

6684

6684

Form 504  
Rev. April 1935

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic }  
Hydrographic } Sheet No. ....

*Sheet 1001*  
U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES  
DEC 9 1941

Acc. No. ....

State MARYLAND

LOCALITY  
*Chesapeake Bay*  
~~SOLONON ISLAND~~

MOUTH OF THE PATUXENT RIVER

1941

CHIEF OF PARTY  
H. Arnold Karo

6684

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. 1001

REGISTER NO. **H6684**

State MARYLAND

General locality CHESAPEAKE BAY  
~~SOLOMON ISLAND~~

Locality MOUTH OF THE PATUXENT RIVER

Scale 1-10,000 Date of survey June, 19<sup>41</sup>

Vessel Launch ELSIE III

Chief of Party H. Arnold Karo

Surveyed by H.A.K.

Protracted by ~~XXXXXXXXXX~~ H.A.K.

Soundings penciled by L.L. Lawrence

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by C.E. Dennis 1/8/42

Verified by

Instructions dated June 23, 19<sup>41</sup>

Remarks:

DESCRIPTIVE REPORT

to

ACCOMPANY HYDROGRAPHIC SHEET NO. 1001 (FIELD)

Scale 1: 10,000

MOUTH OF THE PATUXENT RIVER,

MARYLAND

Launch ELSIE III

H. Arnold Karo, Chief of Party.

INSTRUCTIONS:

This survey was executed under authority of the Director's letter 22-RCC 1993 NO 4, dated June 23, 1941. ✓

LOCALITY:

This survey is confined to an area about one mile square on the bar off the mouth of the Patuxent River and to an area approximately  $1\frac{1}{2}$  miles by  $\frac{1}{2}$  mile inside the mouth of the river. These areas were surveyed at the request of the Navy Department, Chief of Staff, Fifth Naval District, S81-6/ND5, EWMacC:vrr, June 24, 1941, in order to determine the least water on the bar in the first instance, and, to determine the depth in the specified area inside the river mouth in the second instance. ✓

CONTROL & SIGNALS:

The control consisted of previously established triangulation points in this area supplemented by graphic triangulation on aluminum mounted topographic sheets. The signals consisted of natural objects and a few hydrographic signals erected by the party. ✓

SURVEY METHODS:

The usual visual control method of three point fixes on shore objects was used throughout this survey. All soundings were taken with the hand lead from the launch ELSIE III. The soundings were taken by the leadsman as rapidly as the depth would permit, the launch being operated as slowly as possible. The current at times was quite strong. The lead lines were checked before and after work each day. ✓

DISCREPANCIES:

No serious discrepancies were noted, the largest being <sup>1 1/2</sup> 2 feet. This discrepancy occurred on the cross line between positions 178-179 a and 70 - 71 a.

38° 19.4'  
76° 22.6'

This discrepancy is due to wind chop and current. ✓

COMPARISON WITH PREVIOUS SURVEYS:

In general the soundings obtained during this survey agree very well with the results of previous surveys in this area. ✓

DANGERS:

No new obstructions or dangers were obtained during this survey. ✓

CHANNELS:

No channels were developed during this survey. This was a special survey and the results verified the present charted channels in such areas as were surveyed. ✓

LANDMARKS:

The additional landmarks located were submitted on form No. 567, a copy of which is attached. ✓


GEOGRAPHIC NAMES:

The geographic names appearing on charts Nos. 1224 and 539 are correct for the area of this survey. ✓

TIDES:

The tidal data for the reduction of the records was obtained from the standard tide gage at Solomon's Island, Md. ✓

Respectfully submitted,

  
H. Arnold Karo,  
Officer in Charge,  
Norfolk Processing Office.

Norfolk, Virginia.  
December 1st, 1941.

H6684

STATISTICS

SHEET NO. H

ELSIE III

<u>Date</u>	<u>Day</u>	<u>Miles</u>	<u>Soundings</u>	<u>Positions</u>
June 29	a	22.3	669	181
30	b	15.9	383	116
TOTALS		38.2	1052	297

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6684**

Records accompanying survey:

Boat sheets <sup>One</sup>....; sounding vols. (1)..; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls .....;  
 special reports, etc. ....  
 .....

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

Number of positions on sheet	297..	
Number of positions checked	0..	
Number of positions revised	0..	
Number of soundings recorded	1052..	
Number of soundings revised (refers to depth only)	1..	
Number of soundings erroneously spaced	0..	
Number of signals erroneously plotted or transferred	0..	
Topographic details	Time 0..	
Junctions	Time 0..	
Verification of soundings from graphic record	Time 0..	
Verification by <i>C. E. Dennis</i> .....	Total time 18 hr	Date 1/8/42..
Review by <i>J. A. Mc Cormick</i> .....	Time 9 hr.	Date 1/14/42..

