

6533

6533

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. H-6533
Hydrographic }

State MASSACHUSETTS

LOCALITY

NANTUCKET SOUND

1939

CHIEF OF PARTY

Chas. M. Thomas

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

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

Field No. 202

H6533 (1939)

REGISTER NO. H 6533

State Massachusetts

General locality Nantucket Sound

Locality Succonesset Shoal to Bishop and Clerks

Scale 1:20,000 Date of survey June 15 to Nov. 4 1939

Vessel MOTOR VESSEL GILBERT

Chief of Party Chas. M. Thomas

Surveyed by Ship's Officers

Protracted by Joseph H. Vorasick

Soundings penciled by Joseph H. Vorasick

Soundings in fathoms feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by Francis B. Kelly

Verified by "

Instructions dated January 17, 1939

Remarks: Sheet to be completed in Washington Office per
Director's letter of February 24, 1940

D E S C R I P T I V E R E P O R T

To Accompany

Sheet Number H 6533

(Field number 202)

MASSACHUSETTS COAST

NANTUCKET SOUND

INSTRUCTIONS:

The hydrography on this sheet was executed in accordance with the Director's Instructions to the Commanding Officer, Tender GILBERT dated January 17, 1938 and Supplemental Instructions to the Commanding Officer, Launch MIKAWA dated April 1, 1939.

LIMITS AND SCALE:

This area was surveyed on a scale of 1:20,000.

The limit of the work on the east is Longitude $70^{\circ}14'$, on the west is Longitude $70^{\circ}28'$, on the south is Latitude $41^{\circ}31'$. The northern limit begins on the northeast in Latitude $41^{\circ}35.2'$, then west to Longitude $70^{\circ}19.5'$, then north to Latitude $41^{\circ}35.7'$, then west to Longitude $70^{\circ}23.2'$, then south to Latitude $41^{\circ}34'$, then west to Longitude $70^{\circ}26'$, then southwest to Latitude $41^{\circ}33.3'$, Longitude $70^{\circ}28'$, except for the shoal areas given below:

The area between Latitude $41^{\circ}32.3'$ and $41^{\circ}32.8'$ and Longitude $70^{\circ}24'$ to $70^{\circ}28'$ was surveyed by the Launch MIKAWA.

The area between Latitude $41^{\circ}31'$ and $41^{\circ}32.5'$ and Longitude $70^{\circ}20'$ to $70^{\circ}23'$ and the area in Latitude $41^{\circ}31.2'$ to $41^{\circ}32.1'$ and Longitude $70^{\circ}25'$ to $70^{\circ}25.8'$ was surveyed on sheet #65316

The area around Bishop and Clerks Lighthouse in Latitude $41^{\circ}34.5'$, Longitude $70^{\circ}15'$ has not been finished. It is proposed to finish this area during the 1940 field season on a larger scale sheet.

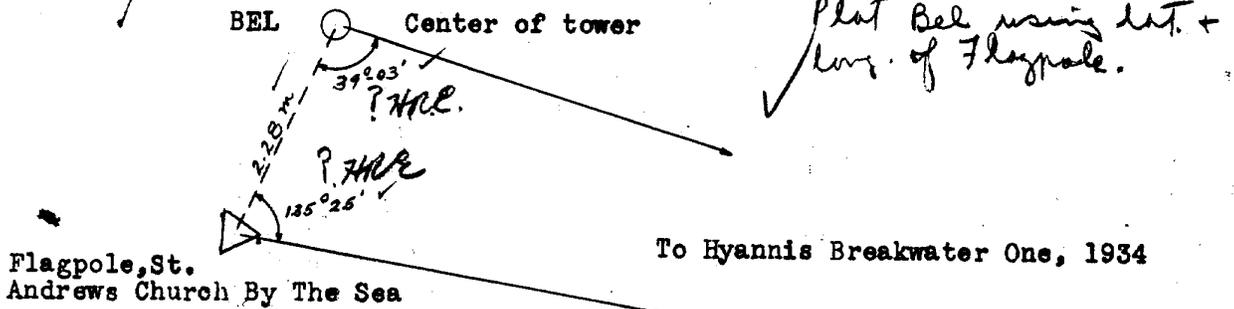
CONTROL:

The control for this sheet consisted of triangulation stations supplemented in part by hydrographic signals and air photographic location of topographic signals.

The position of BEL was determined from the location of the flagpole on St. Andrews Church By The Sea at

CONTROL; (Continued):

Hyannisport. The flagpole is a triangulation station. The tower (BEL) is more prominent and was used for this reason. It was plotted on the boat sheet graphically.



To Hyannis Breakwater One, 1934

FIS is a hydrographic location obtained from the Launch MIKAWA: Lat. 41°34' +912 m Long. 70°27' +758 m

HIE is an air photograph location obtained from the Launch MIKAWA: Lat. 41°33' +820 m Long. 70°28' +1052 m

ORT (Cotuitport W.T.) Two positions of this tank were determined. It is recommended that the air photograph one be used in plotting the smooth sheet although the hydrographic location was used on the boat sheet. This air photograph location is in the MIKAWA'S records for the project. No record of this position can be found aboard the GILBERT.

