

FE205

WIRE DRAG

Diagram No. 78-3 1222-3

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. OPR-467
Office No. FE-205WD (1966)

LOCALITY

State Virginia
General Locality .. Chesapeake Bay
Locality James River, Newport News

1966

CHIEF OF PARTY
C.H. Nixon

LIBRARY & ARCHIVES

DATE

☆ 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.1 1967WD

FE205
WIRE DRAG

F E No. 1 1967

WIRE DRAG

Diag. Cht. Nos. 78-3 & 1222-3.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Wire Drag

Field No. OPR-467 Office No. F.E.No. 1
(1967) W.D.

LOCALITY

State Virginia

General locality Chesapeake Bay

Locality James River, Newport News

1966

CHIEF OF PARTY

Charles H. Nixon

LIBRARY & ARCHIVES

DATE June 20, 1967

USCOMM-DC 37022-P66

Note:
Five (5) chart
sections accompany
this report.

F E No. 1 1967

WIRE DRAG

FE 1 (1967)

DESCRIPTIVE REPORT
WIRE DRAG INVESTIGATIONS

PROJECT OPR-467

JAMES RIVER, NEWPORT NEWS, VA.
CHESAPEAKE BAY, VA.

1966

CHARLES H. NIXON - CHIEF OF PARTY

A. AUTHORITY:

Instructions dated February 16, 1966.

B. CHARACTER AND LIMITS OF THE WORK:

Investigation of certain obstructions and wrecks charted (C&GS charts 1222, 400 and 529) from the vicinity of James River, Newport News, Va. to the Chesapeake Bay Bridge Tunnel for chart revision purposes.

C. CONTROL AND SHORELINE:

The investigations were carried out on the largest scale charts in the area.

All control was visual, utilizing charted objects as signals with the exception of signal POS.

D. DATES OF SURVEY:

Field work began on 9 March 1966 and terminated on 12 April 1966. Upon returning to the Norfolk area from OPR-444 and OPR-466, work was resumed on this project on 21 September 1966 and terminated on 30 September 1966.

J. J. G.

E. VESSELS AND EQUIPMENT:

The wire drag vessels WAINWRIGHT and HILGARD acted as guide and end launch respectively. HILGARD's skiff was used as tender. ✓

Standard wire drag equipment was used throughout. ✓

F. TIDE STATIONS:

Tidal information was furnished by the Washington Office for the standard tide gage at Hampton Roads, Va. for September 1966. March and April tidal information was furnished for the standard tide gage at Portsmouth Naval Shipyard, Va. Tide reducers were computed using corrections taken from Table 2 of the Tide Tables. ✓

See Attachment No. 2 for List of Corrections. ✓

All soundings and effective depths are in feet at Mean Low Water. ✓

G. DRAG TEST:

Test of the drag followed the method outlined in the manual. ✓

H. CONTROL OF WIRE DRAG:

Standard dual control methods were used. Cuts to the end buoy and to the opposite vessel were taken immediately after the fix. The cuts were labeled plus (+) if the object was to the right of the signal used and minus (-) if to the left. Length of towline was from the center of the wheelhouse to the end buoy in each case. ✓

J. ADEQUACY OF THE SURVEY:

This survey is considered adequate within the limits of the investigated items. The following presurvey review items were not investigated this season: ✓

- (a) #5,6,7,13 through 52, A through F, H through BA
- (b) Items #8 and 9, P.R. Sheet dated 26 January 1966 were not completed. ← see Review

The survey was aided by use of SCUBA divers to investigate hangs and to obtain leadline soundings of least depths over obstructions. The survey was handicapped by not having a larger, radio-telephone equipped launch for use as SCUBA and wire drag tender. ✓

K. COMPARISON WITH CHART:

See Attachment No. 4 for List of Hangs and Clears. ✓

L. TIME:

Seventy-fifth (75th) meridian time was used throughout the survey with the exception of the period September 21, 1966 through September 30, 1966 when Sixtieth (60th) meridian time was used. ✓

M. LIST OF ATTACHMENTS:

1. Statistics
 2. Tide Note
 3. List of Signals
 4. Hang and Clear Data
 5. List of Investigations
 6. G.P. Information on Signal POS
 7. ~~Seven~~ overlays for Items #1, #2, #3, #4, #8, #9, and #10. ✓
- * *Nine* →

Respectfully submitted:

Carroll D. North, Jr.
Carroll D. North, Jr.
ENS C&GS

* *Includes two A&D Sheets
constructed by Verifier*

✓

APPROVAL SHEET

The attached report, related wire drag records and plotting sheets have been inspected by me and are approved.

Charles H. Nixon
Charles H. Nixon
Lt. Commander, C&GS
Commanding, WAINWRIGHT
& HILGARD

S T A T I S T I C S

<u>Volume Number</u>	<u>Day- Letter</u>	<u>Date 1966</u>	<u>Number of Positions</u>	<u>Statute Miles</u>	<u>Square N. Mi.</u>
1	A	3/9	11	0.7	0.2
1	B	3/10	16	1.7	0.6
1	C	3/11	23	2.6	0.9
1	D	3/14	17	1.8	0.6
1	E	3/16	12	0.7	0.2
1	F	3/17	36	3.1	0.6
1	G	3/18	37	1.5	0.3
2	H	3/21	8	0.2	0.03
2	J	3/22	27	2.7	0.4
2	K	3/23	20	2.1	0.4
2	L	3/24	8	0.8	0.4
2	M	3/28	45	3.1	0.5
3	N	3/29	52	4.6	0.7
3	P	3/30	27	2.4	0.8
3	Q	4/4	41	4.3	1.0
4	R	4/5	14	0.3	0.1
4	S	4/6	32	2.1	0.2
4	T	4/8	28	3.0	1.1
4	U	4/11	28	3.0	1.2
4	V	4/12	13	0.9	0.4
5	W	9/21	41	5.9	3.5
5	X	9/26	19	2.1	1.3
5	Y	9/27	23	3.0	1.6
5	Z	9/29	20	1.6	0.5
5	AA	9/30	<u>32</u>	<u>3.1</u>	<u>1.7</u>
		TOTALS	630	57.3	19.23

T I D E N O T E

Tidal data was furnished by the Washington Office for the standard tide gage at Hampton Roads (Sewells Pt.) for the period September 21 through September 30, 1966 and for the standard tide gage at Portsmouth Naval Shipyard for the period 9 March through 12 April 1966.

The following corrections were taken from Table 2 of the Tide Tables and applied to the indicated investigations:

1. Sewells Pt.: HW -14m -0.3'; LW -14m 0.0'
Item # 1,2,3,4,10,11,G
2. Menchville: HW +54m +0.1'; LW +69m 0.0'
Item #1,2
3. Old Pt. Comfort: HW -11m 0.0'; LW -35m 0.0'
Item #8,9,10,11,12,G
4. Newport News: HW +20m +0.1'; LW +18m 0.0'
Item #3

