

# FE102

## WIRE DRAG

Diagram No. 78-2

NOAA FORM 76-35A

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

### DESCRIPTIVE REPORT

Type of Survey ... Wire Drag .....

Field No. .... PBS-4850-WD .....

Registry No. .... FE-102WD (1950) .....

#### LOCALITY

State ..... Maryland .....

General Locality ... Chesapeake Bay .....

Sublocality ..... Point No Point .....

1950

CHIEF OF PARTY  
G.R. Fish

#### LIBRARY & ARCHIVES

DATE ..... October 29, 1951 .....

☆U.S. GOV. PRINTING OFFICE: 1985-566-054

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.11, 1951WD

FE102  
WIRE DRAG

# FE No. 11 1951

WD

Diag. Cht. No. 78-2

Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

FE 102 WD (1950)

Type of Survey WIRE DRAG

Field No. PBS-4850-WD Office No. FE. No. 11  
(1951)

LOCALITY

State MARYLAND

General locality CHESAPEAKE BAY

Locality POINT NO POINT

194X50

CHIEF OF PARTY

G. R. Fish

LIBRARY & ARCHIVES

DATE OCT 29 1951

B-1870-1 (1)

FE No. 11  
1951  
WD

DESCRIPTIVE REPORT  
TO ACCOMPANY

WIRE DRAG SURVEY FIELD SHEET NO.

(PBS-4850, WD)

Ships PARKER, BOWEN & STIRNI

Comdr. G. R. Fish  
Chief of Party

AUTHORITY

This survey was executed in accordance with a letter from the Director dated 10 October 1950, subject - Supplemental Instructions, Project CS-326, Reported Obstruction - Chesapeake Bay.

DATE OF SURVEY

The shoran stations used on this survey were established on the afternoon of 30 October and the wire drag survey was made on 31 October 1950.

SCOPE

This wire drag survey was made to locate and determine the least depth over an obstruction reported to be about three miles, 137° from Point No Point Light, Notice to Mariners No. 41 dated 12 October 1946, (5633) Chesapeake Bay - Point No Point.

The survey was made in accordance with the procedure outlined in the Wire Drag Manual and Supplemental Instructions dated 5 March 1948.

CONTROL

Shoran distances from two shoran stations were used to locate the positions on this sheet. Station OUT was located on the railing around the lighthouse at Point Lookout, elevation about 40 feet. This is triangulation station POINT LOOKOUT LIGHTHOUSE, 1846, 1934. Station NOP was located on Point No Point and the shoran antenna was mounted on a twenty foot mast. The mast was 56.7 meters in azimuth 37° 10', true, from triangulation station POINT NO POINT 2, 1934. The computed position of NOP is latitude 38° 08' + 985.4m(-864.5m), longitude 76° 19' + 571.9m(-889.2m).

The shoran station at Point Lookout lighthouse had to be shut down for about ten minutes because of interference with radio reception. During this shut down period two positions were taken using the angle OUT - LIT. Signal LIT is Point No Point L.H., 1905, 1942.

## 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

The southerly hang, in latitude 38° 05' 20", longitude 76° 15' 07", was made with the drag towing south and was apparently near the shoaler depth of the inclined sections. When the tension was released from the ground wire it floated free and over the wreckage and drifted to the south with the ebb current. The position of this hang as plotted on the boat sheet is the best available.

The northerly hang in this vicinity was also made with the drag being towed to the south and is at an effective depth one-half ~~foot~~ <sup>foot</sup> greater than the southerly hang. The tender obtained soundings on both hangs.

## 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

Tides for this sheet were furnished by the Washington office.

#### OBSTRUCTIONS, CLEARANCES, DISCREPANCIES, ETC.

A Special Report was written for this wreck and a copy is attached to and becomes 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 therein take precedence over the values listed in the special report.

The BOWEN obtained a fathometer sounding over the wreckage in latitude 38° 05' 09", longitude 76° 14' 34". The top of the wreckage shows a reduced sounding of 38.0 feet but this is apparently grass for the wreckage was cleared at an effective depth of 39.0 feet. A heavier trace on the fathogram giving a reduced sounding of 39.0 feet was the sounding recorded in the record books.

