FE 100
WIRE DRAG

Diagram No. 1000-3

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT
(HYDROGRAPHIC)

Type of Survey Wire Drag

Field No. PBS-4650-WD

Office No. FE-100WD (1950)

LOCALITY

State New Jersey

General Locality Atlantic Ocean

Locality Chadwick, New Jersey to Ocean Grove, New Jersey

1950

CHIEF OF PARTY
G.R. Fish

LIBRARY & ARCHIVES

DATE October 25, 1951

☆ 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 previously registered as;

FE No.9 1951

FE 100
WIRE DRAG

FE100

Diag. Cht. No. 1000-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey WIRE DRAG

Field No. PBS-4650-WD *Office No.* FE-No.9(1951) WD.

LOCALITY

State NEW JERSEY

General locality ATLANTIC OCEAN

Locality CHADWICK, NEW JERSEY TO
OCEAN GROVE, NEW JERSEY

19450

CHIEF OF PARTY

G. R. Fish

LIBRARY & ARCHIVES

DATE OCT 25 1951

B-1870-1 (1)

FE No. 9
1951

DESCRIPTIVE REPORT
TO ACCOMPANY

WIRE DRAG FIELD SHEET NO. (PBS-4650, WD)

Ships PARKER, BOWEN & STIRNI Comdr. G. R. Fish
Chief of Party

AUTHORITY

This wire drag survey was executed in accordance with Supplemental Instructions for Project CS-326, dated 12 December 1950.

DATE OF SURVEY

The wire drag surveys on this sheet began on 19 August 1950 and ended on 21 September 1950.

SCOPE

The wire drag surveys on this sheet were made to locate and determine the least depth over two reported wrecks. If the wrecks were not found the areas within one mile of the reported positions were to be wire dragged to ascertain that there was no hazard to navigation in the area.

The surveys were made in accordance with the procedure outlined in the Wire Drag Manual and Supplemental Instructions for Project CS-326, dated 5 March 1948.

The wrecks surveyed on this field sheet were Items 57 and 73 of Supplemental Instructions dated 12 December 1949.

CONTROL

Shoran distances from two shore stations were used to control all positions on this sheet. Item 57 was controlled by distances from stations BARN and MAN, and Item 73 was controlled by distances from stations MAN and NOR.

Station MAN was located at the Manasquan Inlet Coast Guard Station and the antenna was mounted on a 100 foot mast, elevation about 110 feet above sea level. The mast was located by a three point triangulation fix, with a check on a fourth object. The computed position of MAN is latitude 40° 06' + 323.6m(-1527.1m), longitude 74° 02' + 409.6m(-1011.4m).

The shoran antenna at station BARN was mounted on the railing around the top of the abandoned lighthouse at Barnegat Inlet, elevation about 155 feet above sea level. This is triangulation station BARNEGAT LIGHT, 1872.

Station NOR was located on the north tower of the old Navesink Lighthouse, triangulation station NAVESINK LIGHT, NORTH, 1869, 1940. The antenna was mounted on a wooden bracket extending out to the east from the walkway railing at the top of the lighthouse, elevation about 240 feet above sea level.

SURVEY METHODS

Standard dual control methods were used. The positions of the end buoys were plotted from the ship position by using gyro azimuth bearings and the length of the towline in meters. The length of the towline, in meters, used for plotting purposes was the length of ground wire, in feet, between the towing bridle and the end buoy, plus 100 feet, and the sum multiplied by 0.3. Thus when 500 feet of ground wire was used the length of towline for plotting purposes was 180 meters.

Tests for lift were made by the Tender using a graduated lead filled pipe, 3/4" x 10 feet long, attached to a graduated airplane cord and suspended from a small float on which a buoy reel was mounted. The pipe was coated with a mixture of white lead and oil to accurately determine the point of contact with the ground wire. Tests for lift were taken as soon as the drag was towing smoothly and were repeated as thought necessary to take care of changing conditions.

Changing the depth of the upright setting while the drag is in the water is too cumbersome with a Tender the size of the STIRNI and it was found more expedient to take in the drag, reset the uprights aboard ship and put the drag out again. This was no handicap when clearing wrecks but in searching for wrecks or obstructions it meant that in areas of uneven bottom the uprights sometimes had to be set at depths which allowed the drag to ground in the shoaler areas. No difficulty was experienced in towing the grounded drag except where the shoal spot was in the middle of the drag and the water depth was considerably less than the upright setting.