L I S T O F S I G N A L S

<u>Signal Name</u>	<u>Source</u>
ANK	Tank (Pier #1) lat. 36°54.94'N, long. 76°19.67'W
BEL	F G 22 ft. BELL 36°58'07" 76°06'44"
BLA	Tank (Newport News)
CAP	Cape Henry Light
COM	Tank, Old Point Comfort
COT	Tank, (Newport News Pt.)
DES	Desert Cove Tank
FIS	NE Corner Fishing Pier, 36°58'03", 76°06'53"
FOX	Tank, (Fox Hill)
GRAIN (USE)	Grain Elevator 36°55'56", 76°19'34"
HAM	Tank (Ocean View) 36°56'51", 76°15'34"
HEL	Tower, White Shoal
HIM	Thimble Shoal Light
HOR	Beacon 36°58'43", 76°06'30"
LIL	Little Creek Tank 36°56.70'N, 76°23.50'W
MID	Newport News Middle Ground Lighthouse
MON	Monument 37°02'32", 76°29'19"
NAV	QK Fl G 24 ft. HORN 36°56.08'N, 76°24.50'W
NEW	Navy Maintd. Explosives Anchorage Tank 37°00.08'N, 76°26.45'W
NOT	Tank, (Ocean View) 36°56'50", 76°16'12"
POR	Tank 36°59'43", 76°26'33"
POS	6 mi. Post - western side of Chesapeake Bay
RAD	Radio Tower, (East Ocean View)
RAN	Tank (Craney Island)
RIT	Tank 36°54'17.5"N, 76°26'04"W
RIV	QK Fl R 25ft. "B" 37°00'41", 76°05'51"
SAP	F G 22ft. BELL 37°02'17", 76°04'29"
SIL	Silver Tank (Phoebus) 37°01.07'N, 76°19.58'W
SEW	Tank 36°57.20'N, 76°19.53'W
SIR	Priv. Maint'd. Tower C&O Pier #9
SMA	Tank 37°00'31", 76°26'38"
STA	Stack 36°55'04", 76°19'18"
TAC	Stack, Newport News Shipbuilding Drydock Co.
TAN	Tank 36°56'43", 76°19'32"
TID	WTID Tower
TON	Tank 37°02'20", 76°27'51"
TOW	Tower, Curtis Pt.
ZIP	Tank, Newport News Shipbuilding Drydock Co.

HANG AND CLEAR DATA

Presurvey Review Item	Chart No.	Position & Day Letter	Latitude Longitude	Grounded-Effective Depth	Sounding	Cleared Effective Depth	Remarks
logged ✓ 1 ✓	✓529 ✓	7Q ✓	37°01'12" ^{12.5"} 76°30'27" ^{27"} <i>27.5"</i>	27'*	39.0' ** <i>Pos. 1q</i>	32.5' 33.5' <i>0</i>	<i>Portion of wreck probably broken off during dragging operations.</i> * part of wreckage caught in drag on setting out - caused enough sag to hang wreck at 39'
logged ✓ 2 ✓	✓529 ✓	<i>10E</i> 6P	37°00'23" ^{24"} 76°29'13" ^{13"}	20.5' <i>0</i>	18.0' <i>Pos. 1e</i>	19.0' 18.5' <i>0</i>	Wreck
<i>NOT PLOTTED</i> → 2	✓529	27P	37°00'55" 76°30'04"	-	--	26.5'	Wooden spar - now believed to be laying flat on bottom
<i>NOT PLOTTED</i> → 4	✓400	11A	37°56'20" 76°20'48"	14.0'	-	10.5'	Hung on <u>known shoal</u>
<i>NOT PLOTTED</i> → 4	✓400	11A	37°56'17" 76°20'32"	14.0'	-	10.5'	Hung on <u>known shoal</u>
<i>NOT PLOTTED</i> → 4	✓400	16B	37°55'59" 76°20'58"	10.5'	-	9.5'	Hung on <u>known shoal</u>
✓ 6 ✓	✓562 ✓	10V ✓	37°01'03" ² 76°15'25" ^{25"}	9.0' <i>0</i>	7.5' <i>Pos. 1v</i>	-	Wreck removed
logged ✓ 11 ✓	✓562 ✓	4L ✓	37°00'47" ^{47"} 76°09'57" ^{57"}	15.5' <i>0</i>	12.5' <i>Pos. 1l (approx.)</i>	12.5' 12.5' <i>0</i>	Wreckage of crane ✓
logged ✓ 12 ✓	✓481 ✓	20Z ✓	36°59'48" ^{48"} 76°06'07" ^{07"}	11.0' <i>0</i>	12.5' <i>Pos. 1z</i>	Not Cleared ✓	Wreck of "BIG D" ✓ <i>1079</i>
3 ✓	✓400 ✓	<i>36G</i> 37G ✓	36°57'55" ^{55"} 76°26'25" ^{25"}	25.0' <i>0</i>	26' <i>0</i>	21.5' 24.0' <i>0</i>	<i>Hang on bottom</i> Current too strong for investigation by divers
4	<i>400</i>	4C	36°56'24.7" ^{24.7"} 76°21'12" ^{12"}	16'	NONE	13'	<i>Temporary grounding</i>

** Fathogram attached

HANG AND CLEAR DATA

<u>Presurvey Review Item</u>	<u>Chart No.</u>	<u>Position & Day Letter</u>	<u>Latitude Longitude</u>	<u>Grounded- Effective Depth</u>	<u>Sounding</u>	<u>Cleared Effective Depth</u>	<u>Remarks</u>
3 ✓	400 ✓	27J ✓	36°58' ⁶ 38" 76°26'32"	47.0' ✓	- ✓	47.0' 41.8' ✓	Hang on Obstruction Current too strong for investigation by divers ✓
3 ✓	400 ✓	11K ✓	36°58' ^{14.5"} 15" 76°26'34" ₃	32.5' 36' ✓	33.5' 36' ✓ Pos. 1k	32.0' ✓ 21.5'	Anchor picked up at shallower depth ✓
3 ✓	400 ✓	17M ✓	36°57'54" ✓ 76°25'57"	41.0' ✓	-	47.5' 48.0' ✓	Wreck - Portion of wreck ^{logged} probably broke off during dragging operations. ✓
3 ✓	400 ✓	36M ✓	36°57' ^{57.5} 42"41" 76°25'49" ✓	40.0' ✓	-	41.0' 40.0	Grounded Probably on bottom. ✓
logged 10	562	28U	37°01'39" 76°10'17.5"	17'	NONE	15'	metal scrap - Wreckage
logged 10	562	21T	37°01'24" 76°10'29"	16'	NONE	16'	Unidentified Obstr.

LIST OF INVESTIGATIONS

OPR-467 James River, Newport News, Va.
Chesapeake Bay, Va.

Item #1

The sunken wreck ED charted in Lat. ^{12.5"} 37°01'11", Long. ^{27.5"} 76°30'17" was located on "Q" day at Lat. 37°01'12", Long. 76°30'27". Divers investigated the hang (7Q) and reported that they found a large object covered with marine growth at a least depth of 39.5' (bottom depth 48').

On "R" day using the ship's fathometer, a d.p. was taken on the submerged wreck. This d.p. agreed with the position obtained on "Q" day. The least depth was determined to be 39.0 ft. The wreck was subsequently cleared on "S" day with effective depths of 32.8' and 33.8' ft. from opposite directions.

Because of the steep contour in the area, it was not possible to get a deeper drag to clear the wreck.

It is recommended the wreck be charted at the above position and shown as cleared by 32 ft. ³³ CONCUR. Chart [33] WK DEW

109924
west of 1222 limits

Item #2

The sunken wreck PD charted in Lat. 37°00'31", Long. 76°29'21" was located on "E" day at a least depth of 18 ft. at Lat. 37°00'23", Long. 76°29'13". Divers investigated the hang and reported that the hang was on a sunken launch rising 4 ft. off the bottom.

The sunken launch was hung again on "P" day on trying to clear. This position agreed with the original position on "E" day. The wreck was subsequently cleared in two directions with 19 and 18.5 ft. It is believed that the 19 ft. strip was able to clear by dragging along and over the rounded surface of the bow. ^{10-12-ft.} The 19-ft. strip changed to 18-ft. to avoid conflict with 18-ft. least depth.