#### RECOMMENDATIONS

It is recommended that work on this obstruction be classified as being completed.

G R Fish

G. R. Fish

Commander, USC&GS

Comdg. Ships PARKER, BOWEN & STIRNI

LOCATION	GENERAL DEPTH FEET	FATH. ON WRECK FEET	SDG. HANG FEET	MINIMUM HANG FEET	POSITION NUMBER	MAXIMUM CLEARANCE FEET	POSITION NUMBER	CHARACTER OF OBSTRUCTION	REMARKS
<i>plotted as one hang</i> Lat. 38 05' <sup>21</sup> 20" <sup>(638m)</sup> Long. 76 15' <sup>08</sup> 07" <sup>(194m)</sup>	44.0	38.5 <sup>0</sup>	* 38.5 <sup>0</sup> to	13.6A -	37.5 <sup>0</sup>	17A-27A -	Reported obstruction 3 miles SE of Pt.No.Pt.	Letter from Director	
		17K-A ✓	40.5 ✓						
Lat. 38 05' <sup>(726m)</sup> 23" 43.5 Long. 76 15' 06" <sup>(146m)</sup> T-pg 14A ✓	43.5	39.0 ✓	39.0 ✓	32.2A -	37.5 <sup>0</sup>	17A-27A -	" " " " " " ✓		
		**	40.5 <sup>0</sup>	43.6A -	39.0 -	35A-39A -	" " " " " " "		
Lat. 38 05' <sup>(274m)</sup> 09" 44.5 <sup>0</sup> Long. 76 14' 34" <sup>(820m)</sup>	44.5 <sup>0</sup>	**	40.5 <sup>0</sup>	43.6A -	39.0 -	35A-39A -	" " " " " " "		
		**	40.5 <sup>0</sup>	43.6A -	39.0 -	35A-39A -	" " " " " " "		

\* HUNG ON INCLINED SECTION

\*\* NO RECORD OF FATHOMETER SOUNDING, SPECIAL REPORT OF 31 OCTOBER 1950 INDICATES ONE TAKEN

STATISTICS FOR SHEET NO. \_\_\_\_\_ (PBS - 4850 - WD)  
 SHIPS PARKER, BOWEN, & STIRNI (Project CS- 326)

DATE	DAY LETTER	STAT. MI. DRAGGED	NUMBER POSITIONS	NO. H.L.	SOUNDINGS FATHOMETER
31 Oct.	A	5.7	44	1	1
	TOTAL	5.7	44	1	1

SQUARE MILES OF AREA DRAGGED - 3.6 Square Statute Miles

FATHOGRAM LIST

DATE	DAY	NO. FATHOGRAMS
31 Oct.	A	3

418 Post Office Building, Norfolk, Virginia.

31 October 1950

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

Subject: Special Report on Reported Obstruction, 3 Miles  
Southeast of Point No Point Lighthouse.

This reported obstruction was wire dragged in accordance with letter from the Director, dated 10 October 1950, reference 22/MEK, S-2-PK-BN-ST.

This obstruction has apparently broken up and pieces of wreckage were found in two locations.

A wire drag set at an effective depth of 38.5 feet hung on some wreckage in latitude  $38^{\circ} 05' 20''$ , longitude  $76^{\circ} 15' 07''$ . This hang was in an inclined section and the deeper effective depth was 40.5 feet. A fathometer sounding of 40.0 feet was obtained on this wreckage in a general depth of 44 feet.

There was another hang on these same pieces of wreckage. A wire drag set at an effective depth of 39.0 feet hung on the wreckage in latitude  $38^{\circ} 05' 23''$ , longitude  $76^{\circ} 15' 06''$ . A fathometer sounding of 39.5 feet was obtained on the wreckage in a general depth of 43.5 feet.

A wire drag set at an effective depth of 37.5 feet cleared both of these pieces of wreckage.

It is recommended that a clear depth of 37 feet be charted for this wreckage.

A wire drag set at an effective depth of 40.5 feet hung and cleared on some wreckage in latitude  $38^{\circ} 05' 09''$ , longitude  $76^{\circ} 14' 34''$ . A fathometer sounding of 39.0 feet was obtained on this wreckage in a general depth of 45 feet.

