

5357

Diag. Cht. No. 1220-1.

Form 504 U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE  <b>DESCRIPTIVE REPORT</b>	
Type of Survey	Hydrographic
Field No. .... 7	Office No. H-5357
LOCALITY	
State	Maryland
General locality	Off Maryland Coast
Locality	Great Gull Bank to Pope Island
<del>19</del> 33	
CHIEF OF PARTY	
H. A. Seran	
LIBRARY & ARCHIVES	
DATE	February 9, 1934

5357

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5357

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. 5357

State Maryland

Small

General locality Off Maryland Coast

Large

Locality Great Gull Bank to Pope Island

Scale 1:20,000 Date of survey June 23, to Oct 11, 1932 1933

Vessel S. GILBERT

Chief of Party H. A. Saran and Herman Odessey

Surveyed by Field Officers

Protracted by F. L. Kish

Soundings penciled by F. L. Kish

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by W. R. Muller

Verified by W. H. Bamford & W. R. Muller

Instructions dated April 27, 1933, 1932

Remarks:

DESCRIPTIVE REPORT

Hydrographic Sheet No. 7  
Maryland Coast

Instructions:

The instructions directing the work on this sheet are contained in the Director's instructions to the Commanding Officers of the ships-OCEANOGRAPHER, LYDONIA and GILBERT, dated April 27th, 1933, and covering projects HT-142, HT-143 and HT-144. ✓

Limits:

This sheet covers an area extending from approximately 1/2 mile to between 4 and 6 miles off the Maryland Coast, between latitude 38° 01' and latitude 38° 16'. ✓

This survey connects with sheet No. 1 on the north, sheet No. 5 on the east, with sheet No. 8 on the south and with sheet No. 1 L on the west. ✓  
#5346 #5353  
#5358 #5347

Survey Methods:

The survey of the area was controlled by sextant angles on objects located by triangulation and topography. ✓

All soundings were taken with the handlead, standard methods being employed.

Discrepancies:

With the following exceptions, the crossings of sounding lines on this sheet were exceptionally good. Lines 11 - 12 L and 136 - 137 H fail to cross by about 6 feet. Soundings on line 136 - 137 H appear too deep and it is recommended they be rejected. ✓

Lines 78 - 79 N and 106 - 107 J fail to cross by about four feet. It is recommended that the second and third sounding after position 106 J be rejected. ✓

Lines 125 - 126 N and 121 - 122 J fail to cross by three feet. Lines 138 - 139 N and 177 - 178 J fail to cross by four feet. It is recommended that the second sounding after position 177 J be rejected. ✓

Lines 174 - 175 N and 92 - 93 K fail to cross by three feet. It is recommended that the third sounding after position 92 K be rejected. ✓

Lines 193 - 194 N and 148 - 149 K fail to cross by three feet. It is recommended that the sounding before position 149 K be rejected. ✓

The line from 212 - 215 N which crosses four other lines, appears about 3 feet too shoal. It is recommended that it be rejected. ✓

Lines 107 - 108 T and 70 - 71 P fail to cross by five feet. It is recommended that the sounding before position 71 P be rejected. ✓

Lines 161 - 162 T and 111 - 112 P fail to cross by three feet. It is recommended that the sounding after position 111 P be rejected. ✓

The soundings between positions 185 and 186 T appear to be several feet too deep. ✓

Lines 188 - 189 T and 25 - 26 R fail to cross by 6 feet. It is recommended that the third sounding after position 188 T be rejected. ✓

The soundings between position 155 and 156 K fail to check the sounding on three cross lines by several feet. It is recommended that they be rejected. ✓  
75 ✓ 76 ✓

Lines 78 - 79 U and 192 - 193 T fail to cross by 6 feet. It is recommended that the sounding after position 193 T be rejected. ✓

(2)

Practically all the above erroneous crossings are near slopes and could be corrected by a slight displacement of one of the lines.

Dangers:

There is an 18 foot sounding on the shoal which centers about latitude  $38^{\circ} 01'$ , longitude  $75^{\circ} 08.5$ . This is three feet less than the sounding appearing in this vicinity on Chart 1220.

The shoal, appearing on Chart 1220, at latitude  $38^{\circ} 03.5$  has moved to the westward .3 mile to longitude  $75^{\circ} 07.6$ . A least depth of 19 feet instead of 18 feet, was found.

