

7090

Diag'd. on Diag. Ch. No. 1222-2

7090

Form 504	
U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	Hydrographic
Field No. Fa 20146	Office No. H-7090
LOCALITY	
State	VIRGINIA
General locality	Chesapeake Bay
Locality	Off Lynnhaven Roads
194 6	
CHIEF OF PARTY	
Ralph L. Pfau & John Bowie, Jr.	
LIBRARY & ARCHIVES	
DATE	July 10, 1946

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

H7090

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-7088~~ and H 7090

Field No. ~~Fa 10345~~ and Fa 20145

State VIRGINIA

General locality Chesapeake Bay

Locality ~~LITTLE CREEK, VA.~~ OFF Lynnhaven Roads

Scale ~~H-7088 1:10,000~~
H-7090 1:20,000 Date of survey January - June, 1946

Instructions dated Verbal Instructions given by the Supervisor of the S.E. Dist.

Vessel FARIS & SOSBEE

Chief of party Lt. Comdr. R. L. Pfau and Lt. Comdr. John Bowie, Jr. ✓

Surveyed by Ships' Officers ✓

Soundings taken by fathometer, graphic recorder, ~~soundings~~

Protracted by A. G. Atwill, L.L. Lawrence and M.E. Byrd ✓

Soundings penciled by H.W. Feazel, L.L. Lawrence and M.E. Byrd ✓

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

REMARKS: This sheet was processed in the Hydrographic Section of the South-eastern District, Norfolk, Va.

()
DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SURVEY SHEETS NOS. H-7089 & H-7090

(Field Nos. Fa 10345 & Fa 20146)

Ship FARIS Lt. Comdr. Ralph L. Pfau, Commanding
Ship SOSBEE Lt. Comdr. John Bowie Jr, Commanding

PROJECT NO.: None Scale H-7089 1:10,000
H-7090 1:20,000

Notes: This descriptive report is compiled from data furnished by Ships FARIS and SOSBEE and supplemented by information obtained while processing these surveys in the Hydrographic Section of the Southeastern District.

PROJECT:

No project number was assigned and no detailed instructions issued. Work was done under verbal instructions given by the Supervisor, Southeastern District.

SURVEY LIMITS & DATES:

The limits originally set for the work are those shown on print of 1941 survey executed by the U. S. Engineers Corps. The limits were later expanded to include the area between the outer limits of the work completed by the FARIS and the buoyed channel, but not to include the channel. The limits were further expanded to include an area in the vicinity of Lynnhaven Inlet, from a junction on the west with the work of the FARIS to a distance of approximately 8000 feet eastward of the inlet, and off shore to the 25 foot curve.

VESSELS & EQUIPMENT:

Hydrography was accomplished by the Ships FARIS and SOSBEE and the Launches 101 and 102. And 808 portable depth recorder was used on all vessels.

TIDE & CURRENT STATIONS:

A portable automatic tide gage was maintained on the east side and at the inshore end of Pier # 3 Little Creek Amphibious Base, Annex 2.

The plane of mean low water was determined as corresponding to a staff reading of 1.71 feet and this value used for taking tide reducers from the marigrams.

No current stations were occupied.

SMOOTH SHEET:

The smooth sheet projection was made by hand in the Hydrographic Section of the Southeastern District. The shoreline was ^{transferred} from bromides of topographic sheets Nos. ~~T-8300~~, T-8301 and T-8302. The enlargement was accomplished by means of a projector. The shoreline is left in pencil on the smooth sheet and is to be inked by the verification section in the Washington Office after verification.

CONTROL STATIONS:

A list of signals is attached to this report. Their origin is indicated on this list.

The hydrographic stations were located by a combination of theodolite and sextant cuts and plotted graphically on the smooth sheets.

SHORELINE & TOPOGRAPHY:

See remarks under heading "Smooth Sheet". No topography was executed by the field parties.