Hydrographic location (used on boat sheet)

- 1. Bis 97°53'
 - One
 - Hie 117°06'
 - One-Ort 82°40'
- 2. Wat 114°33'
 - Har
 - Hie 51°19'
 - Har-Ort 02°12'
- 3. Bis 96°40'
 - Har
 - Hie 105°50'
 - Har-Ort 19°37'

OST (Osterville Water Tank) is a hydrographic signal. The position on the boat sheet is Latitude 41°37' + 1540.8, Longitude 70°23' +1362.8. This position is the mean of three

CONTROL; (Continued):

outs and a three point fix observed at the tank itself. The data was plotted on the boat sheet and the above position scaled then. After long, careful, and diligent search through the records and note books left aboard from the previous season, the three point fix could not be found. The cuts are listed below:

- 1. Bis 97°55' -
One
Hie 116°59' -
One-Ost 68°59' -
- 2. Wat 114°35' -
Har
Hie 51°19' -
Har-Ost 27°36' -
- 3. Bis 96°57' -
Har
Hie 105°40' -
Ost-Har 26°20' -

X
✓
accept boat sheet scaled
K-T

✓ SIG is a hydrographic location obtained from the Launch MIKAWA:

Lat: 41°35' + 1635 m ✓
Long: 70°26' + 693 m

✓ TIP is a hydrographic signal. The cuts used in plotting this signal are listed below:

- 1. Wes 25°46' -
Old
Har 49°08' -
Tip-Old 09°50' - ✓
- 2. Ire 72°23' -
Wes
Bis 62°14' -
Wes-Tip 29°39½' - X
- 3. Wes 30°56' -
Old
Bis 31°15' -
Tip-Old 01°22' - ✓
- 4. Wes 51°26' -
Old
Bis 54°02' -
Tip-Old 03°12' -
- 5. Old 33°31' -

CONTROL; (Continued):

- 5. Old 33°31' -
- Roc
- Har 37°28' -
- Tip-Roc 58°31' -

✓ TWIN is a hydrographic signal. The cuts used in locating this signal are listed below:

- 1. Wes 25°46' - ✓
- Old
- Har 49°07' -
- Twin-Old 48°06' -

- 2. Ire 72°25' -
- Wes
- Bis 62°13' - X
- Twin-Wes 07°08' -

- 3. Wes 30°55' -
- Old
- Bis 31°15' - X
- Twin-Old 38°08' -

- 4. Wes 51°25' - ✓
- Old
- Bis 54°00' -
- Twin-Old 80°09' -

- 5. Old 33°45' -
- Roc 37
- Har 37°28' - X
- Twin-Roc 85°31' -

SURVEY METHODS:

All soundings on this sheet were taken with the Dorsey No. 1 fathometer. Frequent comparisons were made between the fathometer and lead line to assure the correct operation of the fathometer.

A copy of the fathometer corrections is attached to this report.

The sounding lines were controlled by sextant fixes on shore signals.

DISCREPANCIES:

No discrepancies were found on the sheet itself.

JUNCTIONS:

This sheet joins the Launch MIKAWA'S inshore work on the north. The MIKAWA'S party also surveyed the area between Latitude 41°32.3' and 41°32.8' and Longitude 70°24' to 70°28'. The soundings at these points agree very well.

This sheet joins H 6350 at the northwest corner. Satisfactory junction was obtained with this sheet.

This sheet joins H 6534 on the east. Satisfactory junction was obtained with this sheet.

This sheet joins sheet H 6531 on the south and the shoals between Latitude 41°31' and 41°32.5', Longitude 70°20' and 70°23' and between Latitude 41°31.2' and 41°32.1', Longitude 70°25' and 70°25.8'. The 18-foot sounding between 33-34 Z Day, Lat. 41°31.5', Long. 70°25.7', and other soundings in this vicinity fail to check with the soundings obtained in this area on 6531. This spot will be developed more extensively when additional work is executed on 6531 during the coming field season.

No junction was made on the southeast end of the sheet with any modern surveys.

This sheet joins 6532 on the southwest end. A satisfactory junction was obtained with this sheet.

COMPARISON WITH PREVIOUS SURVEYS:

The least depths as charted on chart 1209 were checked to within a foot (boat sheet depths) in the majority of cases. There was good agreement with only slight displacement in a few cases and that in a southerly direction.

The charted 14-foot sounding in Lat. 40°35.2', Long. 70°19.7' was not found after one hour of development. The soundings were not plotted on the boat sheet. Carried forward. Lines spaced 50-100m apart with out feeling around not considered adequate. H.W.M.

SHOAL SOUNDINGS:

The shoal indications in Latitude 41°33.5' and Longitude 70°24' were extensively developed. The critical depths under investigation were not verified.

Your attention is invited to the 18-foot sounding between positions 50 and 51 E Day, Latitude 41°35.1', Longitude 70°22.2'. The following is quoted from notes on this sheet: this " is a 10-foot jump between adjacent soundings and looks like a case of misreading the fathometer or an error in recording. The recorder at the time was a green man. The sounding was questioned at the time it was plotted on the boat sheet because the difference between successive soundings of over one fathom was not checked in the record. Considerable discussion was had with Conant and Smith about this sounding and neither could remember it although they were unusually good about calling attention to such changes. This spot was investigated later and the shoal depth not found. The soundings taken were not put on the boat sheet on account of the lack of space."

See Rev. 1, Per. 4 for addl remarks

(H-4470)
See App. Rev.
Rev. p. 3 para 2

Reject 18

SHOAL SOUNDINGS;(Continued):

Your attention is also invited to the 16-foot sounding between positions 29 and 30, R Day, Latitude $41^{\circ}33.0'$, Longitude $70^{\circ}18.1'$. This depth was not investigated.

Retain

TIDE REDUCERS:

The tide reducers on this boat sheet are based on the Boston tides. In reducing these tides to Nantucket Sound, 0.35 of the range was taken with a +20 minute time correction.

Offshore tides were observed with the fathometer in Latitude $41^{\circ}31.6'$, Longitude $70^{\circ}21.9'$. The times and heights at this station agreed very favorably with the Hyannisport tide gage. It is recommended that Hyannisport gage be used in reducing the soundings for the smooth sheet.

STATE OF COMPLETION:

The smooth sheet has not been prepared or protracted in the field. The tide reducers and fathometer corrections have been entered and checked in the records.

The sheet and records are transmitted to the office as per your letter of February 24, 1940, Reference; 22-RS 1995 GI 4.

This report is compiled entirely from the notes of Ensign Fair J. Bryant.