The southwestern end of Little Gull Bank has moved about .1 mile to the eastward. A least depth of 17 feet was found, which corresponds with the sounding on Chart 1220.

Comparison with Previous Surveys:

The soundings in this area agree well with those obtained by previous surveys.

Several of the shoals have moved slightly and the least depths have varied from one to four feet.

Reduction of Soundings:

In making reduction for soundings, it was assumed that the tide occurred at the same time as that at Assateague Anchorage, at which point a standard tide gauge was in operation.

Respectfully submitted,

*Robert A. Earle*  
Robert A. Earle, Lt., (j.g)  
U. S. C. & G. S. S. OCEANOGRAPHER

Approved and forwarded:

*H. A. Seran*  
H. A. Seran, Commdr., C&GS  
Commanding Ship- OCEANOGRAPHER.

## LIST OF STATISTICS

Hydrographic Sheet No. 7.

Maryland Coast

"GILBERT"

<u>Day</u>	<u>Date</u>	<u>Soundings</u>	<u>Positions</u>	<u>Mileage</u>
A	June 23, 1933	284	60	14.2
B	June 24, "	463	99	25.5
C	June 25, "	277	56	18.0
D	July 11, "	463	85	24.0
E	July 17, "	356	59	15.2
F	July 26, "	530	102	27.5
G	July, 27, "	415	85	22.8
H	July 28, "	1245	238	59.7
J	July 29, "	1046	207	58.0
K	July 30, "	1021	205	56.7
L	Aug. 9, "	156	35	6.0
M	Sept. 18, "	360	69	15.0
N	Sept. 19, "	1234	236	54.7
P	Sept. 28, "	778	133	38.3
Q	Sept. 29, "	609	111	28.1
R	Sept. 30, "	1287	235	61.9
S	Oct. 1, "	981	195	41.5
T	Oct. 10, "	1110	195	47.9
U	Oct. 11, "	532	120	22.1
Totals		13147	2525	637.1

LAC

March 6, 1934 .

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in  
7 volumes of sounding records for

HYDROGRAPHIC SHEET 5357

Locality Great Gull Bank to Pope Island, Maryland Coast

Chief of Party: Herman Odessey in 1933

Plane of reference is mean low water, reading  
3.5 ft. on tide staff at Assateague Anchorage, Va  
9.3 ft. below B. M. 17

Height of mean high water above plane of reference is about 4 feet

Condition of records satisfactory except as noted below:

*Hammner*  
Acting Chief, Division of Tides and Currents

PARTIAL REPORT ON H 5357

MARCH 13, 1934

- 1.1 The protracting on this sheet was well done and the soundings were neatly penciled.
- 2.1 The datum the sheet is referred to - was omitted from the sheet by the field party.
- 3.1 The recommendations made by the field party in the descriptive report under the paragraph headed 'DISCREPANCIES' - were not adhered to as sufficient reason could not be found for this arbitrary rejection of soundings in an area of such uneven bottom.

Respectfully submitted

Warren A. Bamford

May 10, 1934

Section of Field Records  
Report on Hydrographic Sheet No. 5357  
Great Gull Bank to Pope Island  
Off Maryland Coast  
Maryland.

Chief of Party - H. A. Serran and Herman Odyssey.

Surveyed by - Field Officers.

Protracted by - J. L. Kish

Soundings penciled by J. L. Kish

Protracting verified by W. H. Bamford.

Protracting verified and sheet inked by W. L. Muller

This sheet was checked for protracting and inspected by W. H. Bamford whose partial report precedes this report. The records conform to the requirements of the Hydrographic Manual and the protracting and penciling of soundings was excellently done. The following exceptions are noted in regard to the records.

The recorder has used abbreviations for bottom characteristics for which there is no authority in the Manual. I.E. or evidently intended for br. and bl. which might be interpreted as either black or blue. These <sup>latter</sup> abbreviations have invariably referred to mud and have been entered on the sheet as mud without regard to color.

In Vol. 6 at page 8 an attempt was apparently made in the field to obtain a carbon copy of the notes. The carbon paper was reversed resulting in an inverted copy of the notes being made in the records. Fortunately no confusion results from this.

