

Original

6341

WIRE DRAG

1220

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Topographic~~ } WIRE DRAG 402
Hydrographic } Sheet Nos. ~~1, 2, & 3~~

State ~~Virginia, Maryland, New Jersey~~ Virginia

LOCALITY

Atlantic Coast, offshore

~~Chincoteague Bay, Va., to~~
Ocean City to Chincoteague Shoals
~~Beach Haven Inlet, N. J.~~

1938

CHIEF OF PARTY

Frank S. Borden

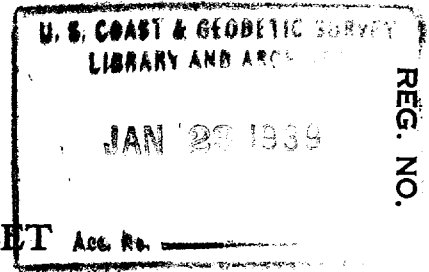
U. S. GOVERNMENT PRINTING OFFICE

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WIRE DRAG

6341

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



WIRE DRAG
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. ~~6341-W.D.~~ 402

REGISTER NO. H-6341-W.D.

State Maryland - Virginia

General locality Atlantic Coast - Offshore

Locality Ocean City to Chincoteague Shoals

Scale 1:40,000 Date of survey May, 19 38

Vessel MARINDIN & RODGERS

Chief of Party Frank S. Borden

Surveyed by S. B. Grenell

Protracted by J. C. Bull

Soundings penciled by ---

Soundings in fathoms feet ---

Plane of reference M. L. W.

Subdivision of wire dragged areas by J. C. Bull

Inked by J. C. Bull

Verified by H.F. STEGMAN

Instructions dated March
April 4, 19 38

Remarks: _____

DESCRIPTIVE REPORT

WIRE DRAG SHEETS Nos. 1, 2 AND 3.

Atlantic Coast, 1938

Frank S. Borden, Chief of Party,

Submitted by: S. B. Grenell.

Note: This report covers three smooth sheets. The field work was originally plotted on five separate boat sheets but condensed to three sheets in smooth plotting by the use of inserts. The report will be submitted in triplicate so that a copy may be attached to each sheet for the review.

FLOATING EQUIPMENT

The floating equipment consisted of the wire drag launches Marindin and Rodgers and one tender. During the early part of the season, one of the launches from the OCEANOGRAPHER was used as a tender; later, a motor surfboat was secured from the Coast Guard and the launch returned to the OCEANOGRAPHER.

PERSONNEL

The personnel for the party was furnished jointly by the OCEANOGRAPHER and LYDONIA and consisted of four officers and eleven men. The officers were S. B. Grenell, H. & G. E.; F. E. Okeson, Mate; J. C. Bull, A. L. Wardwell and C. F. Chenworth, Aids. Mr. Chenworth relieved Mr. Okeson early in the season.

The crew were divided into the following classifications:
1 Bos'n's Mate as Dragmaster, 1 radio operator-recorder, 2 engineers, 2 cooks, 5 seamen.

SURVEY METHODS

Dual launch control was used throughout the season. All drag equipment was standard and all operations were carried on in accordance with the instructions in the manual "Construction and Operation of the Wire Drag and Sweep".

CONTROL AND PROJECTIONS

The projections and control for the boat sheets were furnished by the OCEANOGRAPHER and LYDONIA. Part of the items were controlled by shore fixes and part by survey buoys planted and located by the OCEANOGRAPHER. Preliminary buoy locations were used on the boat sheets but adjusted buoy locations were available for the smooth sheets.

SMOOTH PLOTTING

The reduction of records and smooth plotting has been done entirely by officers attached to the field party. Each item has been carefully reviewed and compared with the boat sheet and is taken up in a separate paragraph in the following discussion.

TIDE REDUCERS

H-6341

All reducers for Sheet #1, except for Item #35, were from a portable automatic gage at the Coast Guard basin, Ocean City, Md. Reducers for Item #35 were from a gage at Assateague Anchorage.

