

Original

7093

Diag'd. on Diag. Ch. No. 77-3

7093

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	HYDROGRAPHIC
Field No. Co-1346	Office No. H-7093
LOCALITY	
State	MARYLAND
General locality	CHESAPEAKE BAY
Locality	POINT NO. POINT
1946	
CHIEF OF PARTY	
Ronald R. Moore	
LIBRARY & ARCHIVES	
DATE	DEC 5 1946

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

H7093

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.

REGISTER No. H-7093

Field No. Co-1346

State MARYLAND ✓

General locality Chesapeake Bay ✓

Locality Point-No-Point ✓

Scale 1:10,000 Date of survey April 24-May 28, 1946 ✓

Instructions dated August 11, 1945

Vessel Ship COWIE

Chief of party Ronald R. Moore

Surveyed by John C. Bull

Soundings taken by fathometer, ~~graphic recorder hand lead wire~~ pole

Protracted by B. M. Jones

Soundings penciled by B. M. Jones

Soundings in ~~fathoms~~ feet at MLW ~~MLW~~ ✓

REMARKS:

This sheet was processed in the Hydrographic Section,
S.E. District, Norfolk, Virginia.



DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET H-7093 (1946) (Field No. Co-1346)

Scale: 1:10,000

Ship COWIE

Ronald R. Moore, Comdg.
Lt. John C. Bull, in Charge

- A. This survey was done under Instructions for Project, CS-287 dated 11 August 1945. ✓
- B. This survey is an inshore survey in Chesapeake Bay, extending from Lat. $38^{\circ} 21'$ southward to Lat $38^{\circ} 07.6'$ and extending offshore to approximately the 30 foot curve to a junction with Sheet H-7094 (Field No. Co.-2145), scale 1:20,000 which was in progress at the same time. On the north it joins Sheet H-7092 (Field No. Co-1246). ✓
1945-46
1946
- Field work commenced on 24 April, 1946 and was finished on 28 May 1946 ✓
- C. This survey was made by Launch # 100, a shoal draft Higgins type launch equipped with an 808-type recording rathometer. This launch was operated from the ship. ✓
- D. The tide station used for the reduction of soundings is the standard automatic tide gage maintained by the Maryland Biological Laboratory on their dock at Solomon's Island, Maryland. No time factor was introduced. ✓
- E. The smooth sheet was plotted at the Norfolk Processing Office. ✓
- F. Control is based on triangulation accomplished by various chiefs of party from 1905 to 1942. ✓

Topographic stations are located on air topographic sheets T-8137 and T-8148. ✓
1943
1942

These are supplemented by hydrographic stations located by sextant fixes at the station or by cuts from the ship or launch from offshore while stopped by sextant angles taken by three observers simultaneously. ✓

- G. The shoreline is from air photographic sheets T-8137 and T-8148 compiled in 1943. ✓

No changes from that shown on the topographic sheets were noted by the hydrographic party. ✓

The low water line could not be defined by hydrographic party because of the gradual slope of the bottom and undulating sand ridges in some places, and in others because trees had toppled into the water from eroding shore line. However, two lines of soundings approximately 50 meters apart were run parallel to the shoreline, the innermost being approximately 100 meters offshore. ✓

H. The soundings were obtained with an 808-type recording fathometer. Bar checks were taken at the beginning and end of the day's work, except on some days when little work could be done or when weather conditions made it difficult. The bar check lines are accurately marked steel wire rope. The bar check curves for each day were plotted and a mean curve for that day used for the correction of soundings.

On "h" and "j" days, while developing shoals, the fathometer was supplemented by soundings taken with an accurately marked 16' pole.

I. All positions for the location of the boat depend on three point fixes taken on stations located as outlined in F above.

J. The survey is complete and adequate to supersede prior surveys. No holidays or excessive differences exist.

Sounding lines are spaced approximately 100 meters apart with intermediate lines where there were excessive differences on adjacent lines and in development of shoals.

The junction with Sheets ¹⁹⁴⁶H-7092 (Co-1246) and ¹⁹⁴⁵⁻⁴⁶H-7094 (Co-2145) are satisfactory in so far as predicted tides were used for the reduction of soundings.