In Vol. 2 at page 6 locations are made of Winter Quarters float buoy #6 and Red and Black Sea buoy (can). These buoys are not on the area covered,



by this sheet but appear on sheet 5358. In checking these positions on H-5358 the writer finds that W. Q. S. #6 checked closely. However the positions of Red and Black sea buoy do not check so that both positions are shown in pencil and are identified by date of location. There are two signals on the sheet with the name BUG. There is no indication in the records as to the direction in which fish traps run.

The buoy between positions 81-82P was plotted in pencil by the field party in what seems to be an erroneous position. This has been changed on smooth sheet because of later location and agreement with boat sheet. It would appear that the buoy has either drifted or its location has been changed. As plotted now the buoy is in approximately Lat 38-03.77 - Long 75-09.66. as shown on Aid Proof sheet #1220 its approximate location is Lat 38-03.73 - Long 75-09.96.

The description report for this sheet calls attention on page 1 to many bad crossings. The positions at all these crossings were checked by the writer and found to be substantially correct. In view of the fact the depths vary rapidly in this area it does not seem that in reality these crossings are very bad, so that none of the recommendations made as to rejection have been accepted. This meets with the approval of Mr. Bamford who originally checked and inspected the sheet.

Respectfully submitted  
W. L. Muller

Section of Field Records

REVIEW OF HYDROGRAPHIC SHEET NO. 5357

Off Coast of Maryland  
Surveyed in 1933

Original instructions dated April 27, 1933 (OCEANOGRAPHER)  
Supplemental instructions dated June 1, 1933 (OCEANOGRAPHER)

Hand lead soundings and 3 Point Control

Chief of party - H. A. Seran, H. Odessey.  
Surveyed by - Officers of Steamer GILBERT.  
Protracted by - F. L. Kish.  
Soundings penciled by - F. L. K.  
Verified by - W. H. Bamford, W. L. Mullen.  
Inked by - W. L. Mullen.

1. Condition of Records.

The records conform to the requirements of the Hydrographic Manual.

2. Instructions.

The plan, character and extent of the work satisfy the Instructions for the Project except that no recommendation was made regarding the retention or rejection of the charted wreck in lat. 38°05'.6, long. 75°10'.6 (Par. 14 of Instructions).

3. Crossings.

The crossings of sounding lines on this sheet are generally very good, although not always within four per cent of the depth in some of the irregular and lumpy areas. The field party submitted a complete list of the worst crossings with recommendations as to their disposition. These places were examined and several adjustments were made. The line between pos. 70P and pos. 72 (lat. 38°04', long. 75°11'.5) was adjusted and the soundings on the line from pos. 155K and pos. 156K (lat. 38°05'.5, long. 75°10'.5) were omitted. In the other cases the recommendations of the field party were sometimes but not always followed because in many cases the rejection of soundings was too arbitrary, not warranted by the general bottom configuration.

4. Curves.

The information is sufficient for completely drawing the usual depth curves.

5. Junctions.

The junction on the north with H. 5346 is satisfactory.

The junction on the east with H. 5348 will be reported in the review of that sheet after it has been verified.

The junction on the east with H. 5355 is satisfactory.

At the junction on the west with H. 5347 there is no actual overlap and in one or two places the distance between the lines slightly exceeds the 200 meters requirement of the Instructions. A closer junction would have been desirable in the vicinity of Lat.  $38^{\circ}01.5$  and Lat.  $38^{\circ}08'$ . (These have been noted in the review of that sheet).

About 0.7 miles has been accomplished in the Add'l Work done on H-5347(1934).  
12/11/34 H.W.M.

The junction on the south with H. 5358 is satisfactory.

#### 6. Comparison with Previous Surveys.

The survey of 1849, H. 213, (Scale 1-40,000) shows only a few widely spaced lines in the area north of Lat.  $38^{\circ}13'$ . There are no shoals of importance on this sheet that fall within the limits of the new survey. It should be superseded by the recent work, H. 5357.

On the survey of 1850, H. 251, the old method of locating the vessel by the intersection of angles taken from two shore stations was used for control. In the areas well off shore, the intersections are not very strong and the control may not be as accurate as the three point fix <sup>method</sup> ~~mentioned~~ used on the new work. Comparison of the two surveys shows that about the same depths were obtained, but sometimes in different locations, indicating that the same shoals exist but located in different positions. A 24 ft. sounding charted in Lat.  $38^{\circ}04'3$ , Long.  $75^{\circ}06'.3$  is an example of this, as the new work finds a 26 ft. shoal about  $4/10$  of a mile to the southward. Because of the difference in time between the two surveys as well as the consideration just mentioned, it is recommended that H. 251 should be superseded by the new work, H. 5357. An 18 foot sounding shown on H. 251 in Lat.  $38^{\circ}02'.2$ , Long.  $75^{\circ}13'.2$  should be retained on the chart until more information is received.

