with a least depth of 37 feet in lat. $41^{\circ} 24.6'$, long. $71^{\circ} 00.4'$ (Chart 1210) falls in depths of 69 to 78 feet on the present survey. The authority for this obstruction cannot be readily ascertained. It is charted on the 1918 edition of old Chart 113 but not on the previous edition of 1914. H-3668 (1914) W.D. cleared this spot with a drag set at 43 feet but the drag work was undoubtedly executed prior to the existence of this obstruction which occurred between the years 1914 and 1918. The obstruction should be retained on the chart pending a wire drag investigation.
- (3) The authority for the charted 69 in latitude $41^{\circ}23.4'$, long. $71^{\circ}05.8'$ falling in depths of 77 feet on the present survey could not be readily ascertained. It has been charted since the 1st edition of Chart 1210 in 1921 and does not appear on the superseded Chart 113 of 1918. It is noted, however, that the present survey shows a 68 just eastward and also two

58 foot soundings just northeastward carried forward from H-3668a (1914-17). The chart also shows the same depth one mile northward in the same approximate relation to the projection. This sounding does not constitute a menace to navigation and in view of the fact that it was cleared by a 58 foot drag strip (H-3668a) it may be disregarded.

- (4) The reported obstructions (not charted) listed in the descriptive report, page 3, will be considered when authorized wire drag surveys covering these items have been received in this office.

b. Aids to Navigation.

- (1) The aids located on the present survey are in general shown in positions differing from 150 to 300 m. from those shown on the charts. The aids in either position, however, satisfactorily mark the features intended.
- (2) The charted buoy in lat. $41^{\circ}25.9'$, long. $70^{\circ}59.6'$, was established subsequent to the present survey.
- (3) The nun buoy shown on the present survey in lat. $41^{\circ}17.1'$, long. $70^{\circ}55.5'$, is not shown on Chart 1210. It was removed subsequent to the present survey.

7. Condition of Survey.

- a. The sounding records are neat and legible and conform to the requirements of the Hydrographic Manual.
- b. The descriptive report is clear and satisfactorily covers all matters of importance.
- c. The field protracting and plotting were satisfactory.
- d. Additional bottom characteristics for charting purposes may be obtained from prior surveys discussed in paragraphs 5d, e and f of this review.

8. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

9. Additional Field Work Recommended.

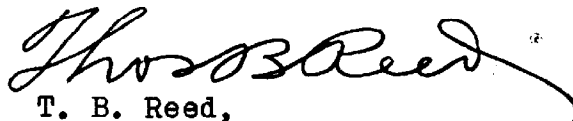
This is an excellent survey. As noted in the descriptive report, page 4, no attempt was made to obtain least depths on shoals on the north because this area was previously covered by 1914-17 wire drag surveys. (See par. 5f for quality of these surveys).


The wire drag instructions of August 1, 1939 to the OCEANOGRAPHER do not include dragging of the obstruction with a least depth of 37 feet in lat. 41°24.6', long. 71°00.4' discussed in paragraph 6a(2) above, nor do they mention the 39 foot depth on the present survey in lat. 41°22.2', long. 70°57.7', which is one mile east of the wreck of the S.S. SEACONNET (Item 3).
Disproved FE 194WD/63
AWAIS #8297
probably #7308

10. Superseded Surveys.


H-154 (1844)	in part	H-1787 (1887)	in part
H-163 (1845-46)	in part	H-1788 (1887)	in part
H-204 (1847)	in part	H-1791 (1887)	in part
H-283 (1851)	in part	H-1792 (1887)	in part
H-344 (1852)	in part	H-1802 (1887)	in part
H-378 (1853)	in part	H-1843 (1887)	in part
H-596 (1857)	in part	H-1941 (1889)	in part
H-670 (1859)	in part	H-2320 (1897)	in part
H-1782 (1887)	in part	H-4822a (1928)	in part

Examined and approved:


 T. B. Reed,
 Chief, Section of Field Records.


 J. S. Borden,
 Chief, Division of Charts.


 Raymond L. Egan,
 Chief, Section of Field Work.


 J. H. Hilde,
 Chief, Division of H. & T.

Record of Application to charts - H-6445 (1939)

Applied to Chart 353	Nov. 4, 1940	J.H.S.
" " " 1210	Nov. 9, 1940	J.H.S.
" " " 1108	Feb. 17, 1941	J.H.S.
" " " 237	Nov. 12, 1940	J.H.S.
" " " 249	Mar. 4, 1941	J.P.
Applied to Chart 1107	April 10, 1941	Paul
" " " 60	Nov. 13, 1941	J.M.A.
Applied to reconstr. of Chart 1210	10/4/61	J.P.
Applied To New Chart 264	10/30/61	G.R.J.
Applied to New chart 265	12-2-61	RHO
Applied to Chart Extension 1210	6-15-64	GRM
Applied to 13221 Extension	2-15-95	John Barber