FIELD OPERATIONS

Special reports were written for each wreck during the progress of the field work. These reports and the obstruction data sheet give all pertinent information about the individual wrecks. Copies of the special reports are attached to this report.

As mentioned in the special report for Item 57 local fishermen know of the existence of a wreck in this vicinity. The fishermen state that there are areas where the bottom is soft and a wreck would tend to sink in the mud if located in such an area. The scallop fishermen pull their scallop drags along the bottom and even a slight obstruction extending above the bottom would foul the drags.

See 9/50 FE 8, 1951, & Item 38

On Item 73 the low obstruction found was enough to foul and hold the ground wire. It might possibly be the remains of an old wreck but the ground wire was only fouled in one place and does not provide sufficient information on which to base a decision. No fathometer sounding was obtained on the obstruction.

Scallop fishermen had planted buoys in the area southwest of the plotted position of the wreck. The buoys are used to mark areas where the scallops are plentiful.

RECORDS

Drag settings were based on predicted tides for Sandy Hook, New Jersey, corrected for time and height on information obtained from the tide tables. Actual tides were furnished by the Washington office for the vicinity of each wreck and were used to process the records. In this report all references to effective depths, unless otherwise specified, are those indicated in the record books.

Bar checks were taken to obtain fathometer corrections for the several vessels. The corrections obtained have been applied to the soundings recorded in the records.

Tide reducers and lifts have been entered to the nearest 0.5 foot and checked. Drag strip diagrams showing effective depth in integral feet have been drawn and checked in the record books.

TIDES

Tide gages were not maintained by this party. Hourly heights were furnished by the Washington office from the tide gages at Atlantic City and Sandy Hook, New Jersey, and were used to process the records.

OBSTRUCTIONS, CLEARANCES, DISCREPANCIES, ETC.

Special Reports were written for each wreck during the progress of the field work and copies of these reports are attached to and become a part of this report.

An obstruction data sheet showing the minimum hang and maximum clearance and based on the final corrections is included in this report and the values therin take precedence over the values listed in the special reports.

RECOMMENDATIONS

It is recommended that no additional work be done on these two wrecks and that they be classified as being completed.

G R Fish

G. R. Fish
Commander, USC&GS
Comdg, Ships PARKER, BOWEN & STIRNI

PROJECT NO. CS-326 OBSTRUCTION DATA SHEET SHEET 4650 - WD

LOCATION	GENERAL DEPTH FEET	FATH. SDG. ON WRECK FEET	MINIMUM HANG FEET	POSITION NUMBER	MAXIMUM CLEARANCE FEET	POSITION NUMBER	CHARACTER OF OBSTRUCTION	REMARKS
Lat. 40 01' 30" Long. 73 31' 40"	132-138	—	—	—	117.0 -	1A-56A -	Wreck #591 - Item # 57 -	No obstruction found - (See also FE 8, 1951)
Lat. 40 08' ~~06~~ 04" (120m) Long. 73 21' ~~53~~ 54" (1281m)	123	—	122.0 -	24.8B -	118.0 -	1C-10C -	Wreck #746 - Item # 73 -	Obstruction found -

STATISTICS FOR SHEET NO._____(PBS - WD - 4650)
SHIPS PARKER, BOWEN, & STIRNI (Project CS-326)

DATE	DAY LETTER	STAT. MI. DRAGGED	NUMBER POSITIONS	NO. H.L.	SOUNDINGS FATHOMETER
19 Aug.	A	6.9	56	—	—
7 Sept.	B	3.4	26	1	2
21 Sept.	C	5.7	41	—	—
	TOTAL	16.0	123	1	2

SQUARE MILES OF AREA DRAGGED - 20.2 Square Statute Miles

General Delivery, Atlantic City, N. J.

22 August 1950

To: The Director
U. S. Coast & Geodetic Survey
Washington 25, D. C.

Subject: Special Report on Wreck No. 591, LILLIAN.

This wreck is Item 57 of Supplemental Instructions for Project CS-326, dated 12 December 1949. The instructions state that the freighter LILLIAN was sunk in 1939, in latitude 40° 01' 30", longitude 73° 31' 40", in depth of about 132 feet. The wreck of the LILLIAN, presumed to be the identical ship, is also listed under Item 38 of these instructions and in a different position.

See FE8(1951)

FE # 8 1951 Jmall. 2/15/52

An area extending out one and one-fourth miles in all directions from the reported position of the wreck was covered by wire drag set at an effective depth of 117 to 119 feet, except where the drag was towed along the bottom, and the entire area was clear of any obstruction.