One other hang was incurred at Lat. 37°00'55", Long. 76°30'04" and was identified as a wooden spar 35 ft. long and 2-3 ft. in diameter. It was pulled up with the drag but hit the skid and dropped back into the water. This area was dragged again, once with a 26.5 ft. eff. strip (1-9S) but the spar could not be located. It is believed to have fallen flat on the bottom. ^{18 in.}

← Hang not plotted. Spar probably flat on bottom. DEW

It is recommended the wreck be charted at the above position and shown as cleared by 18 ft. Chart [18] WK

Lat. 37°00'24"
Long. 76°29'13"

CONCUR.
DEW

109925
west of 1222 limits

Item #3

The sunken wreck 46-ft. rep. charted in Lat. ^{57.5"} 36°58'00", Long. 76°26'05" was found at Lat. 36°57'54", Long. 76°25'57". The least depth over the wreck is unknown. The wreck was hung on "M" day at 41.0 ft. In subsequent drags the hang could not be relocated and was thus cleared with 48.0 and 47.5 ft. from opposite directions. There are several reasons for the hang at 41.0 ft. One - An upright may have been set too deep or slipped. Two - An object may have caught on the wire while laying out the drag and this lowered the ground wire enough to cause the hang. Three - The mast of the wreck may have been hung and broken off upon hanging. Because of the steep contour in the area, it was impossible to set deeper drags to search for the mast. An area within 1/2 mile of the wreck symbol was extensively investigated but no other major obstructions were located. Because of the steep contour, some difficulty was encountered and groundings did occur. (See Hang and Clear Data.)

It is recommended that the wreck be charted at the above position and shown as cleared by 47 ft. **CONCUR. Chart as 48/WK**

48

DEW

Item #4

The sunken wreck charted in Lat. 36°56'26.2", Long. 76°20'35.5" was not found. The area within 1/2 mile of the wreck symbol was investigated with the drag generally set two or three feet from the bottom where possible. The wreck symbol was cleared from opposite directions with 14.0 and 12.5 ft. effective depths. No major obstruction was found.

The data concerning three groundings may be found in the Hang and Clear Data.

It is recommended the wreck symbol be removed from the charts. **CONCUR.**

Also see Review concerning 16-ft. grounding.

DEW

Item G

The sunken wreck, charted in Lat. 37°01'06", Long. 76°15'18" was found at Lat. 37°01'03", Long. 76°15'25" on April 12, 1966. Divers investigated the hang and found the wreck broken-up with a least depth of 7.5 feet in 12.5 ft. of water. Local Notice to Mariners No. 19, Fifth Coast Guard District announced that the wreck has been removed (page 5, 5/4/66).

The wreck symbol should be removed from the charts.

Wreck removed as per

N. to M. No. 22 of 1966

DO NOT CHART

DEW

Items #8 and 9

The obstr. fish haven charted in Lat. 37°01.88', Long. 76°14.91' and

the sunken wreck charted in Lat. $37^{\circ}02'00''$, Long. $76^{\circ}13.97'$ were not found. Both symbols were cleared in two directions with the same strips. The fish haven symbol was cleared with 11.5 and 12.0 ft. and the wreck symbol with 12.0 ft. in both directions. Investigation of these items is not completed. The northern half of a 1/2 mile radius circle has been completed but the southern sector was cleared in only one direction with 10.0 ft. which is not within 3 ft. of the bottom.

logged work
1222
No change on 481

It is recommended that the southern sector be re-dragged at a greater depth before investigation is considered complete. **CONCUR.**

*Retain Obstr Fish Haven and sunken wreck symbol on chart.
Investigation of these items considered incomplete. DEW*

Item #10

The obstr. rep. 1951 charted in Lat. $37^{\circ}01.47'$, Long. $76^{\circ}11.00'$ was not found. The area within 1/2 mile of the symbol was investigated with the drag set from 15 to 18 ft. effective depth (as close to the bottom as possible). The obstruction symbol was cleared in opposite directions with 16' and 18 ft. No obstructions were found. The obstruction symbol should be removed from the chart.

logged

CONCUR. However, obstructions located at two places nearby - See Review for discussion. DEW

at that location.

Item #11

The obstr. 12-ft. rep. 1963 charted in Lat. $37^{\circ}00.90'$, Long. $76^{\circ}09.44'$ was found at Lat. $37^{\circ}00'47''$, Long. $76^{\circ}09'57''$ on "L" day at an approximate least depth of 12.5 ft. The sea was too rough for an accurate measurement. Investigation of the hang by divers revealed the obstruction to be the body of a crane. The obstruction was cleared on "T" day in two directions with an effective depth of 12.5 ft.

logged
applied
Ch 1222
481

It is recommended the wreck be charted at the above position and shown as cleared by 12 ft. **CONCUR. Chart [12] WK DEW**

App'd
Ch. 562

Item #12

The sunken wreck 13-ft. rep. charted in Lat. $36^{\circ}59.85'$, Long $76^{\circ}06.25'$ was found on "Z" day at Lat. $36^{\circ}59'46''$, Long. $76^{\circ}06'07''$ at a least depth of 12.5 ft. Divers investigated the hang and identified it to be the wreck of the "Big D" pile driver.

logged

A very strong current and the nearness of the item to the Chesapeake Bay Bridge caused considerable difficulty in dragging this item. There is no doubt on the position of the wreck. It was hung twice from opposite directions and the position proved to be the same. At the same time, a turbulence in the water caused by the strong current passing over the wreck, also indicated its position.

The wreckage at 12.5 ft. was hung on position 20Z at 11.0 ft. effective depth. It is believed that the strong current in the area at this time caused the drag to fluctuate and sag, thus hanging the wreck. The

USE THIS

off 481

obstruction was not cleared because of the lack of time and the ending of the field season.

It is recommended that the wreck be charted at the new position with a reported depth of 12 ft. ← No!

app'd
1222

App'd 5/62 app'd 4/81

Chart  WK

Hang at 11 ft. seems legitimate
and should be used for charting.

Deo

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COMMONWEALTH OF VIRGINIA

CHESAPEAKE BAY BRIDGE AND TUNNEL DISTRICT
NORTH TOLL PLAZA

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EXECUTIVE DIRECTOR

LEON R. JOHNSON
CHIEF ENGINEER

October 26, 1966

Lieutenant Commander Charles Nixon
Commanding Officer, The Wainwright
Coast and Geodetic Survey
439 West York Street
Norfolk, Virginia

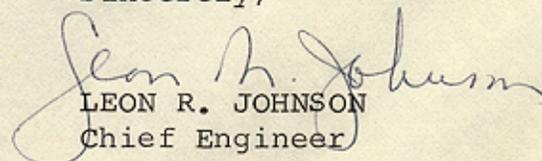
Dear Commander Nixon:

In accordance with our telephone conversation, I am forwarding a letter from Mr. R. H. Hilleary, Project Engineer, representing our Consulting Engineers, Sverdrup and Parcel. The letter outlines the coordinates transmitted to you verbally.

The Milepost 6 coordinates I assume to be on the West guard rail in accordance with Ensign North's request, although the letter does not express this specifically. My request regarding the computation did specify that position. Mr. Hilleary, who will receive a copy of this communication can advise us if our assumption is incorrect.

We would appreciate coordinates on the Big D.