K. The percentage of cross lines is approximately 5%. The crossings are in good agreement considering the use of predicted tides for plotting of soundings, on boat sheet.

L. Comparison with survey H-2993, scale 1:20,000 made in 1908.

The present survey is in close agreement with the previous, however the closer spacing of the present survey gives a better delineation of the depth curves.

A comparison of the shoaler spots on the two surveys is as follows:

	Position		Old	Present	After V&R.
A.	Lat. 38° 09. ⁴⁵ ₅ ' Long. 76° 19.5'	(not charted)	6'	6' Reduced by predicted tides.	5'
B.	Lat. 38° 09.8' Long. 76° 19. ¹⁹ ₄ '	(charted)	9'	13' " (The 19 ft fit carried fwd)	12'
C.	Lat. 38° 09.85' Long. 76° 19. ¹⁹ ₈ '	(not charted)	5'	5' "	4'
D.	Lat. 38° 10. ¹⁵ ₂ ' Long. 76° 19. ¹⁹ ₈ '	(charted)	11'	11' (2 places) "	10'
	Lat. 38° 10.40' Long. 76° 19.90'	(charted)	11'		9'

The 9 foot spot in B above was searched for but not found. This may have been the remains of old wreck which has since disappeared, however it is recommended that the 9' sounding be kept. (The 9, which was supported by 10 & 11-ft. depths on the prior survey has been carried forward).

The soundings listed on present survey may be changed by actual tide reducers.

In Lat. $38^{\circ} 08.85'$, Long. $76^{\circ} 18.1'$ and Lat. $38^{\circ} 08.7'$ and Long. $76^{\circ} 18.1'$ there are small areas with depths of 20¹⁹ feet that were not found on the previous survey although there were indications of shoaler water. (least depth of 19 feet obtained)

M. Comparison with Chart 1224 Print date 6-23-45.

The present survey is in close agreement with the chart with the exception of the two areas mentioned in L above. & the 12-ft. sdg. referred to in par. 5a, Review

N. The only new dangers found are the 20 foot areas mentioned in L above. These are not far off the regular steamer route.

O. This is an inshore survey and used by small boats locally. There are no towns or channels and no objects that are prominent. Anchorage can be made anywhere along this shore, but no shelter.

P. Fixed aids to navigation are:

Point-No-Point Light House
Light on target off Point-No-Point (QK FL G) (par. 6 b, Review)

Q. There are no floating aids to navigation on this sheet.

Respectfully submitted,

Ronald R. Moore

TIDAL NOTE

The automatic tide gage maintained by the Maryland Biological Survey on their dock at Solomon's Island, Maryland, was used for the reduction of soundings without any time correction. ✓

Mean low water corresponds to a reading of 3.0 feet on the tide staff. ✓

STATISTICS

VOL. NO.	Date	NO. POS.	STAT. MILES	BAR CHECK	POLE SNDGS.	DAY LETTER	BOAT
1	4/24/46	107	19.2	1	-	a	#100
1	5/1/46	178	29.6	2	-	b	"
2	5/2/46	101	16.6	3	-	c	"
2&3	5/9/46	231	47.7	3	-	d	"
3	5/10/46	106	21.5	2	-	e	"
3	5/21/46	70	11.7	1	-	f	"
3&4	5/23/46	243	41.4	2	-	g	"
4	5/27/46	57	3.7	2	29	h	"
4	5/28/46	43	3.4	1	21	j	"
		1136	194.8	50			

AREA 6.5 sq. miles

LIST OF SIGNALS H-7093(1946)

TRIANGULATION

POINT NO POINT L.H., 1905-1942

TOPOGRAPHIC SIGNALS from T-8137

Nora
Shore
Time

HYDROGRAPHIC SIGNALS

Ad	Off
Bow	Par
Egg	Pat
Get	Pig (from H-7094)
Jim (from H-7094)	Stub
Joe	Tel
Ham (from H-7094)	Tin
	Why (from H-7094)


ADDENDUM

To accompany

HYDROGRAPHIC SURVEY H-7093 (Field No. Ce-1346)