Fishermen who drag for scallops report hanging on a wreck in this vicinity. On the day this wreck was wire dragged there were three vessels dragging for scallops in the area and the next day we had a report from one of the vessels that they had later fouled the wreck with their scallop drag about one mile southeast of where we were dragging. We completed the second drag strip at the north end of the westerly drag strip and the scallop vessels were in that vicinity while we were taking in the drag. The fishermen report the wreck in 23 fathoms of water. My assumption is that the wreck is low and is in the area covered by wire drag.

On 22 August 1950 the area was again visited and two and one half hours were spent making a sonar search along the south and east sides of the area previously wire dragged, with negative results. Most of this water is deeper than the 23 fathoms reported at the wreck.

It is recommended that no further search be made for this wreck and that the charted wreck symbol be changed to show a wreck no longer a menance to navigation.

Depths are based on predicted tides for the area.

C. R. Fish, Comdr., USC&GS
Comdg. Ships PARKER, BOWEN, STIRNI

2CC: Supervisor, Eastern District

c/o Sandy Hook Coast Guard Station
Box 116, Highlands, New Jersey

21 September 1950

To: The Director
U. S. Coast & Geodetic Survey
Washington 25, D. C.

Subject: Special Report on Wreck No. 746.

This wreck is Item No. 73 of Supplemental Instructions for Project CS-526, dated 12 December 1949. The instructions state that a ship was reported sunk in latitude 40°09'00", longitude 73°21'00", in depth of about 120 feet.

An area extending out over 1-1/4 miles in all directions from the reported position of the wreck was covered by wire drag at effective depths ranging from 118.0 to 122.5 feet. The area was free of obstructions except in latitude 40°08'04", longitude 73°21'54" The ground wire hung at an effective depth of 122.5 feet in a general depth of 125 feet. The obstruction did not show on the fathometer.

A wire drag set at an effective depth of 118.5 feet cleared the obstruction.

Depths are based on predicted tides for the area.

It is recommended that no further search be made for this wreck and that the wreck symbol charted in latitude 40°09'00", longitude 73°21'00" be deleted from the charts.

The area is frequented by vessels dredging on the bottom for scallops and botton obstructions may cause them to lose their drag gear. For this reason it is recommended that the obstruction located in latitude 40°08'04", longitude 73°21'54" be charted with a clear depth of 118 feet.

G. R. Fish
Commander, USC&GS
Comdg. Ships PARKER, BOWEN, STIRNI

2CC: Supervisor, East. Dist.

839

R+C

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography:~~ October 31, 1951

Division of Charts: R. H. Carstens

Plane of reference approved in
3 volumes of sounding ~~records for~~
and wire drag records for

~~HYDROGRAPHIC SHEET~~ FE No. 9, 1951

Locality: New Jersey Coast, Atlantic Ocean

Chief of Party: G. R. Fish in 1950
Plane of reference is mean low water, reading
2.0 ft. on tide staff at Sandy Hook
9.3 ft. below B. M. 2(1923)

Height of mean high water above plane of reference is 4.6 feet.

Condition of records satisfactory except as noted below:

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

U. S. GOVERNMENT PRINTING OFFICE 756675

GEOGRAPHIC NAMES

Survey No. FE-No.9 (1951) WD.

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
										1
										2
										3
										4
										5
										6
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										27
										M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. FE-No.9.(1951) WD.

Records accompanying survey:

Boat sheets .2...; sounding vols. ..1..; wire drag vols. ...2..;

bomb vols. .....; graphic recorder rolls .....;

special reports, etc. ..1 Descriptive Report.....

.....

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

Number of positions on sheet		123
Number of positions checked		15
Number of positions revised		1
Number of soundings revised (refers to depth only)		0
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 Lee Zeskind .....Total time ..8.... Date 7-29-52

Reviewed by Lee Zeskind ..... Time ..2..... Date 7-30-52

M-2232-1

REVIEW OF FIELD EXAMINATION NO. 9, 1951

Project CS-326

The Field Examination was made to locate and determine the least depths over wrecks which are designated items 57 and 73 of Supplemental Instructions dated 12 December 1949.

The results of the wire-drag examinations are tabulated on the obstruction sheet of the Descriptive Report and are plotted on the attached two sections of the boat sheet.

This work was applied to chart 1108 (print date 6-9-52) prior to verification; the charted information is correct.