Remarks

Decisions

	Remarks	Decisions
1		D.S.G.B. 383764
2		
3	For title.	D.S.G.B.
4		
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GEOGRAPHIC NAMES  
 Survey No. **H6684**

Name on Survey	Source										No.
	A	B	C	D	E	F	G	H	K		
<u>Solomons Island</u>											1
<u>Patuxent River</u>											2
<u>Chesapeake Bay</u>											3
<u>Drum Pt</u>											4
											5
											6
											7
											8
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											27

L. Heck 1/28/48



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TO BE CHARTED }  
~~TO BE DELETED~~ } STRIKE OUT ONE

LANDMARKS FOR CHARTS  
Norfolk Processing Office,  
Norfolk, Va.

Dec. 1, 1941

193

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be charted on ~~charts~~ the charts indicated. The positions given have been checked after listing.

H. Arnold Kern

Chief of Party

GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION		DATUM	METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE ° ' "	LONGITUDE ° ' "							
	<i>* OIL TANK, largest of 3 (OIL)</i>	38 19	76 25	N.A. 1927	Topo	June, 1941	532	532	122	
	<i>* SILEO (SIL)</i>	38 17	76 25	"	"	"	532	532	122	

*Displaced to H 760 (1941)  
Chart filter*

*\* Superseded by triangulation  
C.A.M.*

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.



# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
 DESCRIPTIVE REPORT  
~~PHOTOSTAT OF~~

No. H **H6684**  
~~No. H~~

{ received Dec. 5, 1941  
 registered Dec 11, 1941  
 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	R.W. Knox
----	-----------

*RWK*

220  
712

TIDE NOTE FOR HYDROGRAPHIC SHEET

December 12, 1941

~~Division of Hydrography and Topography:~~

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

Plane of reference approved in  
1 volume of sounding records for

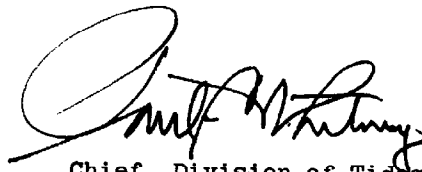
HYDROGRAPHIC SHEET 6684

Locality Mouth of Patuxent River, Maryland.

Chief of Party: H. A. Karo in 1941  
Plane of reference is mean low water reading  
3.0 ft. on tide staff at Solomons Island  
10.9 ft. below B. M. <sup>4</sup>

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

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

*204K*  
*80*  
*22*  
*2222*

H6684

POST-OFFICE ADDRESS: 600 Flatiron Building  
Norfolk, Virginia.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

JAN 27 AM 10:18

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
Norfolk Processing Office

January 26, 1942.

To: The Director  
U. S. Coast and Geodetic Survey

From: Officer in Charge  
Norfolk Processing Office

Subject: Surveys, Patuxent River

In accordance with your letter relating to a 36-ft. sounding shown on a survey accomplished by the personnel of the U.S.S. DAHLGREN in the vicinity of Drum Point, Patuxent River, Virginia, you are respectfully advised as follows:

2200

The proper Fifth Naval District authority has been consulted, namely; the Degaussing Section, District Material Office, who advises that the work in question was probably accomplished under orders from the Navy Yard at Washington. This latter office also advises that the original records of this survey can probably be obtained through Dr. W. N. Neilson, Naval Gun Factory (Naval Ordnance Laboratory)\* Navy Yard, Washington, D. C. There are no copies of the survey available, insofar as can be ascertained, at the Fifth Naval District.

FF 5700  
679

Lieutenant Karo, under whose direction the survey of this bureau was accomplished, is now at the Washington Office and he is being requested to furnish the information regarding the naming and describing of the signals on the topographic sheet.

The photostats are being forwarded to Lieutenant Karo together with copies of all correspondence.

*H.C. Warwick*  
H.C. Warwick  
Officer in Charge  
Norfolk Processing Office

c.c. Lieutenant Karo

*Lieut Karo recommended that 36 be removed from chart etc.*

Park

82-AB

January 22, 1942.

To: Lieutenant H. Arnold Karo,  
U. S. Coast and Geodetic Survey,  
800 Flatiron Building,  
Norfolk, Virginia.

From: The Director,  
U. S. Coast and Geodetic Survey.

Subject: Surveys, Patuxent River.