H-6342

H-6343

Reducers for Sheets #3 and #4 were from the standard automatic gage at Atlantic City, New Jersey.

DISCUSSION

SHEET No. 1 - 6341 W.D.

ITEM #3.

1 - 17 B; 1 - 11 E

On the first strip, Pos. 1 to 6B, the uprights on buoys #1 and #2 parted and the drag had to be picked up and reset. On the second strip, at Pos. 9B, the drag hung on wreckage at buoy #4 which pulled under for a short time. The tender got a sounding on wreckage of $8\frac{1}{2}$ fms. near the submerged buoy but the drag pulled clear before a position was obtained. The effective depth of the drag at the ground was 29 feet and the position was plotted on a cut and distance from H. The position of the ground was later cleared in two directions at 26 feet. It is recommended that a depth of 27 feet be charted. At 12:31 E day, the tender secured a sounding on wreckage of 47 feet, MLW; no shoaler sounding was obtained. The position of this sounding checked the position plotted at 9B.

See par. 3a,
review.

Local information is that the "dragger" (fishing boat), Sea Rover, burned and sank in this location about 1932 or 1933.

ITEM #4.

7 - 10G

The shoal sounding, questioned, of 21 feet on sheet H-5346 was covered by a drag strip of effective depth of 22 feet. Adjacent depths of 25 feet made it impossible to drag this area much deeper. There was no indication of grounding on this strip.

par. 3b,
review.

ITEM #5.

1 - 5G

The shoal sounding, questioned, of 28 feet from sheet H-212 was covered by a strip of effective depth of 30 feet. There was no indication of grounding on this strip.

par. 3c,
review.

ITEM #6.

12 - 17E

This strip was dragged to cover a "holiday" between hydrographic surveys. The drag was set close to bottom and the end buoys bumped bottom several times in charted depths. Due to the fact that one end of the drag grounded and the current was adverse, it was impossible to cover a small portion of the area at the end of the drag strip. There was no indication of grounding in the "holiday".

par. 3d,
review.

ITEM #7.

1 - 6D

A shoal sounding of 28 feet, questioned, from H-212 was covered at an effective depth of 30 feet. A recent survey shows a least depth of 33 feet at this point. There was no indication of grounding on this strip except at Pos. 6D, at the end of the strip, on a charted shoal.

Par. 3e,
review.

ITEM #8.

8 - 14D

A shoal sounding of 31 feet, questioned, from H-213 was covered at an effective depth of 34 feet with no indication of grounding. A recent survey shows a least depth of 38 feet at this point.

Par. 3f,
review.

ITEM #9. 1 - 19A

The position of the wreck T. MORRIS PEROT, which sank in 1913, was covered at an effective depth of 47 feet in two directions. There was no indication of the drag grounding. Local fishermen, who used to fish on this wreck, say that they have been unable to locate it in recent years.

Par. 3g,
review.

ITEM #36. 1 - 15C; 1 - 13F

Two strips of effective depth of 49 to 53 feet were dragged over the reported position of this shoal with no indication of grounding at any time.

Par. 3h,
review.

Fishermen from Ocean City, Md., advised me that several times breakers had been observed in this area in heavy northeast weather. One fisherman said he had actually anchored in six fathoms in this locality while making repairs to his engine and that he had been forced to move from the anchorage as an increasing swell from the northeast had begun to break over his position. Captain Borden offered this man \$20.00 to put us on the position of this shoal but he failed to take up the offer.

The various fishermen locate the fishing banks by magnetic course and time of run for their various boats, and, since they do not know their speed or compass deviation and seldom apply any correction for variation, the information they furnish is very inaccurate.

One fisherman, who claimed to know the location of the shoal, said it was $11\frac{1}{2}$ miles, E X S from Fenwick Shoal Sea Buoy (survey buoy GUP, 1938) by his compass. This fisherman had his boat alongside a dock in Ocean City, which put him on a heading of E X S - which he said was the course he steered from GUP. I ran the MARINDIN alongside the dock astern of his boat and lined in with his hull and made a compass comparison. The deviation curve for the MARINDIN was accurate to one degree so I was able to compute his true course from GUP. This placed his location of the shoal about two miles due north of survey buoy ACE.