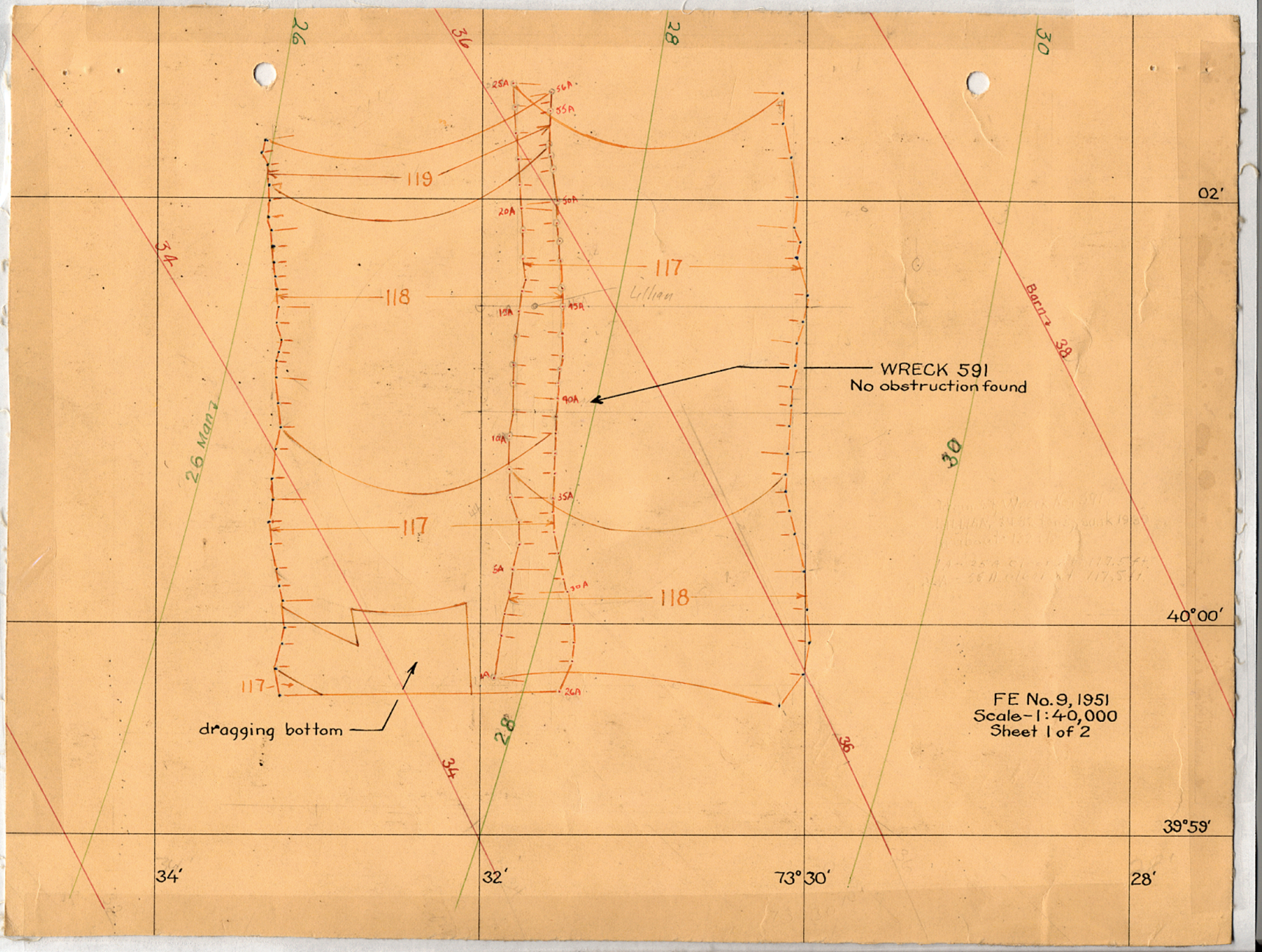
The Descriptive Report and attached correspondence adequately cover all other matters pertaining to this examination. No further discussion is considered necessary.