Sincerely,


LEON R. JOHNSON
Chief Engineer

LRJ/mcf
Encl.

cc: Mr. R. H. Hilleary

L. J. SVERDRUP
E. R. GRANT
B. R. SMITH
D. C. WOLFE
E. J. PELTIER

SVERDRUP & PARCEL
CONSULTING ENGINEERS
Founded in 1928

918 OLIVE STREET
ST. LOUIS, MO. 63101

JOHN I. PARCEL 1928-1968

HP
10-21-66 ✓

October 17, 1966

Chesapeake Bay Bridge-Tunnel District
P. O. Box 111
North Toll Plaza
Cape Charles, Virginia

Attention: Mr. L. R. Johnson
Chief Engineer

Gentlemen:

Subject: Chesapeake Bay Bridge-Tunnel District
Coordinates for Milepost 6

In reply to your letter of October 3, 1966, the
Coordinates of Milepost 6, on the plane rectangular coordinate
system established for construction of the project are N 250, 009.31,
E 700,589.72.

To convert to the State Coordinate System, 2,000,000 must
be added to the East Coordinate. Coordinates of Milepost 6 then
would be N 250,009, E 2,700,590 to the nearest foot.

We would appreciate receiving the coordinates establishing
the position of the Big D No. 1 as determined by Ensign North.

Very truly yours,

SVERDRUP & PARCEL

R. H. Hilleary
R. H. Hilleary
Project Engineer

✓

SVERDRUP & PARCEL
CONSULTING ENGINEERS
915 OLIVE STREET
ST. LOUIS, MO. 63101

October 28, 1966

Chesapeake Bay Bridge and Tunnel District
P. O. Box 111
North Toll Plaza
Cape Charles, Virginia

Attention: Mr. L. R. Johnson
Chief Engineer

Gentlemen:

Your letter of October 26, 1966, received late this P.M.

Coordinates for mile post 6 sent you in our letter
dated October 17, 1966 is for mile post on the west guardrail.

Yours very truly,

SVERDRUP & PARCEL

R. H. Hilleary
R. H. Hilleary
Project Engineer

cc: Lieutenant Commander Charles Nixon
Commanding Officer, The Wainwright
Coast and Geodetic Survey
439 West York Street
Norfolk, Virginia

TIDE NOTE FOR HYDROGRAPHIC SHEET

October 24, 1967

Nautical Chart Division: R.H. Carstens

Plane of reference approved in
11 volumes of sounding records for

HYDROGRAPHIC SHEET Wire drag FE NO. 1 1967

Locality: James River
Newport News, Virginia

Chief of Party: C.H. Nixon (1966)

Plane of reference is mean low water

Tide Station Used (Form C&GS-681):
Hampton Roads, Virginia
Portsmouth, Virginia

Height of Mean High Water above Plane of Reference is as follows:

Hampton Roads 2.5 feet
Portsmouth 2.8 feet

Remarks


Chief, Tides and Currents Branch

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. F.E.No.1 (1967) W.D.

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	5	BOAT SHEETS	7
DESCRIPTIVE REPORT	1	OVERLAYS	9

Smooth sheets are sections of chart inserted in envelopes with descriptive report.

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES	1					
CAHIERS						
VOLUMES	11					
BOXES						

T-SHEET PRINTS (List)

SPECIAL REPORTS (List) 1Envelope of Misc. Overlays-Items Nos. 1,3,8,9 & 10.

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				630
POSITIONS CHECKED		125		
POSITIONS REVISED		3		
DEPTH SOUNDINGS REVISED		2		
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS				
JUNCTIONS				
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS				
SPECIAL ADJUSTMENTS <i>made two A&D sheets</i>		12 hrs.		
ALL OTHER WORK		67 hrs.	9 hrs.	
TOTALS		79 hrs.	9 hrs.	
PRE-VERIFICATION BY	BEGINNING DATE		ENDING DATE	
VERIFICATION BY <i>Dale E. Westbrook</i>	3/6/68		3/25/68	
REVIEW BY <i>Dale E. Westbrook</i>	3/25/68		3/25/68	

REVIEW
FIELD EXAMINATION NO. 1, 1967 W.D.
WRECK INVESTIGATIONS
CHESAPEAKE BAY

1. This wire-drag field examination was made in compliance with instructions for Project OPR-467.
2. The purpose of the examination was to investigate and verify or disprove numerous reported wrecks and obstructions described in the Pre-Survey Review for OPR-467.
3. The results of the investigations are shown on the accompanying sections of Charts 400, 481, 529, and 562. These chart sections are supplemented by information shown on nine tracing cloth overlays inserted in the Descriptive Report.
4. A comparison between the field examination and the charts of the areas in which work was done indicates that advance information was used for charting in several instances. Certain revisions to the charts are necessary to reflect the final results of the investigations.

Attention is directed to the following:

CHART 529 - 13th ED., Jan. 22, 1968

P.R. Item No. 1 - Correctly charted.

P.R. Item No. 2 - The cleared by 18-1/2 ft. should be changed to a cleared by 18 ft. and its position moved about 64 meters to the NW as shown by the field examination. A pr

CHART 400 - 30th ED., Sept. 25, 1967

P.R. Item No. 3 - The cleared by 45 ft. charted in lat. $36^{\circ}57'54''$, long. $76^{\circ}25'57''.5$ should be changed to a cleared by 48 ft. WK A pr

Additional features which should be charted are:

- A. A cleared by 40-ft. Shoal in lat. 36°57'41", long. 76°25'49".
- B. A cleared by 24-ft. Shoal in lat. 36°57'55", long. 76°26'25".
- C. A cleared by 32-ft. Obstr. in lat. 36°58'14.5, long. 76°26'33".
- D. A cleared by 41-ft. Obstr. in lat. 36°58'36", long. 76°26'32".

NM 30/68

P.R. Item No. 4 - Correctly charted, except that a cleared by 13-ft. Obstr. should be added to the chart in lat. 36°56'24.7, long. 76°21'12". This was a temporary grounding which was not subsequently investigated. Therefore, it is not known whether the bottom or an object was struck by the drag.

CHART 562 - 4th ED., April 10, 1967

P.R. Item "G" - Correctly charted. This wreck was removed through N. to M. No. 22 of 1966 subsequent to the wire-drag investigation.

P.R. Items No. 8 and 9 - The Obstr. Fish Haven should be retained on the charts, and the wreck should be retained on Wreck Chart 1222 only. These items were incompletely investigated and additional work should be done on them at some future time.

P.R. Item No. 10 - Correctly charted, except that the following features should be added to the chart:

- A. A cleared by 16-ft. Obstr. in lat. 37°01'24", long. 76°10'29".
- B. A cleared by 15-ft. Wreckage in lat. 37°01'39", long. 76°10'17.5.

*logged
app'd 1222
481
NM 30/68
logged
app'd 1222*

P.R. Item No. 11 - Correctly charted, except that the cleared by 12-ft. Obstr. should be changed to a cleared by 12-ft. WK and should be repositioned about 100 meters southward as shown by the field examination.