Respectfully submitted,

J. E. Waugh, Jr.

J. E. Waugh Jr.,
Ensign, U.S.C. & G. Survey.

Approved and Forwarded:

H. C. Warwick

H. C. Warwick,
Lieutenant, C&GS.,
Comd'g. Motor Vessel GILBERT.

S T A T I S T I C S

Date 1939	Day Letter	Statute Miles Sdg Lines	No. of soundings	No. of positions
June 15	A	103.0	2203	289
June 19	B	63.9	1355	185
June 20	C	44.5	917	131
June 21	D	19.3 97.5	198 2074	36 311
June 28	E	76.5	1545	273
June 29	F	25.6	506	95
July 5	G	42.0	983	100 181
July 6	H	68.8	1422	255
July 7	J	34.6	811 1129	198 195
July 11	K	93.2	1826	319
July 12	L	56.8	1125	193
July 13	M	48.3	1000	185
July 18	N	72.5	1624	278
July 20	P	92.2	1894	341
July 24	Q	13.6	272	53
July 28	R	7.1	166	31
Aug. 4	S	1.2	27	6
Aug. 8	T	56.0	1113	210
Aug. 11	U	26.1	582	111
Sept. 15	V	23.8	526	107
Sept. 19	W	13.8	309	60
Sept. 28	X	18.3	398	75
Oct. 13	Y	27.6	586	168
Oct. 16	Z	14.5	326	63
Oct. 17	AA	20.9	894	180
Oct. 20	BB	4.1	111	27
Nov. 4	CC	1.5	39	8
Total for sheet		1060.7 1147.9	22758 24952	4057 4330

Total area surveyed 45.2 square statute miles.

J. H. W.

8

FATHOMETER CORRECTIONS

SHEET H 6533

Period	Depth Range	Correction
1939	Feet	Feet
June 15 - 30	0 - 26	- 1
Sept. 7 - 26	27 - 82	- $\frac{1}{2}$
	83 and deeper	0
July 1 - 31	0 - 17	- 1
Sept. 1 - 6	18 - 55	- $\frac{1}{2}$
	56 - 92	0
	93 and deeper	+ $\frac{1}{2}$
Aug. 1 - 31	0 - 14	- 1
	15 - 44	- $\frac{1}{2}$
	45 - 75	0
	76 - 105	+ $\frac{1}{2}$
	106 and deeper	+ 1
Sept. 28 - to	0 - 60	- 1
Oct. 17	61 and deeper	- $\frac{1}{2}$
Oct. 18 to	0 - 55	- 1
Nov. 4	56 and deeper	- $\frac{1}{2}$

GEOGRAPHIC NAMES

Survey No. **H6533**

Name on Survey	Source of Name										
	A. On Chart No.	B. On previous survey No.	C. On U. S. quadrangle Maps	D. From local information	E. On local Maps	F. P. O. Guide or Map	G. Rand McNally Atlas	H. U. S. Light List	K.		
<u>Eldridge Shoal</u>											1
<u>Wreck Shoal</u>											2
<u>Succonnesset Shoal</u>											3
<u>Bishop and Clarks</u>											4
<u>Nantucket Sound</u>											5
<u>Collier ledge</u>											6
<u>Hodges Rock</u>											7
<u>Hallets Rock</u>											8
<u>W.S.W. ledge</u>											9
<u>Pt. Gammon</u>											10
<u>Succonnesset Pt.</u>											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names underlined in red approved
by L. Heck on 5/21/40

Remarks

Decisions

	Remarks	Decisions
1		415704
2		"
3		415704 U.S.G.B
4		415702-03 "
5		"
6		415702-03
7		" U.S.G.B
8		"
9		"
10	For limits of sheet	416702
11	" " " "	415704 U.S.G.B
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6533 (1939)**

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

Number of positions on sheet	4330
Number of positions checked	41
Number of positions revised	17
Number of soundings recorded	24952
Number of soundings revised	46
Number of soundings erroneously spaced	4
Number of signals erroneously plotted or transferred	0

Date: *Dec. 12, 1940*

Verification by *Francis A. Kelly*

Review by *Harold W. Murray*

Time: *261 hrs.*

Time: *56 hrs.*

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

No. H **H6533**
~~No. I~~

received April 27, 1940
registered May 17, 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			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
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✓ *TBR*

LAC
H.C.P.

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 27, 1940

Division of Hydrography and Topography:

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

Plane of reference approved in
15 volumes of sounding records for

HYDROGRAPHIC SHEET 6533

Locality Succonnesset Shoal to Bishop and Clerks, Nantucket Sound

Chief of Party: Charles M. Thomas in 1939
Plane of reference is mean low water reading
1.0 ft. on tide staff at Hyannisport
18.4 ft. below B. M. 4

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

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H 6533(1939)

Verified and Inked by *Francis B. Kelly*

Date *Dec. 12, 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. X
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 were shown on outstanding shoals. ✓
14. The reduction and plotting of doubtful soundings were checked. ✓

28. Sounding line crossings were satisfactory except as follows: ✓

29. Junctions with contemporary surveys were satisfactory except as follows:

The only junction made was with #6532(1939) & it was so poor only a butt junction was made. ✓
The other surveys have not as yet been verified.

30. Condition of sounding records was satisfactory except as follows:

It was impossible to tell the exact times the various logs were passed. ✓

31. The protracting was satisfactory except as follows: The sheet was ✓
difficult to plot & verify because of the weak center.

32. The field plotting of soundings was satisfactory ~~except as follows:~~ ✓

33. Notes to reviewer:

The 5 foot sounding in lat $41^{\circ}33.8$ long $70^{\circ}14.6$ was transferred from the boat sheet. a better location of this rock will probably be obtained by a later survey. ✓

15. The transfer of contemporary topographic information was carefully examined. X
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.~~ office. ✓
20. Heights of rocks were checked against range of tide. X
21. Rocks transferred from topographic survey have a dotted curve where shown thereon. X
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. X
24. The low water line and delineation of shoal areas have been properly shown (see letter of October 20, 1934). X
25. Degree and minutes values and symbols have been checked. ✓
26. Source of shoreline and signals (When not given in report). ✓
note: log sea for Δ Hyannis Standpipe, 1934 in lat. 41°41', long. 70°17' removed after review.
27. Depth curves were satisfactory ~~except as follows:~~ ✓