18 foot sdg. disproved.  
(See Review of H-5347-Add'l Work of 1934).  
12/11/34 H.W.M.

The survey of 1911, H. 3314, is on a scale of 1 to 200,000. The greater part of this survey depends for control upon a crude type of dead reckoning on which no allowance was made for current or leeway. The position of the soundings is only approximate. For this reason it is recommended that H. 3314 be generally superseded by the late survey, H. 5357. A 24 ft. sounding (actually 25 ft.) is charted in Lat.  $38^{\circ}01'.2$ , Long.  $75^{\circ}07'.2$ , from this survey. As the new work also shows a shoaling at this point (28ft. obtained), it is recommended that the 24 ft. sounding be retained on the chart for the present. Although the control is considered unreliable it noted that at several places H. 3314 checks the new work fairly well. For example a 17 foot shoal at Great Gull Bank. The survey of 1912, H. 3314a is on a scale of 1 to 80,000. Only one sounding line from this sheet crosses the new work. The

control for this survey is also very weak and the position of soundings approximate only. (See verifier's report attached to descriptive report of H. 3314a). H. 3314a, should also be superseded by the new work, H. 5357.

7. Wreck.

A wreck symbol is shown on Chart 1220 in approximate Lat. 38°-05'.6, Long. 75°10'.6. The origin and history of this wreck could not be traced, as it has been carried on our charts since about 1900. The field party placed the wreck on their boat-sheet and ran sounding lines over the position without finding any trace of it, but failed to make any mention of it in their descriptive report. The existence of the wreck appears to have been disproved, and should be discontinued in future charting.

8. The area within the limits of this sheet has been well covered. With but few exceptions the same or less water has been obtained on the charted shoals. In some cases the development on the shoals does not seem close enough to give assurance that the least depths were found.

9. Additional Field Work Recommended.

Inasmuch as work is to be continued in this vicinity this year, it is desirable that the following additional work be accomplished:

- a. A further development of the small bank (least depth 39 feet) in approximate lat. 38°09'.5, long. 79°06'.5. ✓ JMM
- b. A closing of the gap at the junction with H. 5347 in lat. 38°08' to 38°09' and long. 79°10'. A better delineation of the 18 foot curve should be made here. ✓ JMM
- c. A few short split lines along the ridge in lat. 38°04'.8, long. 75°09'.2. Chart 1220 shows a 30 foot sounding in this vicinity from H. 251. The depths surrounding the 30 on the old survey seems to agree generally well with the depths on the new survey; hence it is possible that the 30 still exists. ✓ JMM
- d. The narrow ridge in the vicinity of lat. 38°02'.1, long. 75°13'.3 with 19 and 21 feet on it should be further developed to ascertain the existence of the northernmost of two charted 18 foot shoals here. This 18 foot sounding is from H. 251. ✓ JMM
- e. A further examination should be made of the shoaling (least depth 28 feet) in lat. 38°01'.2, long. 75°07'.1 to determine whether less water exists here. The charted

18 foot sdg disproved.  
(See Review of H-  
5347 (1934) Add'l Work.  
12/11/34 H.W.M.)

24 foot sounding in this vicinity (from H. 3314) should be retained unless disproved by the additional examination, and while working in this vicinity additional lines should be run over the shoaling (least depth 29 feet) in lat. 38°01'.4, long. 75°07'.3 and the 28 foot sounding in lat. 38°01'.9, long. 75°07'.3. Less water may exist near the first and the second may be a fathom in error.

10. Reviewed by R. L. Johnston - May 1934.

Sheet inspected and recommendations concurred in - A. L. Shalowitz.

*K. T. Adams*  
K. T. Adams,  
Chief, Section of Field Records.

*B. Borden*  
Chief, Section of Field Work.

Examined and approved:

*L. O. Gilbert*  
Chief, Division of Charts.

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

Applied to Drg. of Chart 1270 after additional work was verified; July 22, 1935, H.B.  
" " " " Chart 1109 " " " " " July 24, 1935 H.B.