*logged
app'd 1222
481
Wreck*

CHART 481 - 15th ED., Aug. 21, 1967

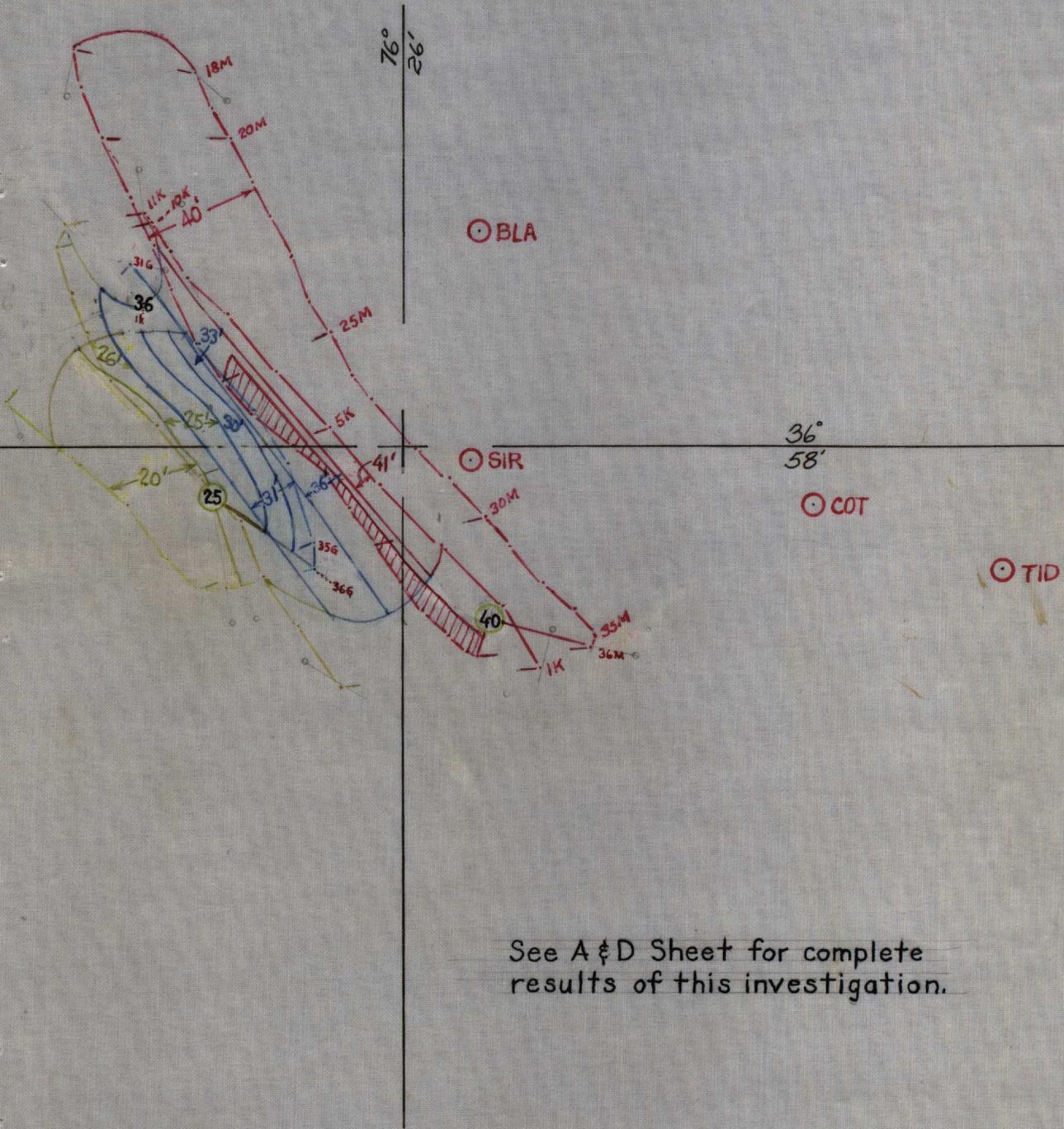
P.R. Item No. 12 - The 13-ft. sounding Obstr. should be changed to an 11-ft. sounding WK and should be moved about 100 meters to the NNW as shown by the field examination. *NM 30/68 appl. 481*

5. All Pre-Survey Review Items investigated were satisfactorily accomplished except Items No. 8 and 9 for which additional work is considered necessary for their final disposition. Items 5, 6, 7, 13 through 52, A through F and H through BA were not investigated this season.
6. The Descriptive Report adequately covers all other matters pertaining to this examination. No further discussion is considered necessary.

Reviewed by: Dale E. Westbrook
March 25, 1968

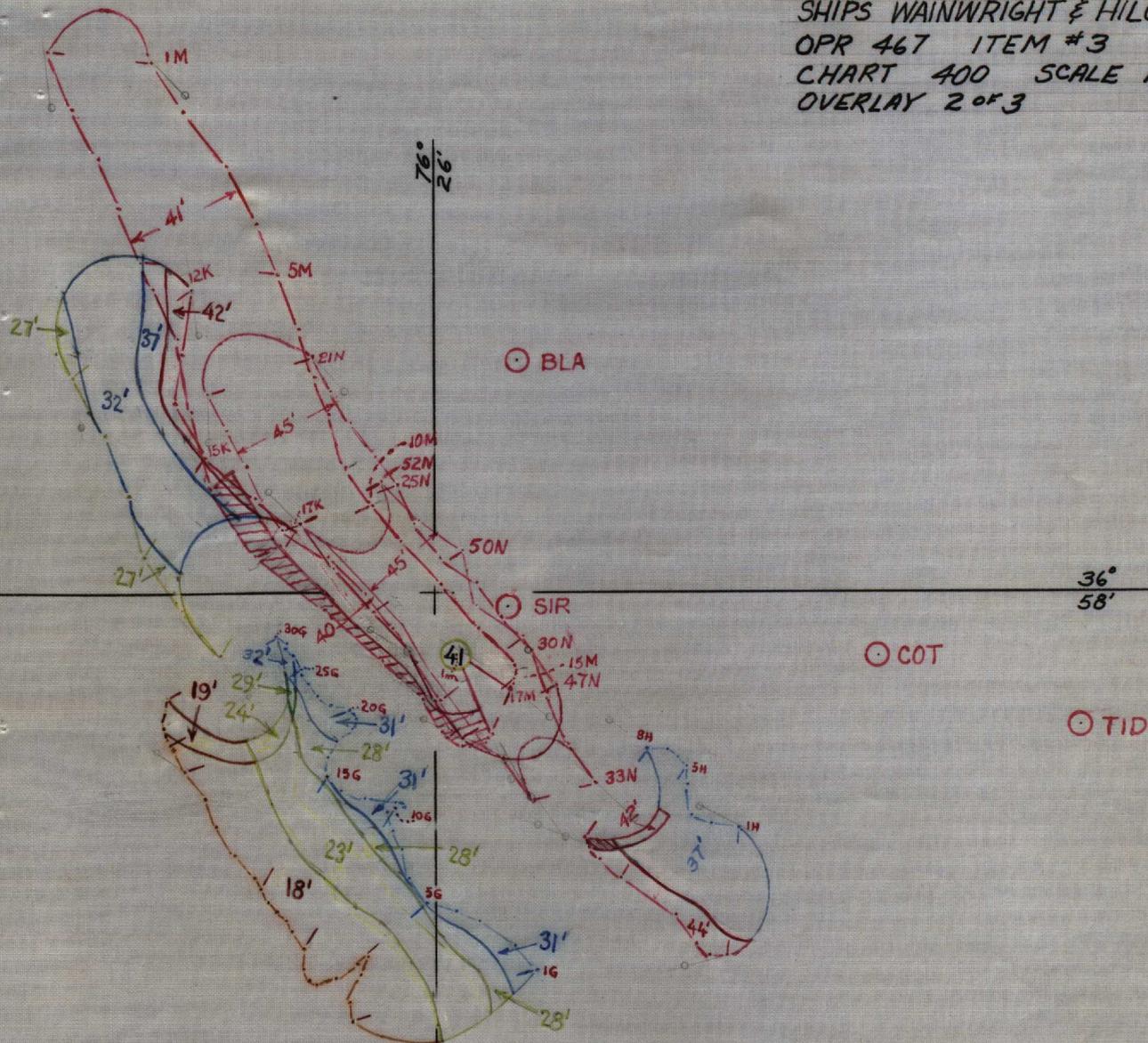
R. H. Carstens
Inspected by: R. H. Carstens
May 20, 1968