SOUNDINGS:

The soundings were obtained by means of the 808 portable automatic depth recorder. Corrections to the soundings were obtained by bar-checks.

CONTROL OF HYDROGRAPHY:

The three-point fix method of horizontal control employing sextant angles on shore objects was used. A list of signals is attached to this report.

ADEQUACY OF SURVEY:

The survey is complete and adequate for charting purposes and should supersede prior survey. No holidays or excessive differences exist between soundings obtained on this survey.

CROSSLINES:

Sufficient crosslines were run to check the regular system of soundings lines. The maximum discrepancies noted were 2 feet. In general, the crossings are in excellent agreement.

COMPARISON WITH PRIOR SURVEYS AND CHARTED SOUNDINGS:

See paragraph No. 5 in the addendum to this report by the Commanding Officer of the Ship SOSBEE.

DANGERS OR SHOALS:

See paragraphs Nos. 6 and 7 in the addendum to this report by the Commanding Officer of the Ship SOSBEE.

Numerous fish traps are located along the shoreline of the area covered by these surveys.

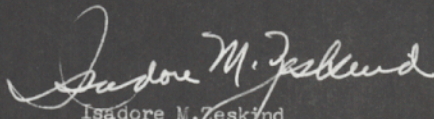
COAST PILOT INFORMATION:

No additional Coast Pilot Information was obtained from these surveys.

AIDS TO NAVIGATION:

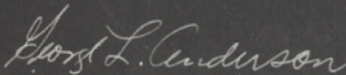
The following floating aid to navigation appears on H-7089,- Spar Buoy # 67 N, B & W, position No. 6a (green), latitude 36° 55.52' N and longitude 76° 04.59' W, dated located May 9, 1946.

Respectfully submitted,


Isadore M. Zeskind
Cartographic Engineer

Norfolk, Va.
July 8, 1946

Approved & Forwarded


George L. Anderson
Supervisor, S.E. District

TRIANGULATION STATIONS

- BLACK, 1929
- CHESAPEAKE BEACH TOWER A, (U.S.E.), 1939
- HYGELA INN, 1929
- JET (LITTLE CREEK, 1929)
- LITTLE CREEK C.G. TOWER, 1941
- MAN (JETTY), 1929
- RADIO TRANSMITTING TOWER, 1941

Hydro Stations

- Abe Gum Toy
- Acø How Twin
- Bat Ida Vet
- Big Joe Win
- Box Kid Yes
- Cat Lux
- Con Mid
- Cur Nip -H-7028
- Dot Out
- Ebb Pal
- Far Red
- Five Sub
- Flag Tan