I reported this location by radio to Captain Borden and the OCEANOGRAPHER made a detailed survey of the area without finding anything of importance. The drag strip 1 to 13F covers the only shoal found by the OCEANOGRAPHER in the vicinity of the position given in the INSTRUCTIONS. The least depth on this shoal was ~~32~~ feet.

89

* * * * *

ITEM #35 INSERT

This item was plotted on a separate boat sheet and recorded in a separate volume "Chincoteague, Vol. #1; 1A to 14A."

The U. S. Coast Guard removed a wreck at this point in 1925 with a reported least depth of 20 feet after removal. A detailed hydrographic survey in 1934 gave a least depth of 32 feet.

Par. 3i,
review.

The area was covered in two directions at 26 and 28 feet with no indication of grounding. There was no tender available when this area was dragged so there were no tests for lift taken. An assumed lift of 1 foot was applied and tide reducers were taken from a gage established at the Coast Guard dock in Assateague Anchorage. ✓

GEOGRAPHIC NAMES

Survey No. H-6341 W.D.

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>Ocean City</u>	✓										1
<u>Fenwick Island Lt</u>	✓										2
<u>Isle of Wight Shoal</u>	✓	H 212						✓ PJ 387			3
<u>Fishing Point</u>	✓										4
<u>chincoteague Inlet</u>	✓										5
chincoteague Shoals	✓										6
<u>Assateague Island</u>	✓										7
<u>Assateague Anchorage</u>	✓										8
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
Names underlined in red approved											24
by <u>WTE</u> on 3/31/39											25
											26
											27

Remarks

Decisions

	Remarks	Decisions
1		
2	<i>USGB decision</i>	
3		
4		
5		
6	<i>Shoals not surveyed - Not indicated on this survey</i>	
7		
8	<i>Location of T.G.</i>	
9		
10		
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25		
26		
27		

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 6341 (1938) W.D.

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

Number of positions on sheet225
Number of positions checked61
Number of positions revised0
Number of soundings recorded
Number of soundings revised
Number of soundings erroneously spaced
Number of signals erroneously plotted or transferred

Date: March 8, 1939.

Verification by H.F. Stegman

Time: 12 hrs.

Review by J.A. McCormick, 3/16/39.

Time: 20 hrs.

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

} No. H-6341 W.D.
 } ~~No. TX~~

{ received Jan. 23, 1939
 { registered Feb. 15, 1939
 { 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	✓	<i>T.B.R.</i>	<i>Groundings on wrecks. See copies of charts 1217, 1219 and 1220 accompanying which wrecks have been plotted. T.B.R.</i>
88			
90			

RETURN TO

82	T. B. Reed
----	------------

✓ *T.B.R.*

VERIFICATION REPORT ON H-6341 (1938) W.D.

1. CONDITION OF RECORDS:

The records are neat and legible, and conform to the requirements of the Wire Drag Manual except that:

- a. No bottom characteristics were recorded. Descriptive matter sufficient. ✓
- b. No check angles were taken at the tender positions of soundings at groundings. There is sufficient information for checking. ✓
- c. No compass course headings were recorded. ✓

2. SHORELINE AND SIGNALS

This is an offshore survey and the shoreline is not shown as it appears on the hydrographic surveys of this area. ✓

Signals are adjusted triangulation control and field adjusted buoys located by the OCEANOGRAPHER (See page one of the Descriptive Report.) ✓

3. JUNCTIONS WITH CONTEMPORARY SURVEYS

This survey consists of a number of widely separated drag strips dragged to investigate wrecks and shoal areas. As there are no other Wire Drag surveys in the area covered by this sheet there are no junctions. ✓

Item #3 of this survey (Descriptive Report page 3) was transferred to H-5346 (1933). This is a grounding, with an effective depth of 29 ft, on the wreck of the fishing boat Sea Rover (according to local information.)