John O. Boyer
Approved by: John O. Boyer
Captain, USESSA
Chief, Marine
Chart Division

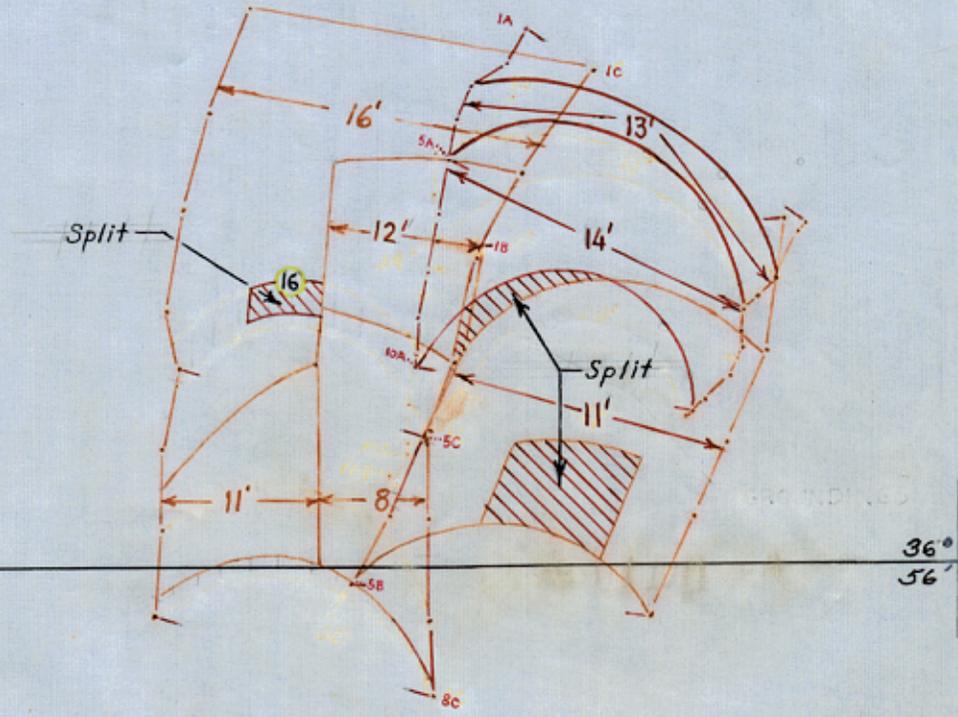


See A & D Sheet for complete
results of this investigation.

SHIPS WAINWRIGHT & HILGARD
OPR 467 ITEM #3
CHART 400 SCALE 1:20,000
OVERLAY 2 of 3



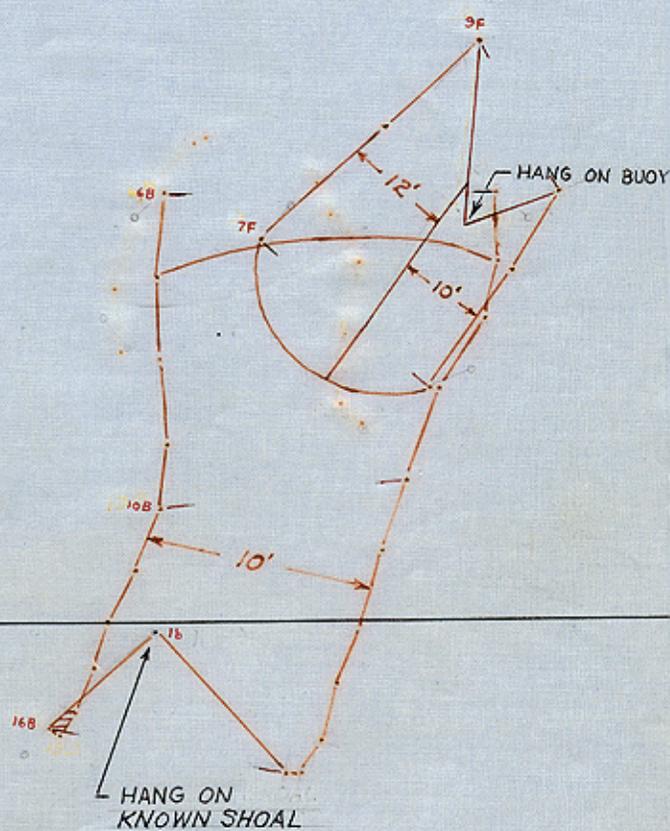
See A & D Sheet for complete
results of this investigation.



See A & D Sheet for complete
results of this investigation.

76°
22'

SHIPS WAINWRIGHT & HILGARD
OPR 467 ITEM # 4
CHART 400 SCALE 1:20,000
OVERLAY 2 of 2



See A & D Sheet for complete
results of this investigation.

MON

76°
30'

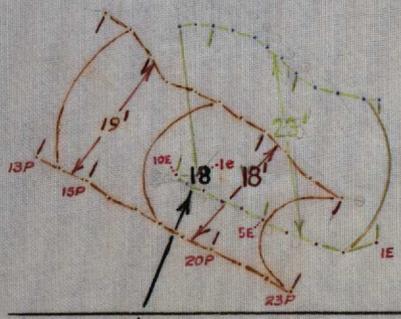
TON

SHIPS WAINWRIGHT & HILGARD
OPR 467 ITEMS #1 & 2
CHART 529 SCALE 1:40,000

HEL



Hang on wreck at 27 ft.
Actual depth 39 ft.
Cleared by 33 ft.
(See D.R.)

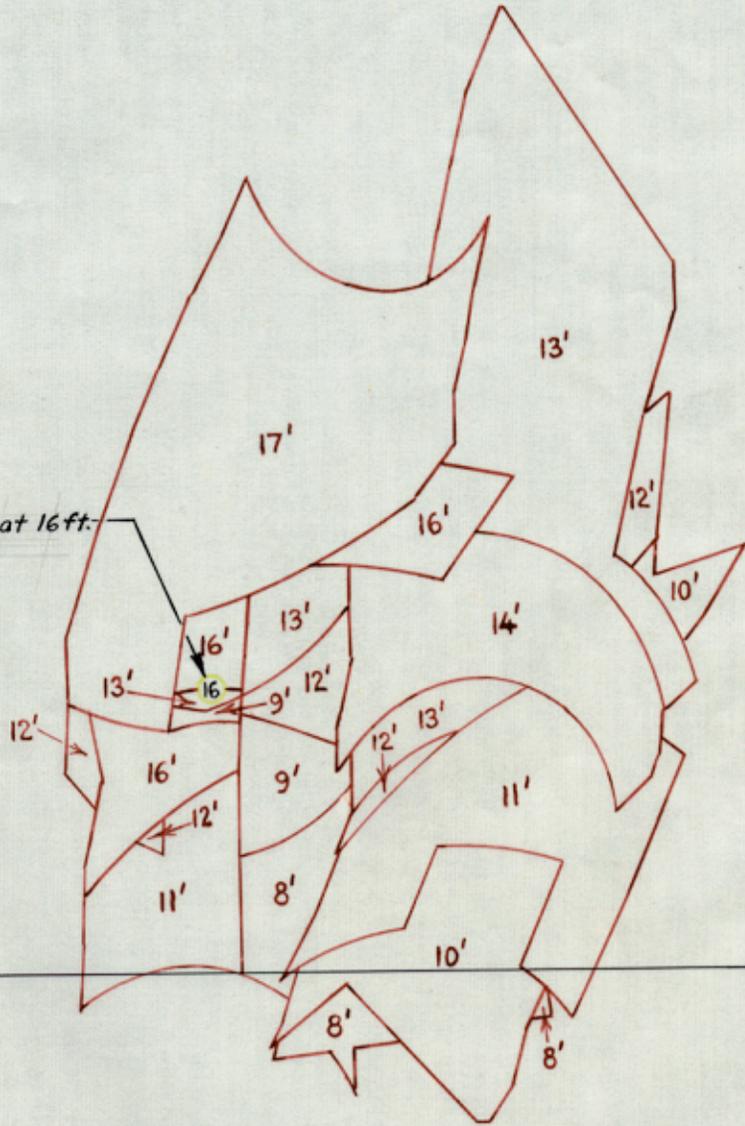


37°
00'

Hang on wreck at 23 ft.
Actual sounding 18 ft.
Cleared by 18 ft.