Topo Stations

- Count -T-6820
- Stack -chart letter 453(1944)
only record Wash. Office

(51)
STATISTICS - H-7089

Vol.	Date	Day Letter	No. of Positions	Stat. Miles
1	Jan. 2, 1946	A(Red)	84	21.8
1	Jan. 3, 1946	B(Red)	52	10.7
2	Jan. 3, 1946	B(Red)	89	18.2
2	Jan. 4, 1946	C(Red)	55	12.9
3	Jan. 4, 1946	C(Red)	61	13.8
3	Jan. 10, 1946	D(Red)	126	27.6
3	Jan. 11, 1946	E(Red)	68	13.6
4	Jan. 11, 1946	E(Red)	16	3.4
4	Jan. 14, 1946	F(Red)	75	17.4
4	Jan. 22, 1946	G(Red)	40	8.5
4	Jan. 23, 1946	H(Red)	201	44.6
5	Jan. 23, 1946	H(Red)	14	2.9
5	Jan. 25, 1946	J(Red)	119	25.9
5	Jan. 29, 1946	K(Red)	32	7.2
5	Jan. 31, 1946	L(Red)	72	13.9
5	Feb. 1, 1946	M(Red)	67	11.8
6	Feb. 1, 1946	M(Red)	37	6.9
6	Feb. 4, 1946	N(Red)	119	19.6
6	Feb. 8, 1946	P(Red)	76	13.9
6	Feb. 11, 1946	Q(Red)	102	17.7
7	Feb. 12, 1946	R(Red)	196	38.9
7	Feb. 13, 1946	S(Red)	162	33.4
8	Feb. 18, 1946	T(Red)	4	0.9
8	Mar. 6, 1946	U(Red)	152	30.7
8	Mar. 7, 1946	V(Red)	15	3.7
8	Mar. 12, 1946	W(Red)	73	13.8
9	Mar. 12, 1946	W(Red)	107	20.7
9	Mar. 14, 1946	X(Red)	119	18.6
9	Mar. 15, 1946	Y(Red)	115	25.5
10	Mar. 15, 1946	Y(Red)	4	0.6
10	Mar. 26, 1946	Z(Red)	61	9.2
10	Mar. 27, 1946	AA(Red)	42	---
11	May 9, 1946	a(green)	148	20.7
11	May 10, 1946	b(green)	96	12.4
11	May 16, 1946	c(green)	51	8.0
12	May 16, 1946	c(green)	131	16.9
12	May 17, 1946	d(green)	119	19.7
12	May 21, 1946	e(green)	75	12.3
13	May 21, 1946	e(green)	47	8.5
13	May 23, 1946	f(green)	185	26.8
14	May 2, 1946	c(blue)	10	2.4
*1	May 2, 1946	C(blue)	35	7.0
15	June 25, 1946	g(green)	60	3.8
Total			3512	646.8

* This volume filed under Sheet H-7090 but contains work on this sheet.

(6)
26 June 1946

Addendum to Report of Comdg. Officer, Ship FARIS, on Special Hydrographic Survey
For the U.S. Navy in vicinity of Little Creek, Va.

1. Authority.

⁵⁰⁰ All work was performed in accordance with verbal instructions from the Supervisor,
Northeastern District.

2. Survey Limits.

The area surveyed was extended to that completed by the Ship FARIS as follows:

- a. To the South side of Thimble Shoal Channel on the North.
- b. To the Shoreline on the South from Little Creek Jetty to longitude $76^{\circ} 04'$.

3. Vessels and Equipment.

All work was done by 808 portable depth recorders mounted in the Ship SOSBEE,
and launches 101 & 102.

4. Tide Gage.

A portable tide gage located at Little Creek was maintained and results obtained
were used for reducing soundings.

5. Agreement with Previous Surveys.

The depths obtained are in good agreement with those of Chart 481, except in the
vicinity of Lynnhaven Inlet where the bank off the inlet seems to have shoaled a few
feet.

6. Wreck Investigation.

The wreck appearing on Chart 481 at Lat. $36^{\circ} 55.4'$, Long. $76^{\circ} 04.6'$ was investi-
gated by a system of closely spaced lines. No evidence of the wreck was ~~in~~ ⁸⁻⁷⁰⁸⁹ evident.

If the wreck is still in existence, it is not a menace to navigation as it is
close to fish traps which extend 300 meters further offshore.

7. Barge Symbol

There is no barge anchored at Lat. $36^{\circ} 56.1'$, Long. $76^{\circ} 09.3'$ (Chart 481). This
symbol should be removed from all charts. ⁸⁻⁷⁰⁷

8. Miscellaneous.

Naval vessels anchored in the Area made it difficult to run straight lines and to
obtain fixes at regular intervals. Numerous fish traps were also a hinderance.

A few Splits were run in the southern part of the area surveyed by the FARIS.

Survey operations were handicapped by the lack of a generator aboard the SOSBEE.

9. Personnel.

Officers attached to the SOSBEE are as follows:

John Bowie, Jr. Lieut. Comdr.
Don A. Jones Lieut.

