FE85

Diagram No. 78-2

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

(HYDROGRAPHIC)

Type of Survey ....Field Examination.....

Field No. .....

Office No......FE-85.....

LOCALITY

State .....Virginia.....

General Locality ..Chesapeake Bay.....

Locality .....San Marcos Wreck.....

.....

1950

CHIEF OF PARTY

.....J. Bowie Jr.....

LIBRARY & ARCHIVES

DATE .....June 27, 1950.....

☆U.S. GOV. PRINTING OFFICE: 1976—669-441

NOTE: A new system for registering Field Examinations (FE's) was established in 1980. All FE's are now consecutively numbered as shown hereon. The date shown in the new format is the actual date of survey. This material was previuosly registered as:

FE No.3 1950

FE85

FE No.3 1950

Diag. Cht. No. 78-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. SAN MARCOS WRECK INVESTIGATION *Office No.* F.E. No.3(1950)

LOCALITY

State VIRGINIA

General locality CHESAPEAKE BAY

Locality SAN MARCOS WRECK

19~~4~~ 50

CHIEF OF PARTY

JOHN BOWIE JR.

LIBRARY & ARCHIVES

DATE JUN 27 1950

B-1870-1 (1)

7/1956

FE No.3 1950

Form 537
Ed. Dec. 1930

REG. NO.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

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. SAN MARCOS WRECK INVESTIGATION

REGISTER NO.

State VIRGINIA

General locality CHESAPEAKE BAY

Locality SAN MARCOS WRECK

Scale 1:5,000 Date of survey 12 June 1950, 19

Vessel COWIE

Chief of Party JOHN BOWIE JR.

Surveyed by "

Protracted by W.W. FEAZEL

Soundings penciled by " " "

Soundings in ~~XXXXX~~ feet

Plane of reference MLW

Subdivision of wire dragged areas by

Inked by Maxwell M. Rogers

Verified by Maxwell M. Rogers - Stephen Rose

Instructions dated 31 May 1950, 19

Remarks:

U. S. GOVERNMENT PRINTING OFFICE

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS: Post Office Box 351,
Crisfield, Md.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

Ship COWIE 16 June 1950

To: Supervisor, SE District,
U. S. Coast & Geodetic Survey,
Room 418 Post Office B'ldg., EOH
Norfolk 10, Va.

Subject: Report of Hydrographic Investigation of SAN MARCOS WRECK. 482

In accordance with instructions dated 31 May 1950, a hydrographic investigation of the SAN MARCOS WRECK was made on 12 June 1950. The following report is respectfully submitted:

1 - VESSELS:

U. S. Coast and Geodetic Survey Ship COWIE and U. S. Coast Guard buoy boat No. 52305 D.

2 - CONTROL:

To control the hydrography, the Coast Guard buoy boat No. 52, S. T. Olsen, B.M. 1, comdg., placed 3 river type buoys in an East - West line north of the San Marcos Wreck Buoy. Each buoy was anchored with two 300 lb. sinkers on 45 ft. of chain. Sextant fixes were taken to locate each buoy from objects on Chart 1223. Objects used were the water tank at Kilmarnock 467, Smith Pt. L.H. 481, Tangier Sound L.H. 482, with the Church Spire on Tangier Island for a check angle 808. Great Wicomico River L.H. and Windmill Pt. L.H. could not be seen from the bridge of the COWIE even though the visibility was excellent. Their lights did not show at night but the glow of the revolving lights could be identified.

3 - SOUNDINGS:

All soundings were made with 808 type depth recorder No. 118 S mounted in Launch 102. Time used was Eastern Standard Time. Use predicted tides for reductions of soundings.

4 - HYDROGRAPHY:

Standard methods as outlined in the Hydrographic Manuel were used in the survey. 50 meter spaced sounding lines were run in the vicinity of the wreck covering an area of approx. ½ mile. Cross lines were run close to the wreck on each side. The survey was made on a scale of 1 to 5,000.

5 - WRECK BUOY:

A sextant position of the wreck buoy was made using the 3 river buoys as control objects. The fix was taken at 1430 E.S.T. Wind N - 1. Ebb current estimated at 1/3 knot. (The strength of the current can be computed by comparing the time and distance covered by two of the North - South lines beginning with position 14 and ending with position 24).