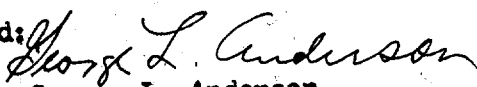
This sheet was processed in the Hydrographic Section of the S.E. District, Norfolk, Virginia. ✓

Respectfully submitted,


Isadore M. Zeskind
Cartographic Engineer

Norfolk, Virginia
December 2, 1946

Approved and forwarded:


George L. Anderson
Supervisor S.E. District

From

DEC 27 1946

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography:~~

Division of Charts: H. W. MURRAY

Plane of reference approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 7093

Locality Point No Point, Chesapeake Bay

Chief of Party: R. R. Moore in 1946
Plane of reference is mean low water, reading
3.0 ft. on tide staff at Solomons Island
10.8 ft. below B. M. 4

Height of mean high water above plane of reference is 1.2 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section
Chief, ~~Division of Tides and Currents.~~

GEOGRAPHIC NAMES
 Survey No. **H7093**

Name on Survey	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>Maryland</u>								U.S.G.B	1
<u>Chesapeake Bay</u>								"	2
<u>Point No Point</u>									3
<u>St. Jerome Point</u>									4
									5
									6
									7
									8
									9
									10
									11
<u>Solomons Island</u>								U.S.G.B	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 5/20/47

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. .. **A7093**

Records accompanying survey:

Boat sheets .1..; sounding vols. 4....; wire drag vols.;
 bomb vols.; graphic recorder rolls .10..
 special reports, etc.1 sheet of Bar Checks.....

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

Number of positions on sheet	..136..
Number of positions checked	..120..
Number of positions revised (40 positions revised by replotting Sig. Ad)	..44..
Number of soundings revised (refers to depth only)3.
Number of soundings erroneously spaced0.
Number of signals erroneously plotted or transferred2.
Topographic details	Time ..1 hr..
Junctions	Time ..7 hrs..
Verification of soundings from graphic record	Time ..6 hrs..

Verification by R. K. DE LAWDER.....Total time .86 hrs. Date 3-31-47.

Reviewed by J. A. Dismore..... Time .27 hrs. Date 5/20/47

16 April, 1947

To: Lieut. Comdr. Ronald R. Moore
U.S.C.&G.S. Ship COWIE
418 Post Office Building
Norfolk 10, Virginia

Subject: Undescribed hydrographic signals

Enclosed are photostat copies of portions of hydrographic surveys No. H-7092 and H-7093 covering the vicinity of Cedar Point to Point No Point, Maryland.

Indicated on the photostats are five undescribed hydrographic signals established about 300 to 1200 meters offshore.

A description of these signals is desired.

Acting Director

*Letter of reply enclosed
with D.R. H. 7092*

JAS

Bow (temp. signal)

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7093

FIELD NO. CO-1346

Maryland, Chesapeake Bay, Point No Point
Surveyed in April - May 1946 Scale 1:10,000
Project No. CS-287

Soundings:

808 Fathometer
Fole

Control:

Three-point fixes on shore
signals

Chief of Party - R. R. Moore
Surveyed by - J. C. Bull
Protracted by - B. M. Jones
Soundings plotted by - B. M. Jones
Verified and inked by - R. K. DeLawder
Reviewed by - T. A. Dinsmore, May 20, 1947
Inspected by - H. W. Murray

1. Shoreline and Signals

The source of the shoreline and signals is given in the Descriptive Report.

The fixes for supplementary hydrographic signals are recorded in the sounding volumes of the present survey and adjoining contemporary surveys.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

Except for delineation of the zero curve, the depth curves are complete. It was impracticable for the hydrographer to delineate the low-water line because of its proximity to the shoreline and the low range of tide (1 foot).

The bottom is generally smooth and undulating but irregular shoal areas arise at all depth levels throughout the survey.

4. Junctions with Contemporary Surveys

An adequate junction is effected with H-7092 (1946) on the north.

The junction with H-7094 (1946) on the east will be considered when that survey has been verified.

No contemporary survey is registered on the south, however, charted information here is in good agreement with the present survey.