A wire drag set at an effective depth of 39.0 feet cleared the wreckage.

Recommended charting depth for this wreckage is 39 feet.

2858(50)

Depths are based on predicted tides for the vicinity.

The U. S. Coast Guard Station at Point Lookout furnished two small marker buoys and these were planted at latitude  $38^{\circ} 05' 23''$ , longitude  $76^{\circ} 15' 06''$ , and latitude  $38^{\circ} 05' 09''$ , longitude  $76^{\circ} 14' 34''$ .

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

2 cc: Supervisor, Southeastern District

RAC

### TIDE NOTE FOR HYDROGRAPHIC SHEET

~~DIVISION OF HYDROGRAPHY AND TIDE SURVEYS~~

20 November 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~~ F E NO. 11 1951

Locality Point No Point, Chesapeake Bay

Chief of Party: G. R. Fish in 1950  
Plane of reference is mean low water, reading  
3.6 ft. on tide staff at Hampton Roads (NO B)  
13.4 ft. below B. M. 6 (1927)

3.0 ft. on tide staff at Solomons Island  
10.9 ft. below B M 4(1937).

Condition of records satisfactory except as noted below:

NOTE: Tide reducers were based on observed tides at Hampton Roads and Solomons Island with necessary allowances having been made for estimated time and range differences. These tide reducers have been verified.

*E.C. McKay*  
*Section*

Chief, ~~Division of Tides and Currents~~

# GEOGRAPHIC NAMES

Survey No. FE. No. 11 (1951)  
WD.

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
											1
											2
											3
											4
											5
											6
											7
											8
											9
											10
											11
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											24
											25
											26
											27

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. FE. No. 11(1951) WD.

Records accompanying survey:

Boat sheets ..2.; sounding vols. ....1; wire drag vols. ....2.;  
 bomb vols. ....; graphic recorder rolls <sup>1 Env</sup>.....;  
 special reports, etc. <sup>1 Descriptive Report</sup>.....  
 .....

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

Number of positions on sheet	.....	44
Number of positions checked	.....	10
Number of positions revised	.....	1
Number of soundings revised (refers to depth only)	.....	0
Number of soundings erroneously spaced	.....	—
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 *L. J. Reskind*.....Total time ..... 8 Date 8-15-52

Reviewed by *L. J. Reskind*..... Time ..... 1 Date 8-18-52

REVIEW OF FIELD EXAMINATION 11, 1951

Project CS-326

The Field Examination was made to locate and determine the least depth over an obstruction reported to be about three miles  $137^{\circ}$  from Point No Point Light, Notice to Mariners. No. 41, dated 12 October 1946 (5633) Chesapeake Bay.

The results of the wire-drag examination are tabulated on the obstruction sheet of the Descriptive Report and are plotted on the attached section of the boat sheet.

This work was applied to charts Nos. 77 dated 7-28-52, 557 dated 3-3-52, 1224 dated 8-4-52, and 3330 dated 6-23-52; 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  
18 August 1952

Inspected by:

R. H. Carstens

BOAT SHEET

**E No 11**

Phi Psi 2 (1901)

38-08-30.496

76-19-24.892

08'

16'

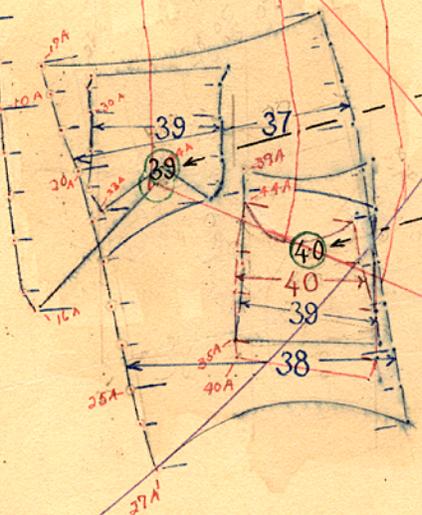
76° 14'

12'

NOP

38 40 44 46

38° 06'



OBSTRUCTION  
Actual sounding 38 ft.  
Cleared by 37 ft.

OBSTRUCTION  
Cleared by 39 ft.

04'

OUT

FE No 11, 1951  
Scale - 1:40,000  
Sheet 1 of 1