Items #6 and #7 were penciled on H-4951 (1929). The disposition of the soundings on these items will be accomplished by the reviewer.

Accomplished.

H. FIELD PLOTTING.

The field plotting on this sheet was satisfactory. One minor correction was made by the verifier on item #36.

There are approximately 225 positions on this sheet.

61 positions were checked, and none was revised.

Time on verification 12 hours.

Mar. 8, 1939

Respectfully submitted

A. F. Stegman

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6341 (1938) W.D. FIELD NO. 402

Ocean City to Chincoteague Shoals, Atlantic Coast - Offshore,
Maryland - Virginia

Surveyed in May 1938, Scale 1:40,000

Instructions dated March 4, 1938 (OCEANOGRAPHER)

Wire Drag

Dual Control

Chief of Party - F. S. Borden.
Surveyed by - S. B. Grenell.
Protracted by - J. C. Bull.
Subdivision of wire dragged areas by - J. C. Bull.
Inked by - J. C. Bull.
Verified by - H. F. Stegman.

1. Shoreline and Signals.

Shoreline is not shown. Buoy signals were located by taut wire and sun azimuth. The location data, when received from the field, will probably be filed with the sounding records of H-6344 (1938), H-6345 (1938) or H-6346 (1938).

2. Junctions with Wire Drag Surveys.

The present survey consists of a number of detached investigations. There are no prior wire drag surveys in this area and none of the strips on the present survey overlap any of those on nearby 1938 surveys.

3. Results of Survey.

Item numbers below are those used in the instructions for the project, and in the descriptive report.

a. Item 3. (Chart 1220). Par. 9d, review of H-5346 (1933), recommended investigation of a 39 foot shoal sounding (charted) in lat. $38^{\circ} 16.8'$, long. $75^{\circ} 02.2'$ on that survey. The 39 foot sounding was cleared with an effective depth of 36 feet but the drag encountered wreckage 0.2 miles to the northeast. The drag grounded with an effective depth of 29 feet and cleared the obstruction with 26 feet.

*No correction
to ch 1220
5/4/39
set charted 26*

b. Item 4. (Chart 1220). Par. 9c, review of H-5346 (1933), recommended investigation of a 21 foot shoal sounding (charted) in lat. $38^{\circ} 20.4'$, long. $75^{\circ} 03.3'$, on that survey. The shoal was cleared with an effective depth of 22 feet on the present survey. This is sufficient to insure the non-existence of shallower depths than the 21,

*No correction
to ch 1220
5/4/39*

but not sufficient to justify the removal of the 21 from the chart.

c. Item 5. (Chart 1220). Par. 9a, review of H-5346 (1933) recommended development of the 28 foot shoal sounding (charted) in lat. $38^{\circ} 21.0'$, long. $75^{\circ} 02.4'$ on H-212 (1848). It was cleared with an effective drag depth of 30 feet on the present survey. Although insuring the non-existence of materially lesser depths, the 30 foot clearance is not quite sufficient to warrant the removal of the 28 from the chart. It falls on a 37 foot ridge on H-5346, which has 40 and 44 feet on either side. H-5346 is insufficiently developed, sounding lines in vicinity of the 37 foot sounding being spaced at 400 meter intervals. About 35 foot clearance would have been necessary to disprove the 28 foot sounding.

No correction
to Ch 1220
5/4/39

d. Item 6, 7. (Chart 1220). Par. 9c, review of H-5346 (1933) recommended development of the $1/4$ square square mile holiday where that survey makes a common junction with H-4944 (1929) and H-4951 (1929) in approximate lat. $38^{\circ} 22.0'$, long. $75^{\circ} 01.4'$. The holiday was dragged to an effective depth of 30 feet on the present survey, two soundings of 28 and 29 feet being obtained where the end buoys touched bottom on known shoals. The drag work is adequate, but should have been supplemented by sounding lines.