HYDROGRAPHIC SURVEY NO. H6533

Smooth Sheet Yes (To be plotted in office)

Boat Sheet Yes

Records; Sounding 15 Vols., Wire Drag Vols., Bomb Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals No

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 27; Last Date Nov. 4, 1939

Remarks _____

DIVISION OF CHARTS

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6533 (1939) FIELD NO. 202

Massachusetts, Nantucket Sound, Succonnesset Shoal
to Bishop and Clerks

Surveyed June - November, 1939

Scale 1:20,000

Instructions dated January 17, 1938 (GILBERT)

April 1, 1939 (MIKAWA)

Soundings:

Dorsey Fathometer No. 1

Control:

Three-point fixes on shore
signals

Chief of Party - Charles M. Thomas

Surveyed by - Ship's Officers

Protracted by - J. W. Vonasek

Soundings plotted by - J. W. Vonasek

Verified and inked by - F. B. Kelly

Reviewed by - Harold W. Murray, January 15, 1941

Inspected by - H. R. Edmonston

1. Shoreline and Signals

a. This is an offshore sheet and no shoreline is shown.

b. The origin of the control is given in the Descriptive Report, pages 1 to 4.

2. Sounding Line Crossings

Agreement of sounding line crossings is satisfactory.

3. Depth Curves

The usual depth curves may be satisfactorily drawn.

4. Junctions with Surveys

a. The present survey joins H-6532 (1939) and H-6350 (1938) on the west. Agreement is satisfactory except in the area of uneven bottom blocked off by a red dashed line where all three surveys overlap. For charting purposes in this area, H-6532 including such soundings as have been transferred should be used to its limits and charting then continued from the present survey.

- b. The junction on the west in the vicinity of Lat. $41^{\circ} 33'$, Long. $70^{\circ} 28'$ and on the south with H-6531 will be considered when that work is received from the field.
- c. The junction on the northwest with H-6469 (1939) is satisfactory. The differences noted in Lat. $41^{\circ} 33'$, Long. $70^{\circ} 24'$ are attributed to uneven bottom. The small gap of approximately 300 meters in Lat. $41^{\circ} 36'$, Long. $70^{\circ} 23'$ (records lost in fire on MIKAWA) will undoubtedly be covered when that area is resurveyed.
- d. The present survey joins H-6470 (1939) on the north. The present survey depths average about 1-1/2 feet shoaler than the overlapping depths of 12 to 29 feet. Such small differences frequently occur when fathometer work (present survey) overlaps hand lead work (H-6470). For charting purposes, the present survey depth should be used to their limits and charting then continued from the inshore sheet.
- e. The junction on the northeast with H-6534 (1939) will be considered in the review of that survey.
- f. The southeast portion of the present survey makes a satisfactory junction with the charted hydrography.

5. Comparison with Prior Surveys

- a. H-184 (1847), H-455a (1854) and H-527 (1855-56)
Scales 1:20,000; 1:40,000 and 1:30,000.

These surveys consisting of zigzag sounding lines each cover portions of the present survey. Agreement of depths is only fair and differences are noted in the positions of some of the shoals.

On H-527 in Lat. $41^{\circ} 33.5'$, Long. $70^{\circ} 22.8'$ a shoal with least depth of 10 feet falls in depths of 22 to 30 feet on the present survey. The present survey, however, shows a similar shoal with a minimum depth of 15 feet about 200 m. northeast. In Lat. $41^{\circ} 33.8'$, Long. $70^{\circ} 16.0'$ H-184 shows a line of seven 18-foot depths which fall in depths of 27 to 30 feet on the present survey. The present survey shows a similar shoal area about 350 m. southward. Other differences are also noted.

In view of the differences noted, the present survey supersedes these surveys.

- b. H-1243 (1874), H-1948 (1889), and H-2193 (1894)
Scales 1:20,000, 1:20,000 and 1:40,000.

A fringe of soundings from each of these surveys falls within the eastern limits of the present survey and they are generally in good agreement. Some discrepancies were noted on H-1948.

- (1) In Lat. $41^{\circ} 33.1'$, Long. $70^{\circ} 14.2'$ a shoal (not with a least depth of 17 feet falls in (charted) depths of 43 feet on the present survey. The 17 is one of three soundings (17, 17, and 18) obtained on line, pos. 41-42B, and indicates a shoal area of at least 100 m. in length. On the present survey, a line of 43-foot soundings was obtained directly over the shoal and shows no indications. On H-1880 (1889-95) Ad. Wk., an investigation consisting of a series of sounding lines run over the shoal soundings failed to reveal any evidence since only depths of 42 to 44 feet were obtained. The shoal soundings on H-1948 are considered disproved.
- (2) In Lat. $41^{\circ} 32.3'$, Long. $70^{\circ} 14.1'$ a 20-ft. sounding (charted as 19 feet, chart No. 1209) on H-1948 falls in depths of 35 feet on the present survey. This 20, however, is open to question since it is (1) on the same line, pos. 38B as the soundings mentioned in the preceding paragraph, (2) a single sounding obtained at the beginning of a new line, and (3) two sounding lines on the present survey and one on H-1880 (1880) passing almost directly over the 20 show no indication. The 20 is considered erroneous and should be disregarded.

The present survey with the indicated additions supersedes these surveys.

- c. H-1880 (1888) and H-1880 (1894-95) tracing,
Scales 1:20,000.

The 1888 work entirely covers the present survey. The 1895 work is additional work plotted on a

tracing most of which falls on the present survey in the area east of Long. $70^{\circ} 19'$. The average agreement of depths is within 1 to 2 feet.

The quality of the smooth plotting of soundings on these surveys is very poor and such principles as have been followed have not necessarily been done consistently. Tide reducers have been entered to the nearest tenth. At the change point between 0.7 and 0.8 foot, 0.7 may be either dropped or plotted as the next whole foot. Occasionally 0.8 or 0.9 foot is also dropped. Some records are reduced in fathoms and quarters requiring mental conversion to feet. Fractions of $1/2$ and $3/4$ foot may be either dropped or considered as the next whole foot. Some lines are carefully plotted in accordance with one or the other of the above rules, whereas others are quite carelessly plotted since errors as great as 10 feet shoaler or deeper occur.