We are enclosing photostats of three surveys in the vicinity of Drum Point, Patuxent River, Virginia; a topographic and hydrographic survey accomplished under your direction and a hydrographic survey by the personnel of the U.S.S. DAHLGREN. The latter survey shows a 36-ft. sounding in Lat. 38°18.0', Long. 76°25.9' which is apparently in error 20 feet, although it cannot be definitely disproved as it falls just outside the limits of your survey. The exact location of the 36-ft. sounding is uncertain because of discrepancies in the positions of the signals used on the Navy survey.

Please contact the proper Fifth Naval District authority and determine whether or not the 36-ft. sounding was transferred to the tracing in error.

It is noted that several signals on the topographic sheet, evidently not used in hydrography, were not named nor described. As it may be possible that a better comparison of this and future hydrographic surveys may be made with the added control, please describe these signals.

(Signed) I. H. HAWLEY  
Acting Director.

Enclosures

DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTER NO. 6684

Field No. 1001

Maryland; Chesapeake Bay; Mouth of Patuxent River  
Surveyed in June 1941, Scale 1:10,000  
Instructions dated June 23, 1941  
(Director's Letter to H. A. Karo)

Soundings:

Control:

Hand Lead

Sextant fixes on shore signals

Chief of Party - H. A. Karo  
Surveyed by - H. A. Karo  
Protracted by - H. A. Karo  
Soundings plotted by - L. L. Lawrence  
Verified and inked by - C. E. Dennis  
Reviewed by - J. A. McCormick, January 14, 1942  
Inspected by - H. R. Edmonston

1. Shoreline and Signals

Topographic signals are from graphic control survey T-6854 (1941). Shoreline is omitted.

2. Sounding Line Crossings

Satisfactory.

3. Depth Curves

Satisfactory.

4. Adjoining Surveys

The Coast and Geodetic Survey has made no surveys in this area in recent years.

5. Previous Surveys

H-209 (1848), 1:20,000; H-210 (1848), 1:20,000;  
H-2931 (1907-08), 1:20,000

Surveys of 1848 are only in fair agreement with present depths. H-2931 shows depths averaging about 5 feet deeper than present depths southeast of Solomon's Island but agrees fairly well with present depths on the bar. The bottom is mostly mud and such differences are to be expected. The old surveys are superseded in the common area.

6. Comparison with Chart 539 (New Print of June 19, 1941)

Depths charted on the bar are from surveys discussed in the preceding paragraph. Surveys from outside sources have been applied in the basin southeast of Solomon's Island. Latest of these is a survey executed by the U.S.S. DAHLGREN on April 10, 1941 (filed as B.P. 35251). Navy soundings are in fair agreement with the present soundings except in Lat. 38°18.6', Long. 76°25.9' where a 36-ft. Navy sounding appears to be about 20 feet too shoal when compared with present and past surveys of the area. The 36 falls too close to the limits of the present survey to be absolutely disproved by the present survey alone but when considered in conjunction with H-2931 its existence is highly improbable. Correspondence (attached to the Descriptive Report) with the Norfolk Processing Office discloses that the Fifth Naval District had no knowledge of the DAHLGREN'S survey. The correspondence was referred to Lieutenant H. A. Karo who recommends removal of the 36 from the chart.

7. Compliance with Project Instructions

Excellent in so far as can be determined from correspondence in this office. The survey was made at the request of the Chief of Staff of the Fifth Naval District, Norfolk, Virginia. Controlling depth over the bar was found to be 29 feet and the basin southeast of Solomon's Island was developed as requested.

8. Additional Field Work Recommended

None.

9. Superseded Surveys


H- 209 in part  
 H- 210 " "  
 H-2931 " "

Examined and Approved:

  
 Chief, Surveys Section

  
 Chief, Division of Charts

  
 Chief, Section of Hydrography

  
 Chief, Division of Coastal Surveys



# NAUTICAL CHARTS BRANCH

SURVEY NO. H. 6684

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
12/17/45	3331	<i>H.S. MacSwire</i>	<del>Before</del> After Verification and Review
2/21/46	553	<i>G.C. McGlasson</i>	" " " " <i>Thru Dig. Ch. 3331</i>
4-20-50	561	<i>J.M. Albert</i>	<del>Before</del> After Verification and Review <i>Examined for chart 561. Add 1 atg.</i>
11/9/51	553	<i>H.J. Stegman</i>	<del>Before</del> After Verification and Review <i>Applied to reconstruction thru chs 3331 and 561</i>
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

Alpina to PA 539 - April - 1942 J.H.S.

" " " 1224 " " J.H.S.

" " " 77 Dec. 19, 1942 G.H.S.