No correction
to Ch 1220
5/4/39

e. Item 7. (Chart 1220). The review of H-4944 (1929) recommended investigation of the 28 foot shoal sounding (charted) in lat. $38^{\circ} 22.5'$, long. $74^{\circ} 56.1'$, on H-212 (1848). The shoal was cleared on the present survey with an effective depth of 30 feet. The margin of clearance is small, but in view of the good development on H-4944 (1929) and the checking of similar shoal depths to the northeast by the grounding of the drag at the end of the strip, the 28 is considered disproved and should be removed from the chart.

Removed 28
foot sk.
5/4/39

f. Item 8. (Chart 1220). The review of H-4944 (1929) recommended investigation of the 31 foot shoal sounding (charted) in lat. $38^{\circ} 20.7'$, long. $74^{\circ} 52.9'$, on H-213 (1849). The shoal was cleared with an effective depth of 34 feet on the present survey. The drag work is accepted as adequate and the 31 foot depth should be replaced on the chart by the 38 foot shoalest depth obtained 100 meters to the northeast on H-4944 (1929).

31 erased
38 added
5/4/39

g. Item 9. (Chart 1220). The 30 foot sounding charted in lat. $38^{\circ} 26.6'$, long. $74^{\circ} 50.3'$ originates with Lighthouse Notice to Mariners 42 of 1913 which states that it is the depth over the wreck of the T. Morris Perot. The area in the vicinity of the charted 30 was twice dragged to an effective depth of 47 feet on the present survey. Although the Lighthouse information does not state how the wreck was located, it does give a strong location of the lighted buoy

No correction
to Ch 1220
5/4/39

which was placed just to the east of it. The buoy was removed in 1930 without comment. The area dragged is ample and it is probable that the wreck has broken up. The 30 foot depth should be removed from the chart.

h. Item 36. (Chart 1109) The review of H-5352 (1933) recommended wire drag investigation in the vicinity of lat. 38° 19.5', long. 74° 33.5', where the U.S.S. Hopkins reported a 6-1/2 fathom shoal (Chart Letter 61 of 1926). On the present survey, the wire drag cleared, with effective depths of 50 to 53 feet, the reported position and the positions of several shoal indications of 82 to 91 feet obtained on H-5352. Effective depths of 70 feet would have been preferable but the drag work accomplished satisfactorily supplements the closely developed hydrography on H-5352 (1933) and further search for the reported shoal is considered unnecessary.

*No correction
to ch 1109
5/4/39*

i. Item 35. (Chart 1220). The 20 foot sounding charted in lat. 37° 50.0', long. 75° 23.9', is stated by Chart Letter 248 of 1925 to be the depth to which a wreck reported previously (Lighthouse Notice to Mariners 19 of 1925) was removed by the Coast Guard. The area was closely developed on H-5703 (1934) without finding any indications of the wreck and the review of that survey recommended wire drag investigation. The charted position was cleared with effective depths of 26 and 28 feet on the present survey. The remains of the wreck have probably broken up and the "20 wreck" should be removed from the chart.

*20 wreck
removed
from ch 1220
5/4/39*

4. Additional Field Work Recommended.

Greater effective depths would have been desirable over some of the shoals discussed in the preceding paragraphs. Hand lead sounding would also have added considerably to the value of the investigations in one or two cases. Such deficiencies are not of sufficient magnitude, however, to warrant further investigation of any of the shoals covered by the present survey.

5. Reviewed by - J. A. McCormick, March 16, 1939.

Inspected by - E. P. Ellis.

Examined and approved:

T. B. Reed

T. B. Reed,
Chief, Section of Field Records.

K. T. Adams

Chief, Division of Charts.

W. L. Peacock

Chief, Section of Field Work.

G. H. Hude

Chief, Division of H. & T.

Applied to Drawing of Chart 1270, May 4, 1939 - JFW.
" " " " 1109 " " " "