10. Statistics.

Date	Day Letter	No. Pos.	Mi. Sdg. (Stat.)	Ship
4/30/46	A	53	15.2	SOSBEE
5/1/46	B	116	31.8	"
5/2/46	C	70	16.9	"
5/9/46	a	148	20.7	Launch 101
5/10/46	b	96	12.4	" "
5/16/46	c	182	27.7	" "
5/17/46	d	119	19.7	" "
5/21/46	e	122	20.8	" "
5/23/46	f	185	26.8	" "
6/25/46	g	60	3.8	" 102

Totals

No. positions = ~~998~~ 1051
 Mi. Sdg.(Stat.)=~~188.6~~ 195.8
 Area of Mi. = 6.0

See "Statistics" in combined report for H-7089 & H-7090. Aug.

Respectfully submitted

John Bowie, Jr.
 John Bowie, Jr.
 Lieut. Comdr., C&GS
 Comdg., Ship SOSBEE

LIST OF SIGNALS
Sheet H-7090

TRIANGULATION STATIONS

BLACK, 1929
CAPE HENRY L.H. 1887-1932
GRANITE B. (U.S.E.) 1939
HYGEIA INN, 1929
LITTLE CREEK, 1929, JET
LITTLE CREEK C.G. TOWER, 1941
MOORE, 1943
CHESAPEAKE BEACH TOWER A, (U.S.E.) 1939
RADIO TRANSMITTING TOWER, 1941
THIMBLE SHOAL L.H., 1919 - 1935

Topo Stations

Count — T-6820
Stack — *chart letter 453 (1944)*
only record wash. office

Hydro Stations

Far
Mid
Nip — H-7028
Sub
Twin

STATISTICS - H-7090

Day	Date	Vol.	Ship	No.of Positions	Stat.Miles
A (blue)	Apr.30,1946	1	SOSBEE	53	15.2
B (blue)	May 1, 1946	1	SOSBEE	116	31.8
C (blue)	May 2, 1946	1	SOSBEE	35	9.9
T (red)	Feb. 18,1946	8	FARIS	12	2.6
V (red)	Mar. 7,1946	8	FARIS	61	13.3
X (red)	Mar.14,1946	9	FARIS	7	1.4
				Total	74.2

Area about 5 sq. miles.

TIDE NOTE FOR HYDROGRAPHIC SHEET

August 15, 1946.

~~Division of Hydrography and Topography:~~

Division of Charts: H. W. Murray

Plane of reference approved in
16 volumes of sounding records for

HYDROGRAPHIC SHEET 7089 and 7090

Locality Lynnhaven Inlet, Chesapeake Bay, Virginia.

Chief of Party: R. L. Pfau and J. Bowie, Jr. in 1946.
Plane of reference is mean low water, reading
1.7 ft. on tide staff at Little Creek
7.9 ft. below B. M. 1

Height of mean high water above plane of reference is 2.5 feet.

Condition of records satisfactory except as noted below:

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

GEOGRAPHIC NAMES
 Survey No. **H7090**

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>Lynnhaven Roads</u>									1
<u>THIMBLE Shoal</u>									2
<u>Chamel</u>									3
<u>Little Creek</u>			(location of tide staff)						4
									5
<u>Chesapeake Bay</u>								USAB	6
									7
									8
									9
									10
									11
									12
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									26
									27

L. Heck 9/5/46

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. **H.7090**

Records accompanying survey:

Boat sheets .1...; sounding vols. 3...; wire drag vols.;
 bomb vols.; graphic recorder rolls .3.(see 7089)
 special reports, etc. .(For all other data refer to H-7089).....

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

Number of positions on sheet
Number of positions checked	... ⁰ ...
Number of positions revised	... ⁰ ...
Number of soundings revised (refers to depth only)	... ² ...
Number of soundings erroneously spaced	... ⁰ ...
Number of signals erroneously plotted or transferred	... ⁰ ...
Topographic details	Time ... ^{3 hrs} ...
Junctions	Time ... ⁰ ...
Verification of soundings from graphic record	Time ... ^{20 hrs} ...