6 - SAN MARCOS WRECK:

The SAN MARCOS WRECK is approx. 75 yds. ENE of the wreck buoy. (A smooth sheet will be needed to determine the exact distance). At the time of the investigation, a small part of the wreck was showing above water. The water was riled to the South of the wreck. Wreckage could be seen under the water around the exposed part. The wreckage was circled at a ~~radius~~ distance of approx. 100 ft. and again at a ~~radius~~ distance of 50 ft. No portion of the submerged wreck showed on the fathometer graph. The wreckage was then approached as close as possible from various directions and no definite shape of a vessel could be found. Further investigations failed to indicate any other wreckage.

7 - OTHER WRECKS:

No other wrecks were found. The LEXINGTON has either disintegrated and broken up; fused with the SAN MARCOS WRECKAGE; or drifted away. The Motor Vessel T. H. ANDERSON did not sink in the SAN MARCOS WRECK area. S. T. Olsen (U.S.C.G.) stated he towed the disabled vessel to the western side of the buoy. He further stated that the engine of the ANDERSON went to the bottom after the ship struck, and identified the SAN MARCOS wreck as where the ANDERSON hit.

8 - The three river type buoys have been left intact until the records of this survey can be reviewed by your office.

John Bowie Jr.

John Bowie, Jr.,
Comdr. USC&GS,
Comdg. COWIE.

C.C. - Director.

ADDENDUM
To Accompany

SAN MARCOS WRECK INVESTIGATION

Hydrographic control buoys ABE, BAR and COB were plotted on a 1:20,000 scale projection and then transferred to a 1:5,000 scale smooth sheet in order to show hydrographic developement and the position of the wreck.

Soundings shown on smooth sheet and in sounding volumes are reduced according to predicted tides.

Respectfully submitted,

Hugh L. Proffitt
Cartographer

Norfolk, Va.
23 June 1950

Approved & forwarded:

Earl O. Heaton
Supervisor, S.E. District

839

RHC

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~ 7 July 1950

Division of Charts: R. H. Carstens

Plane of reference approved in
1 volumes of sounding records for

FE NO. 3, 1950

~~HYDROGRAPHIC SHEET~~

Locality San Marcos Wreck, Chesapeake Bay, Maryland

Chief of Party: J. Bowie in 1950
Plane of reference is mean low water.
ft. on tide staff at
ft. below B. M.

NOTE: These tide reducers were verified by means of predictions at Hampton Roads (NOB) with the following allowances for time and range at the working grounds.

Time of Tide	Ratio of Range
+2 hr. 50 min.	0.6

Condition of records satisfactory except as noted below:

E.C. McKay

Chief, ~~Division~~ Section of Tides ~~and Currents.~~

Hydrographic Surveys (Chart Division)

F.E. No. 3 (1950)

HYDROGRAPHIC SURVEY NO. .....

Records accompanying survey:

Boat sheets ..1..; sounding vols. ..1...; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls ..1 envel.

special reports, etc. 1 sheet, scale 1:20,000; 1 overlay .....

.....

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

Number of positions on sheet		..131..
Number of positions checked		..15..
Number of positions revised		...1...
Number of soundings revised (refers to depth only)		..34..
Number of soundings erroneously spaced		...6..
Number of signals erroneously plotted or transferred		...0..
Topographic details	Time	...0..
Junctions	Time	...0..
Verification of soundings from graphic record	Time	..1....

Verification by ~~Stephen Rose~~ Maxwell M. Rogers* Total time* ~~7 hrs.~~ 5. Date July 10, 1950

Reviewed by ..... Time ..10... Date July 10, 1950

M-2232-1

REVIEW OF FIELD EXAMINATION NO. 3, 1950

This field examination was accomplished for the purpose of surveying the wrecks of the SAN MARCOS and LEXINGTON and the area adjacent to the wrecks, and to obtain the position of the buoy marking these wrecks. These features are shown on Chart 1223 in the vicinity of lat. 37° 43.15', long. 76° 04.7'.