Important soundings on the 1888 work were transferred to the 1895 tracing in red, some of which are erroneous. In addition, critical depths on the 1895 tracing were transferred back to 1888 work in red and some of these soundings are erroneously plotted and charted. In occasional instances, erroneous soundings on the 1888 work were the cause of unnecessary investigation in 1895. Since erroneous soundings so disproved were not corrected on the smooth sheet, doubt therefore exists as to whether the real cause of the discrepancy was detected after the additional work was accomplished.

The more important discrepancies are given below. This group does not include all the errors corrected. The reviewer has confined his investigations to the more obvious and larger discrepancies since the ascertaining of all errors would necessitate a verification of the entire work which is unwarranted.

	Plot. Sdg.	Cor-rected Sdg.	Sheet	Charted	Latitude	Longitude
(1)	30	20	H-1880 (1888)	No	41° 34.1'	70° 16.6'
(2)	22	27	"	"	32.3'	16.9'
(3)	27	22	"	247	34.7'	18.6'
(4)	26	20	"	"	34.6'	18.4'
(5)	26	23	"	"	34.5'	18.5'
(6)	47	41	"	No	34.4'	20.8'
(7)	23	27	"	1209	34.9'	20.7'
(8)	50	58	"	No	31.5'	15.0'
(9)	43	48	"	"	31.3'	15.0'
(10)	57	51	"	"	31.7'	14.6'
(11)	49	44	"	"	31.4'	14.4'
(12)	34	24	H-1880 (1895)	"	33.7'	16.3'
(13)	28	19	"	"	33.4'	16.4'
(14)	23	28	"	"	34.3'	16.0'
(15)	22	28	"	"	34.6'	16.6'
(16)	24	28	"	"	34.7'	16.7'

- (17) In Lat. 41° 31.7', Long. 70° 15.0'; several uncharted 60 to 63 foot soundings on the 1888 work fall in depths of 45 to 50 feet. It is possible that these soundings were read 2 fathoms too deep since the present survey shows no evidence of any such pockets nor do the sounding records indicate any misses or rejections in the vicinities of these deeper soundings. These soundings should be disregarded.
- (18) The charted (247) detached 17 foot sounding from the 1888 work in Lat. 41° 35.2', Long. 70° 19.1' is incorrectly plotted on line, pos. 21 to 22 p. Its correct position is about 50 m. northwest where it is quite close to the 18 foot curve marking Hodges Rock and can be ignored.
- (19) The detached 18 foot depth on chart No. 247 from the 1888 work in Lat. 41° 33.6', Long. 70° 15.4' is similar to the 17 discussed in the preceding paragraph and is therefore not being carried forward.
- (20) The final disposition of the uncharted 28 carried forward in Lat. 41° 31.8', Long. 70° 24.7' from the 1888 work may be altered when field work covering the holiday just west is received. Disregard 28. Very shoal area to westward. J.A.M. 1/23/41
- (21) The charted 12 (line 8 - 9c) on the 1895 work in Lat. 41° 34.4', Long. 70° 17.2' which falls in depths of 14 feet is actually 13.1 feet and is accompanied by the notation "plotted as 12 feet with curve to comply with office rule." This sounding agrees within 0.2 foot and is not carried forward.

- (22) The charted 12 from the 1895 work in Lat. $41^{\circ} 34.6'$, Long. $70^{\circ} 15.9'$ is actually 13 feet (line 17 - 18A, green), and has been so carried forward.
- (23) The 28-foot sounding (not charted) on the 1895 work in Lat. $41^{\circ} 32.5'$, Long. $70^{\circ} 15.4'$ and falling in depths of 32 feet appears to be erroneous. Because of distortion on the tracing, illegibility of the position points and the fact that the soundings are not plotted exactly as recorded, the sounding cannot be identified with certainty. The least depth recorded on this line is 33 feet and the 28 should be therefore disregarded.

About 12 soundings were carried forward from these surveys. The present survey with these additions supersedes these inaccurately plotted surveys.

d. H-2600 (1902), Scale 1:20,000

This survey covers practically all the shoaler areas on the present survey. The development consisting of over 21,000 soundings is very close and within the area covered ~~is~~ is the basis for present chartings in this area. General agreement is within 1 to 2 feet. The bottom, however, is quite lumpy and abrupt changes of as much as 15 feet are not uncommon.

The charted 18 foot sounding in Lat. $41^{\circ} 31.4'$, Long. $70^{\circ} 25.9'$ falls exactly on a single 19-foot sounding (line 83-84V) on this survey which has been carried forward. The difference of 1 foot is probably due to the dropping of the 1 foot so that the 18-foot curve could be used to emphasize the shoal.

Several soundings have been carried forward. The present survey with these additions supersedes this survey.

e. H-2851 (1906), Scale 1:20,000

A few soundings from this survey fall within the southwest limits of the present survey. Agreement is good in some areas but in others differences up to 8 feet are noted. In Lat. $41^{\circ} 31.0'$, Long. $70^{\circ} 27.8'$ the present survey shows an extensive shoal area with depths of 24 feet where formerly depths of 29 to 41 feet were indicated. Because of the differences noted, the present survey should supersede this survey.

6. Comparison with Chart 247 (New Print dated July 11, 1940)
1209 (" " " July 2, 1940)

a. Hydrography

Hydrography shown on the chart originates with surveys discussed in the preceding paragraphs except the charted sunken rock in Lat. $41^{\circ} 33.9'$, Long. $70^{\circ} 14.5'$ which is from Chart Letter 693 of 1939. This letter is advance information of the 5-foot sounding accompanied by the notation "Rk" shown on the present survey. The letter further states that "while the GILBERT was temporarily on the rock, the fathometer was indicating a depth of 19 feet." This rock is plotted on line about 2 minutes after the last position (9cc). A firmer position will undoubtedly be obtained when the holiday just west is surveyed. The present survey delineation should supersede the charted information.

b. Aids to Navigation

The fixed aids agree quite closely with the charted positions. The floating aids vary as much as 350 m. with their charted positions but satisfactorily mark the features intended. The buoys located in Lat. $41^{\circ} 35'$, Long. $70^{\circ} 21'$; Lat. $41^{\circ} 33'$, Long. $70^{\circ} 20'$ and Lat. $41^{\circ} 32'$, Long. $70^{\circ} 19'$ are not shown on the chart.