76°22'

Temp. Grounding at 16 ft.
Cleared by 13 ft.



37°56'

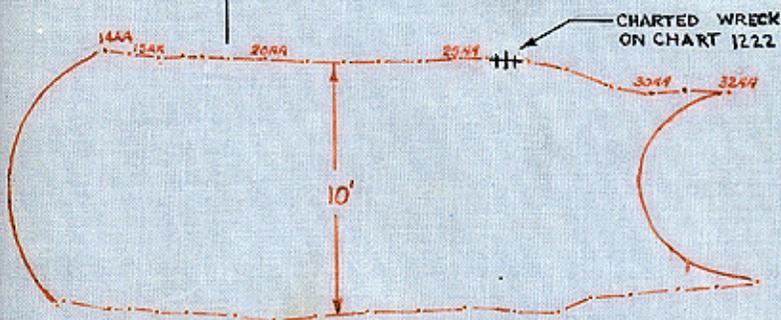
F. E. No. 1, 1967
A & D Sheet
Pre-Survey Review Item 4
Chart 400

76° 15'

76°

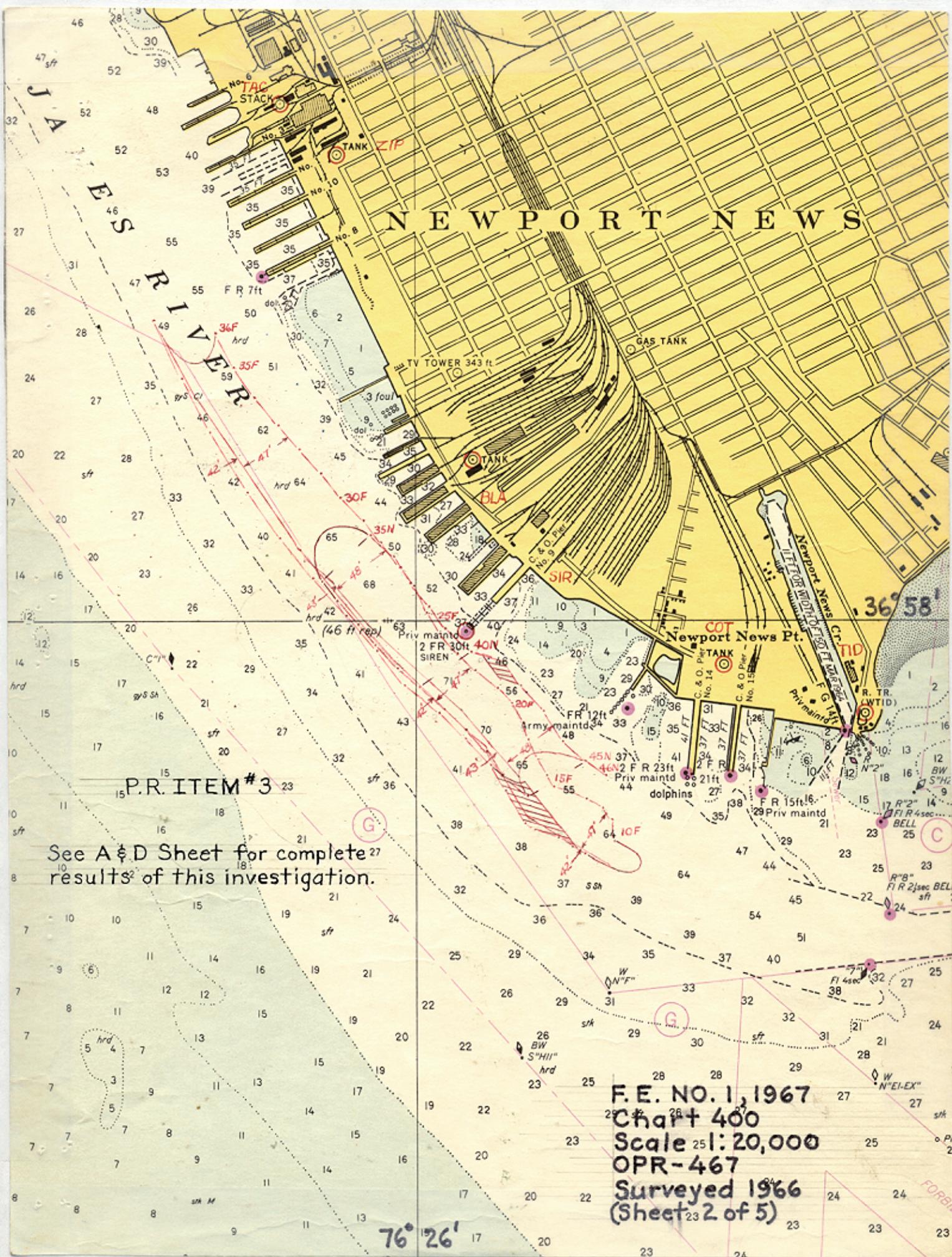
37°
05'

SHIPS WAINWRIGHT / HILGARD
OPR 467 ITEMS 8,9
CHART 562
OVERLAY 1 of 1



HIM ⊙

37°
00'