Verification by... *F. N. Bell* Total time ^{23 hrs} Date ^{20 Aug 1946}

Reviewed by... *J. F. Jordan* Time ⁸ Date ^{Aug. 22, 1946}

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 7090

FIELD NO. Fa-20146

Virginia, Chesapeake Bay, off Lynnhaven Roads
Surveyed in January - June, 1946. Scale 1:20,000
Project No. --

Soundings:

808 Fathometer

Control:

Three-point fixes on shore
signals

Chief of Party - R. L. Pfau and J. Bowie Jr.
Surveyed by - Ship's Officers
Protracted by - A. G. Atwill, L. L. Lawrence and M. E. Byrd
Soundings plotted by - W. W. Feazel, L. L. Lawrence and
M. E. Byrd
Verified and inked by - F. H. Bell
Reviewed by - G. F. Jordan, August 22, 1946
Inspected by - R. H. Carstens

1. Shoreline and Control

Source of the shoreline and the control is given in
the descriptive report.

2. Sounding Line Crossings

Satisfactory.

3. Bottom Configuration

This survey covers only a small area of smooth bottom.

4. Adjoining Surveys

Junction on the south will be considered when H-7089
(1946) is verified. There are no other contemporary
surveys in this special project.

5. Comparison with Prior Surveys

a. H-446 (1854) 1:40,000

Sparse soundings on this prior survey agree fairly well with the present survey. However, present depths appear to be slightly shoaler.

b. H-2064 (1891) 1:20,000; H-2551 (1901) 1:60,000
H-3041 (1910) 1:20,000; H-3923 (1916-17) 1:30,000
H-4038 (1918) 1:40,000

Depths on these prior surveys in the eastern and western parts of the present survey agree or show 1 to 2-ft. differences. In the central area of the present survey, the bottom has shoaled as much as 4 to 12 feet.

The present survey, within the area covered, supersedes the foregoing surveys.

6. Comparison with Chart 481 (Latest print of April 6, 1946)

a. Hydrography

Charted hydrography within the area of the present survey is mostly from a survey by the U. S. Engineers, blueprint No. 35514 (1941). The hydrography is in sharp contrast with the present survey. The smooth-bottom depths on the present survey are from 5-ft. shoaler to 8-ft. deeper than charted depths. Charted soundings should be entirely superseded by soundings on the present survey.

The sunken wreck and marker buoy at lat. 36° 58.35', long. 76° 07.80', were applied by hand corrections to the chart from H.O. Notice to Mariners No. 16, dated April 20, 1946. No reference to this wreck is made on the present survey by the hydrographer nor is it indicated on the fathograms. Chart letter No. 515 dated 18 September 1946 which was just received from the Supervisor, Southeastern District, states that the wreck has been removed.

b. Aids to Navigation

No floating aids were located on the present survey.

c. Dredged Channels

Depths on the present survey are slightly deeper than the marked 39½-ft. depth in Thimble Shoal Channel.

7. Condition of the Survey

- a. The sounding records and descriptive report are satisfactory.
- b. The smooth plotting was satisfactory.
- c. No bottom characteristics were obtained.
- d. The wreck discussed in par. 6a, above should have been located.

8. Compliance with Instructions

This survey was executed in compliance with verbal instructions.

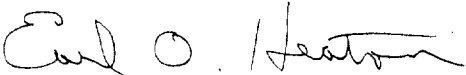
9. Additional Field Work

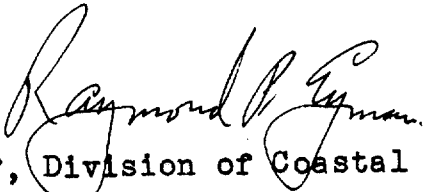
Except as noted in par. 6a and 7d, above, this limited survey is considered satisfactory for the purpose intended.

Examined and approved:


Chief, Nautical Chart Branch


Chief, Chart Division


Chief, Section of Hydrography


Chief, Division of Coastal Surveys