7. Condition of Survey

- a. The sounding records are neat and legible and conform to the Hydrographic Manual.
- b. The protracting and plotting of the smooth sheet is satisfactory. Many positions, however, are controlled by weak angles.
- c. The Descriptive Report is clear and satisfactorily covers all matters of importance.

8. Compliance with Instructions for the Project

The plan, character and extent of the survey satisfy the Instructions for the Project except that in the case of several charted soundings such as the 10 falling in depths of 17 feet in Lat. $41^{\circ} 31.9'$, Long. $70^{\circ} 19.7'$ the sounding line spacing of 40 m. should have been supplemented by drift sounding.

9. Additional Field Work Recommended

When convenient, consideration should be given to the following:

a. A specific investigation consisting of drift soundings or an improvised wire drag of the 10 foot sounding falling in depths of 17 feet carried forward from H-1880 (1888) in Lat. $41^{\circ} 31.9'$, Long. $70^{\circ} 19.7'$.

10 ft. sdg deleted
 Sec. 2 (F) of
 renew Add. Wk.
 1942

b. A drag examination of the 20 foot sounding falling in depths of 35 to 37 feet on H-1948 (1889) in Lat. $41^{\circ} 32.35'$, Long. $70^{\circ} 14.1'$. This sounding was considered of doubtful accuracy in the review, par. 5b(2) and has not been carried forward.

17 ft and 20 ft.
 disproved by
 Add. Wk 1942

At such time it may be desirable to confirm the disproval of the 17 on the same survey falling in depths of 43 feet in Lat. $41^{\circ} 33.1'$, Long. $70^{\circ} 14.2'$ which is about one mile further north of the 20 foot sounding. (See Rev., par. 5b(1))

c. An examination of the 17 foot sounding carried forward from H-1880 (1888) in Lat. $41^{\circ} 31.7'$, Long. $70^{\circ} 20.5'$ falling in depths of 24 feet.

17 ft. deleted
 See item 2 (G)
 review Add. Wk.
 1942

10. Superseded Surveys

H- 184	(1847)	In part
H- 455a	(1854)	" "
H- 527	(1855-56)	" "
H-1243	(1874)	" "
H-1880	(1888)	" "
H-1880	(1894-95) tracing	" "
H-1948	(1889)	" "
H-2193	(1894)	" "
H-2600	(1902)	" "
H-2851	(1906)	" "

Examined and approved:

Thos. Board

Chief, Section of Field Records.

J. S. Brown

Chief, Division of Charts.

Raymond P. Gunn

Chief, Section of Hydrography.

Stude

Chief, Division of Coastal Surveys.

Applied to Chart	1107	April	1941	F.M.W.
"	"	"	July 1941	J.S.G.
"	1108	Aug.	1941	S.M.A.
"	70	"	"	S.M.A.
"	259	Oct	"	J.W.
"	247	Feb.	1942	G.R.
"	258	Mar.	"	G.R.
"	1108	July	1944	X.R.

6533

Additional work

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. _____ Office No. H6533

LOCALITY

State Massachusetts

General locality Nantucket Sound

Locality Succunnesset Shoals to Bishop and

Clerks _____

194 2

CHIEF OF PARTY

W.F. Deane, J. Bowie

LIBRARY & ARCHIVES

DATE _____

6533

Additional work

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. **H6533**

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. 6533

REGISTER NO. **H6533**
Additional work

State Massachusetts

General locality Nantucket Sound

Locality Successnet Shoal to Bishop and Clerks

Scale 1 : 10,000 Date of survey Aug. - Sept., 19 42

Vessel M.V. GILBERT Launch FARIS

Chief of Party John Bowie, Jr. William F. Deane

Surveyed by J. Bowie, Jr., H. F. Garber, W. F. Deane

Protracted by R. J. Christman

Soundings penciled by R. H. Christman

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by A. R. STIRNI

Verified by A. R. STIRNI

Instructions dated March 9, 1942, 19

Remarks:

Supplemental Descriptive Report

to

Accompany Sheet H - 6533

H6533
Additional work

Motor Vessel GILBERT John Bowie, Jr., Chief of Party

August - September 1942

Nantucket Sound, Mass.

AUTHORITY:

The additional work executed on this sheet was done in accordance with the Supplemental Instructions, Project HT - 217, dated March 9, 1942.

PURPOSE OF WORK:

The purpose of the additional work is to prove or disprove certain soundings indicated in large red figures on the boat sheet.

CONTROL:

The same control was used as appeared on the boat sheet with the exception of three signals. (ED, POLE, RAD). The first two of these signals were located by topography during the present season. Signal RAD was located by sextants cuts. *Vol. 3 of sig records* ✓ *T-6887 (1942)*

SURVEY METHODS:

Standard survey practices for development were followed throughout. The hydrography was accomplished with an 808-A portable depth recorder mounted on launch No. 75 and portable depth recorder No. 71 mounted on Launch FARIS. The latter vessel was used for developments south of Bishop and Clerks L. H. ✓

The depths were verified by a bar check at the beginning and close of each days work and during the noon hour. The depths were found to be correct so that no depth recorder corrections were applied. ✓

The soundings were recorded every 30 seconds during the work and later scaled and corrections entered in the record book. The soundings were scaled to one-half foot. Tide reducers were also entered to one-half foot. ✓

H6533

Additional work

RESULTS OF INVESTIGATIONS:

1. A close system of lines failed to verify the 16 foot sounding at Lat. $41^{\circ} 31.4'$, Long. $70^{\circ} 28.4'$. The least depth recorded was 20 $\frac{1}{2}$ feet, after drifting over the spot for 15 minutes. It is recommended that the 16 foot sounding be deleted and the 20 foot depth inserted. 16 ft. retained
see item 2(A)
of review

A 16 foot depth was recorded at Lat. $41^{\circ} 31.45'$, Long. $70^{\circ} 28.3'$ which plots approximately 40 meters north of old 16 foot sounding. Because of the uneven character of the bottom it is recommended that the 16 foot depth be retained. 16 ft. retained
see item 2(A)
of review

2. A closely spaced system of lines failed to verify the 17 foot sounding shown at Lat. $41^{\circ} 32.2'$, Long. $70^{\circ} 26.25'$. The least depth recorded in this area was 22 feet. It is recommended that the 17 foot depth be deleted from the chart and replaced by the 22 foot sounding. 17 ft. retained
see item 2(B)
of review

3. The 19 foot sounding at Lat. $41^{\circ} 31.35'$, Long. $70^{\circ} 25.9'$ was substantially verified by a closely spaced system of sounding lines. The current development shows a 19 foot shoal 170 meters NE with numerous 20 foot depths in the immediate area. 19 ft. retained
see item 2(C)
of review

4. No indication of a ~~23~~²⁸ foot shoal was found at Lat. $41^{\circ} 31.8'$, Long. $70^{\circ} 24.65'$. The soundings obtained by the development agreed very closely with those shown by the previous survey. It is recommended that the ~~23~~²⁸ foot depth be deleted from the chart. 28 ft. disprop.
see item 2(D)
of review

5. A close system of lines in the vicinity of the 26 and 27 foot soundings at Lat. $41^{\circ} 34.6'$, Long. $70^{\circ} 22.8'$ failed to verify these soundings. It is recommended that these soundings be deleted. 26 ft. & 27 ft.
deleted
see item 2(E)
of review

6. The 17 foot and 10 foot shoals at Lat. $41^{\circ} 31.7'$, Long. $70^{\circ} 20.5'$ and Lat. $41^{\circ} 31.85'$, Long. $70^{\circ} 19.7'$ respectively were developed by a system of closely spaced sounding lines without indications of either shoal. It is recommended that these soundings be removed from the chart. 10 ft. & 17 ft.
deleted
see items
2(F&G) of
review

7. Careful development failed to reveal any indication of a 28 foot shoal at Lat. $41^{\circ} 32.9'$, Long. $70^{\circ} 15.1'$. 33 feet was the least depth found in this area. It is recommended that the 28 foot sounding be deleted from the chart. 28 ft. deleted
see item 2(F)
of review

8. The 17 and 18 foot shoal shown at Lat. $41^{\circ} 33.1'$, Long. $70^{\circ} 14.15'$ was investigated and a least depth of 43 feet found. It is recommended that these soundings be removed from the chart. 17 ft. & 18 ft.
deleted
see item 2(I)
of review

H6533

Additional work

Page 3

RESULT OF INVESTIGATIONS: (Cont'd)

9. At Lat. $41^{\circ} 32.35'$, Long $70^{\circ} 14.1'$, a 20 foot shoal was developed by closely spaced lines and a least depth of 37 feet found. It is recommended that the ~~20~~ foot sounding be removed from the chart. 20ft. deleted.
See item
2 (J) of
review

TIDAL DATA

to

Accompany Supplemental Report

on

Sheet H - 6533

The tide gage at Cotuit Highlands, Lat. $41^{\circ} 36.4'$, Long. $70^{\circ} 26.2'$ was used for the reductions of soundings on all developments.

M.L.W. of 0.7 feet on the staff was determined by spirit levels from B.M.'s.

* * * * *

Statistics to Accompany

Sheet H - 6533

Nantucket Sound, Mass.

DATE 1942	DAY LETTER	STAT. MILES SOUNDING LINES	NO. of POSITIONS
Aug. 26	a	6.4	51
27	b	9.2	54
Sep. 20	c	11.8	90
25	A	<u>11.2</u>	<u>63</u>
	Totals	38.6	258

Area - Square Statute miles: 1
No. of Soundings: Continuous profile

Additional work

List of Signals to

Accompany Sheet H - 6533

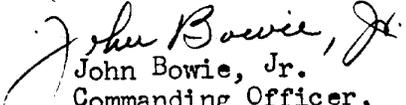
Nantucket Sound, Mass.

<u>Hydrographic Name</u>	<u>Location</u>
BIS	Bishop & Clerks L.H.
COL	Colliers Ledge Beacon, 1934
HAR	Oyster Harbor Tank, 1934
HIE	Topographic Sheet A-1, 1942
IN	Topographic Sheet A-1, 1942
MAT	Topographic Sheet A-1, 1942
OLD	L. H. Pt. Gammon <u>Old</u> Tower, 1934
ORT	Cotuitport W. T. (1934)
OST	Osterville Water Tank, 1934
POLE	Topographic Sheet A-2, 1942
RAD	<u>Radio</u> Tower (Sextant Cuts, 1942)
RID	Pierides W. T., 1934

T-6887(1942)

T-6887

Respectfully submitted,


 John Bowie, Jr.
 Commanding Officer,
 U.S.C. & G.S. MV GILBERT

GEOGRAPHIC NAMES

Survey No.
H6533
 Additional work
 Name on Survey

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

	A	B	C	D	E	F	G	H	K	
Bishop and Clerks										1
Nantasket Sound										2
Succunnesset Shoal										3
										4
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Remarks

Decisions

	Remarks	Decisions
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Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6533**
 Additional work

Records accompanying survey:

Boat sheets ~~240~~; sounding vols. (3)..; wire drag vols.;
 bomb vols.; graphic recorder rolls (2)..;
 special reports, etc.

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

Number of positions on sheet	..258
Number of positions checked	..78.
Number of positions revised	..48.
Number of soundings recorded	1042
Number of soundings revised (refers to depth only)	..11.
Number of soundings erroneously spaced	..18.
Number of signals erroneously plotted or transferred
Topographic details	Time
Junctions	Time
Verification of soundings from graphic record	Time ..4..