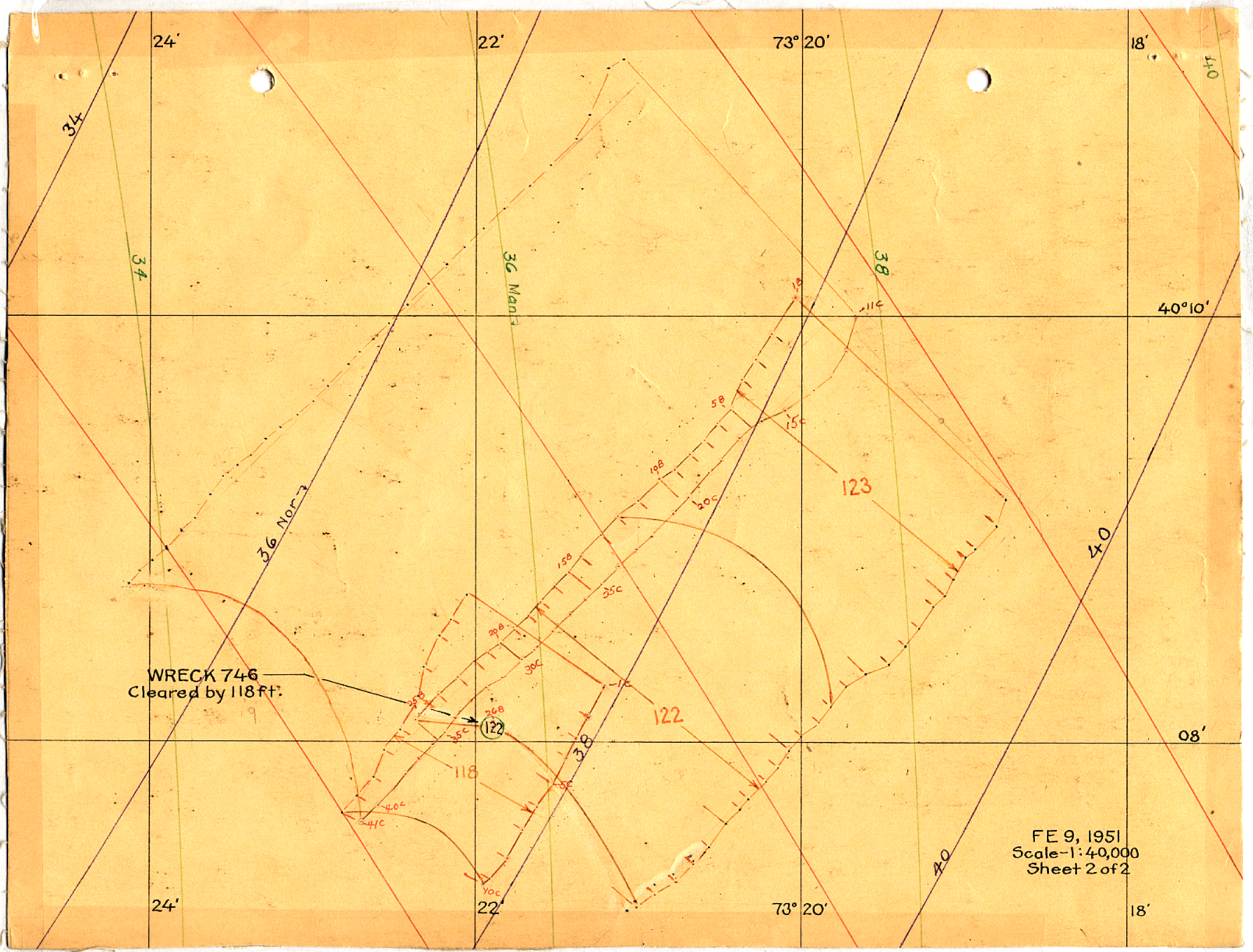
Reviewed by:

I. M. Zeskind
30 July 1952

Inspected by:

R. H. Carstens


26
36
28
30
02'
34
26 Mans
Barn
38
WRECK 591
No obstruction found
119
118
117
117
118
117
dragging bottom
Lillian
25A
56A
55A
50A
20A
15A
45A
90A
10A
35A
5A
30A
26A
40°00'
39°59'
34'
32'
73° 30'
28'
FE No. 9, 1951
Scale-1:40,000
Sheet 1 of 2


24'
22'
73° 20'
18'
40°10'
08'
34
36 Nor
36 Man
38
40
WRECK 746
Cleared by 118 ft.
122
118
123
FE 9, 1951
Scale-1:40,000
Sheet 2 of 2

NAUTICAL CHARTS BRANCH

SURVEY NO.FE- No. 9(1951) WD.

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
2/26/52	1108	McAlinden	Before ~~After~~ Verification and Review No correction
2/26/52	1000	McAlinden	Before ~~After~~ Verification and Review
6/5/53	70	McGann	~~Before~~ After Verification and Review No correction.
			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.