The establishment of visual buoy control and the transfer of buoy positions to the 1:5,000 scale plotting sheet is adequately discussed in the Descriptive Report. This sheet, showing the buoy control and hydrography, has been cut to filing size and accompanies the Descriptive Report.

The extent of the wreckage is delineated by a dashed curve covering an area approximately 50 meters wide by 90 meters long. A part of the wreckage uncovering 1 ft. at M.L.W. lies 70 meters east-northeastward of the bell buoy. The outlined area is defined by three detached positions. The area was circled at distances of 50 feet and 100 feet without finding any further trace of wreckage on the fathogram. Furthermore, no traces of wreckage are shown on the fathograms in the area covered beyond the limits of the indicated wreckage.

A comparison with Chart 1223 (2/6/50 print) reveals that the present positions of the wreck and the bell buoy are 330 to 360 meters west of their charted positions. The position of the charted SAN MARCOS wreck symbol was computed from intersection angles taken in 1911 and checked at that time by a sextant angle at the wreck. The computations and plotting of both the present survey position and the 1911 position have been checked but no cause for the discrepancy in the two positions could be ascertained. See addendum The 1911 position, listed in the Descriptive Report for H-3313, is superseded by the position on the present survey for charting. The wreck of the motor vessel LEXINGTON charted southeast of the SAN MARCOS from Chart Letter No. 355 (1940) was not found to be separated from the outlined wreckage area. The position of the charted bell buoy corresponds to the position given in the Light List for 1949.

A comparison with H-3313 (1911), scale 1:40,000 reveals that prior depths are in general 1 to 3 feet shoaler than present depths. An evaluation of possible bottom changes, however, is deferred until new surveys providing more extensive coverage in this area are available. Future surveys should also furnish an independent determination of the position of the wreck.

G. F. Jordan

10 July 1950

Approved by:

R. H. Carstens
Chief, Hydrographic Section

Addendum to F. E. 3, 1950

The redetermination of the position of the San Marcos wreck buoy and the wreck reported in Chart Letter 724 (1956) and F. E. 7 (1956) reveals an error in the positions determined on F. E. 3 (1950). The positions of the survey buoys on F. E. 3 were replotted from the original records and are correct with respect to the recorded angles. However, it is considered probable that the recorded observations for buoy BAR are faulty and the buoy should plot about 60 meters easterly of its plotted position. In this position the sounding lines would plot north - south and east - west, and the position of the wreck would plot in agreement with the 1911 triangulation determination. Because of the probable error in the position of the survey buoy, F. E. 3, 1950 is considered to be erroneous in position and information from this field examination should be disregarded for charting. The position of San Marcos Wreck and the wreck buoy should be charted from F. E. 7, (1956).

R H Carstens

R. H. Carstens
10/19/56

NOTE: POSITION OF WRECK, BUOY AND SOUNDINGS ARE IN ERROR — DISREGARD FOR CHARTING.
SEE ~~CH. L. 724 (1956)~~ F.E. 7 (1956) FOR CORRECT POSITION OF WRECK AND BUOY

8/30/56

COB

BAR

ABE

Computed Pos.

37°43'30"

subm wreckage

wreck buoy

uncovers 1ft at MLW

37°43'00"

76°05'00"

76°04'30"

F.E. 3 (1950)

SAN MARCOS WRECK

CHESAPEAKE BAY, VA.

Scale 1 : 5,000

SOUNDINGS IN FEET
at Mean Low Water

No. 42 HYDROGRAPHIC SURVEY

Field No.	Reg No. F.E. 3 (1950)
Scale 1: 5,000	Plotted H.L.P Verified W.W.F.
Projection.	
Tri. Sta.	
Topo. Sta.	
Hydro. Sta.	W.W.F. H.L.P.
Datum.	N.A. 1927
Ref. Sta.	
Lat.	°..... ′..... m. Adj.
Long.	°..... ′..... m. Chkd.

NAUTICAL CHARTS BRANCH

SURVEY NO. F.E. #3 (1950)

Record of Application to Charts

12/

DATE	CHART	CARTOGRAPHER	REMARKS
9-26-50	1223	[signature]	~~Before~~ After Verification and Review
10/30/50	78	[signature]	~~Before~~ (After) Verification and Review
6/22/53	568	[signature] JR	~~Before~~ After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			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.