Verification by... *A.P. STIRNI* Total time .48.. Date *Apr. 19, 1943*

Review by *R.H. Carstens* Time .23.. Date *Apr. 29, 1943*

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT
~~PHOTOSTAT BOOK~~

No. H **H6533**
~~PHOTO~~ Additional work

received **Nov. 13, 1942**
 registered **Nov. 23, 1942**
 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			
24			
25			
26			
30			
40			
62			
63			
82			
✓ 83	Pg 283	<i>HEH</i>	<i>Comdr Finnegan</i>
88			
90			

RETURN TO

82	R. W. Knox
----	-------------------

✓ RWK

Lae
ME

TIDE NOTE FOR HYDROGRAPHIC SHEET

November 25, 1942.

~~Division of Hydrography and Topography:~~

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

Plane of reference approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 6533 Ad-WK

Locality Succoneset Shoal to Bishop and Clerks, Nantucket Sound, Mass.

Chief of Party: John Bowie, Jr. in 1942
Plane of reference is mean low water reading
0.7 ft. on tide staff at Cotuit Highlands
6.3 ft. below B. M. 1

Height of mean high water above plane of reference is 2.6 feet.

Condition of records satisfactory except as noted below:

C. H. Green

Chief, Division of Tides and Currents.

DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6533 Add. Wk.

Massachusetts, Nantucket Sound,
Succunneset Shoal to Bishop and Clerks
Surveyed August - September 1942; Scale 1:20,000
Instructions dated March 9, 1942

Soundings:

Depth Recorder 808

Control:

Sextant Fixes on Shore Signals

Chief of Party - John Bowie, Jr.
Surveyed by - John Bowie, Jr.; H. F. Garber and W. F. Deane
Protracted by - R. J. Christman
Soundings plotted by - R. J. Christman
Verified and inked by - A. R. Stirni
Reviewed by - R. H. Carstens
Inspected by - H. R. Edmonston

1. Purpose

The purpose of this additional work was to investigate certain shoal soundings originating with prior surveys and falling within the limits of H-6533 (1939).

2. Results of Investigation

- a. Two 16-ft. depths in Lat. $41^{\circ}31.4'$; Long. $70^{\circ}28.4'$ originating with H-1880 (1884-94): These soundings are adequately verified by nearby 17-ft. and 20-ft. soundings of the present survey. The depth charted on chart 1209 should be retained.
- b. The 17-ft. sounding (uncharted) in Lat. $41^{\circ}32.2'$, Long. $70^{\circ}26.24'$ originating with H-1880: The vicinity of this sounding was covered with closely spaced lines and no depth less than 22 feet was found. However, abrupt changes in depth of 3-4 feet are common, and the immediate area is lumpy. It is considered advisable to carry the sounding forward.
- c. The 19-ft. sounding in Lat. $41^{\circ}31.35'$; Long. $70^{\circ}25.93'$ from H-2600 (1902): This sounding was adequately verified by nearby 19-21-foot depths of the present work and should be retained on the chart.

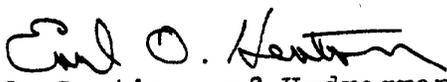
- d. The 28-ft. sounding in Lat. $41^{\circ}31.78'$; Long. $70^{\circ}24.7'$ from H-1880: The vicinity of this uncharted sounding was covered by the present work as well as by close development on H-2600 (1902) and no indication of such a depth was found in depths of 52 feet. The 28-ft. sounding is probably erroneous and should be disregarded.
- e. The 26- and 27-ft. soundings in Lat. $41^{\circ}34.6'$; Long. $70^{\circ}22.9'$ from H-1880: The vicinity of these soundings was closely covered by sounding lines and no sounding less than 30 feet was found. These soundings are considered disproved and should be deleted from the chart.
- f. The 10-ft. sounding in Lat. $41^{\circ}31.85'$; Long. $70^{\circ}19.7'$ from H-1880: The vicinity of this sounding was closely developed by 30-meter lines and no depth less than 16 feet was found. The 10-ft. was probably recorded 1 fathom in error and should be considered as disproved.
- g. The 17-ft. sounding in Lat. $41^{\circ}31.7'$; Long. $70^{\circ}20.45'$ from H-1880: A system of closely spaced sounding lines was run in the vicinity of this sounding and no depth less than 22 feet was found. The sounding was probably recorded 1 fathom in error and should be deleted from the chart.
- h. The 28-ft. sounding in Lat. $41^{\circ}32.87'$; Long. $70^{\circ}15.1'$ from H-1880: The vicinity of this sounding was developed by a system of closely spaced lines and no depth less than 32 feet was found. The area is considered sufficiently well developed to disprove the 28-ft. sounding. It should be deleted from the chart.
- i. The 17-ft. and 18-ft. soundings (uncharted) in Lat. $41^{\circ}33.1'$; Long. $70^{\circ}14.15'$ from H-1948 (1889): Closely spaced lines were run in the vicinity of these soundings and no indication of a shoal was found in depths of 43 feet. On H-1948 the shoal is shown as being about 100 meters in length and 25 feet in height. It is considered unlikely that a shoal of these dimensions would escape detection by the present close development. Additional work on 1880 also failed to reveal this shoal. These shoal soundings are considered disproved and are not carried forward.

- j. The 20-ft. sounding (uncharted) in Lat. $41^{\circ}32.35'$; Long. $70^{\circ}14.1'$ is from H-1948: No indication of this shoal, falling in depths of 35 feet, was found in the development of the present work. The 20-ft. sounding is a single sounding at the beginning of a line and is considered erroneous. It was not retained.

Examined and approved:


Chief, Surveys Branch


Chief, Division of Charts


Chief, Section of Hydrography


Chief, Division of
Coastal Surveys

additional work applied to chart 1209 July 2, 1943
applied to Ch. 258 (after review) Sept 18, 1943 - JFW
" " " 259 " Oct. 2, 1943 - JFW
" " " 1108 July 26, 1944 - K.R.