5. Comparison with Prior Surveys

a. H-209 (1848) and H-211 (1849) 1:20,000

Taken together, these surveys cover the area of the present survey. Fair agreement between the prior and present surveys is noted in depths greater than 24 feet. A general disagreement is otherwise noted between the prior and present surveys which indicates that substantial bottom changes have occurred at shoaler depths. Recession of the present shoreline by as much as 200 meters is accompanied by greater inshore depths. Prior depths of 2 to 12 feet are in some instances superseded by present 6-to 18-ft. depths. Innumerable shoals appearing on the present survey are not disclosed by the sparse development of these early surveys.

An 8-ft. sounding (uncharted) has been carried forward from H-209 (1848) at lat. $38^{\circ} 10.97'$, long. $76^{\circ} 20.49'$. Falling in present 16-to 17-ft. depths, the 8 has not been previously charted since it did not appear on the smooth sheet of H-209. It was found in the sounding records of H-209 while verifying the charted uninvestigated 12-ft. sounding which originates with the same survey and falls a few meters northeastward. A 13-ft. sounding falls between the 8 and 12 which are on the same sounding line. The development on the present survey is considered inadequate to disprove the 8-ft. sounding.

b. H-2429 (1899) 1:40,000

The six soundings from this reconnaissance survey, which fall within the area of the present survey, are in good agreement with present depths.

c. H-2993 (1908-09) 1:20,000

This survey covers the entire area of the present survey. Prior depths are generally in very good agreement with those on the present survey. In 20- to 30-ft. depths, however, present soundings are 1 to 2 ft. shoaler than prior depths. Although no major disagreements are noted between the two surveys, two critical soundings (charted) listed below, have been carried forward. The 9, although investigated on the present survey, and the uninvestigated 11 are not considered disproved by present development.

9 ft. at lat. $38^{\circ} 09.81'$, long. $76^{\circ} 19.38'$ (in 13-ft. depths).

11 ft. at lat. $38^{\circ} 10.98'$, long. $76^{\circ} 20.78'$ (in 13-ft. depths).

Except for three soundings and several bottom characteristics carried forward, the foregoing prior surveys are superseded in the area common to the present survey.

6. Comparison with Chart 557 (Latest print of Aug. 10, 1946)a. Hydrography

Charted hydrography originates with the previously discussed prior surveys, supplemented by advance chartings from the present survey prior to verification and review. Soundings from the present survey have been applied by hand correction.

b. Aids to Navigation

There are no floating aids within the limits of the present survey.

Other charted aids are in agreement and adequately mark the features intended except that the bombing target light located at lat. $38^{\circ} 08.37'$, long. $76^{\circ} 19.13'$ on the present survey has been subsequently removed from the chart (H. O. Notice to Mariners No. 5, 1947).

7. Condition of the Survey

a. The sounding records are complete. The Descriptive Report is particularly comprehensive.

b. Except for a 20-meter error in plotting of hydrographic signal AD in lat. $38^{\circ} 08.1'$, long. $76^{\circ} 19.4'$, the smooth plotting was neat and carefully executed. Replotting of signal AD necessitated revising forty positions in the vicinity of lat. $38^{\circ} 08.0'$, long. $76^{\circ} 19.0'$.

c. Detached investigation was not made of the charted 12-ft. sounding at lat. $38^{\circ} 10.97'$, long. $76^{\circ} 20.48'$. Verification of the charted 12 from prior survey records revealed the uncharted 8-ft. sounding nearby which is discussed in par. 5a.

8. Compliance with Project Instructions

Except for investigation of the charted shoal sounding referred to in par. 7c, above, the survey adequately complies with the Project Instructions.

9. Additional Field Work

This is an excellent basic survey. It is, however, recommended that the 8-ft. sounding at lat. $38^{\circ} 10.97'$, long. $76^{\circ} 20.49'$, discussed in par. 5a of this review and carried forward from H-209 (1848), be investigated at some future date.

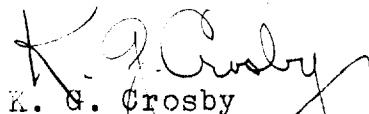
Examined and approved:


I. E. Rittenburg

Chief, Nautical Chart Branch


C. M. Durgin

Chief, Division of Charts


K. G. Crosby

Chief, Section of Hydrography


C. K. Green

Chief, Division of Coastal Surveys