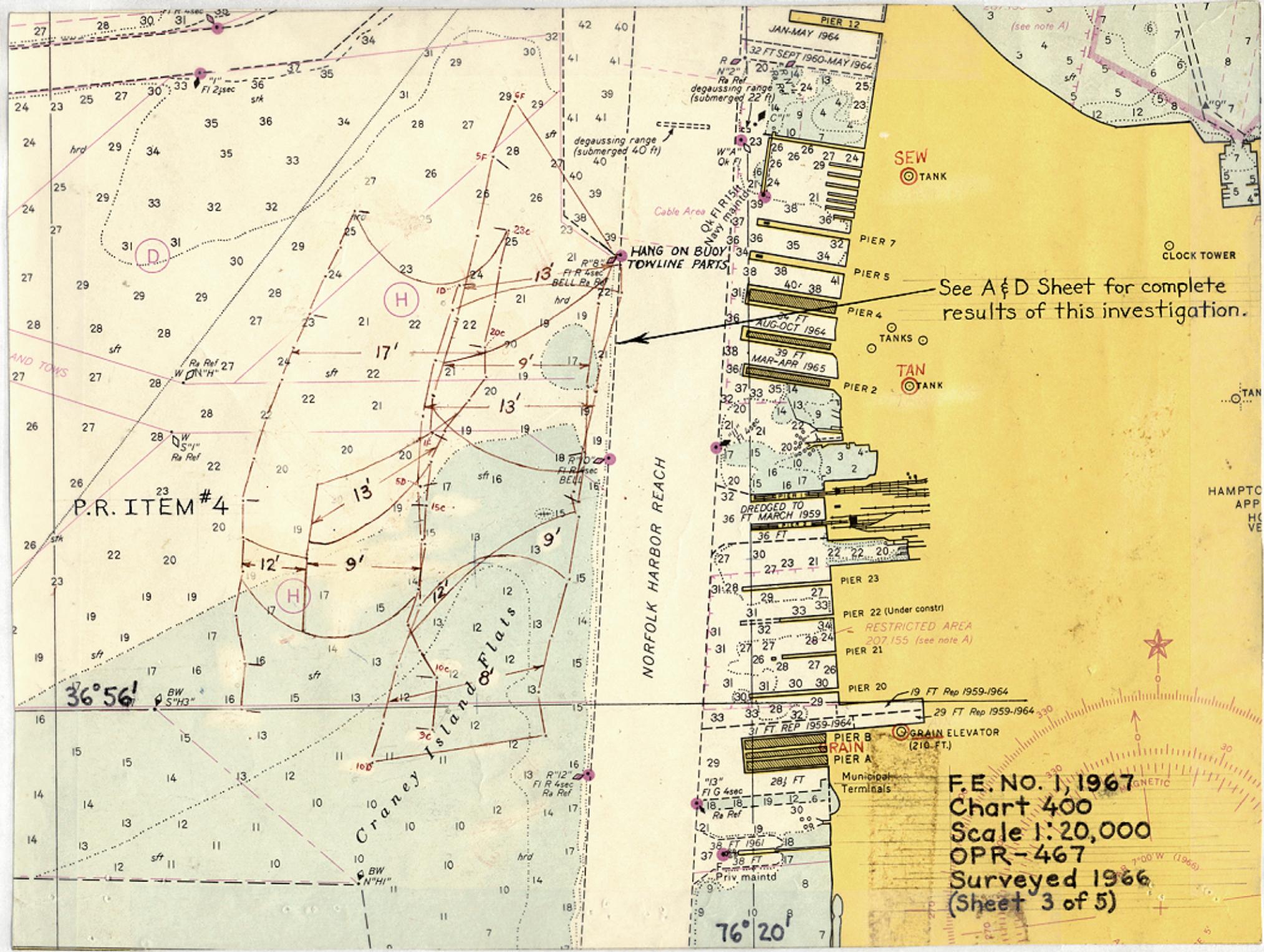


P.R. ITEM # 3

See A & D Sheet for complete results of this investigation.

F.E. NO. 1, 1967
 Chart 400
 Scale 1:20,000
 OPR-467
 Surveyed 1966
 (Sheet 2 of 5)

76° 26'



See A & D Sheet for complete results of this investigation.

P.R. ITEM #4

36° 56'

76° 20'

F.E. NO. 1, 1967
 Chart 400
 Scale 1:20,000
 OPR-467
 Surveyed 1966
 (Sheet 3 of 5)

SEW TANK

TANK

GRAIN ELEVATOR (218-FT.)

Municipal Terminals

CLOCK TOWER

HAMPTON APPROACH

NORFOLK HARBOR REACH

Craney Island Flats

HANG ON BUOY TOWLINE PARTS

RESTRICTED AREA 207 155 (see note A)

PIER B RAIN PIER A

19 FT Rep 1959-1964

29 FT Rep 1959-1964

31 FT REP 1959-1964

28 1/2 FT

30

38 FT 1961

36 FT

Priv maintd

37

38

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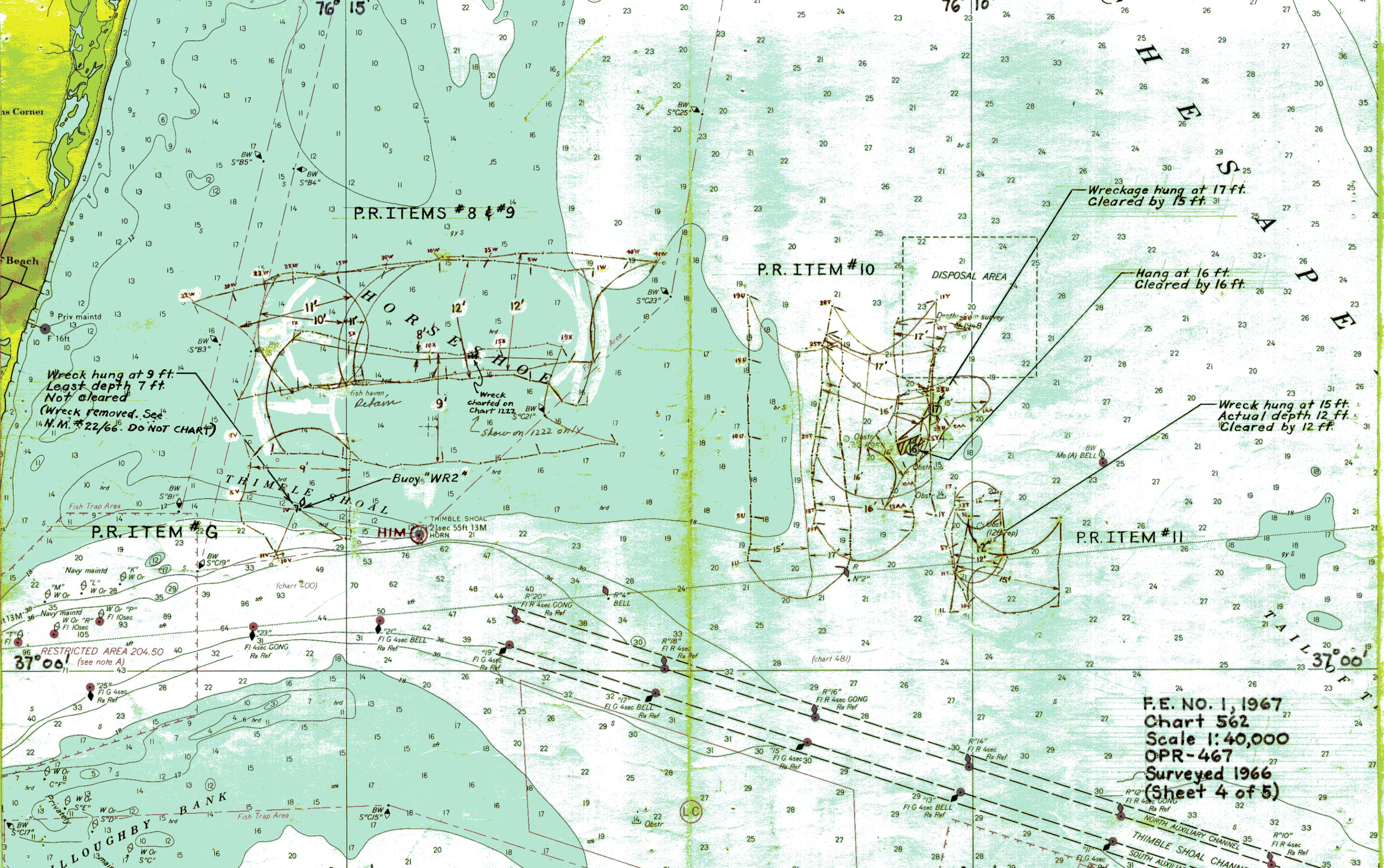
96

97

98

99

100



P.R. ITEMS # 8 & # 9

P.R. ITEM # 10

Wreckage hung at 17 ft.
Cleared by 15 ft.

Hang at 16 ft.
Cleared by 16 ft.

Wreck hung at 15 ft.
Actual depth 12 ft.
Cleared by 12 ft.

Wreck hung at 9 ft.
Least depth 7 ft.
Not cleared
(Wreck removed. See
N.M. # 22/66. Do NOT CHART)

Wreck charted on
chart 1222
show on 1222 only

P.R. ITEM # G

P.R. ITEM # 11

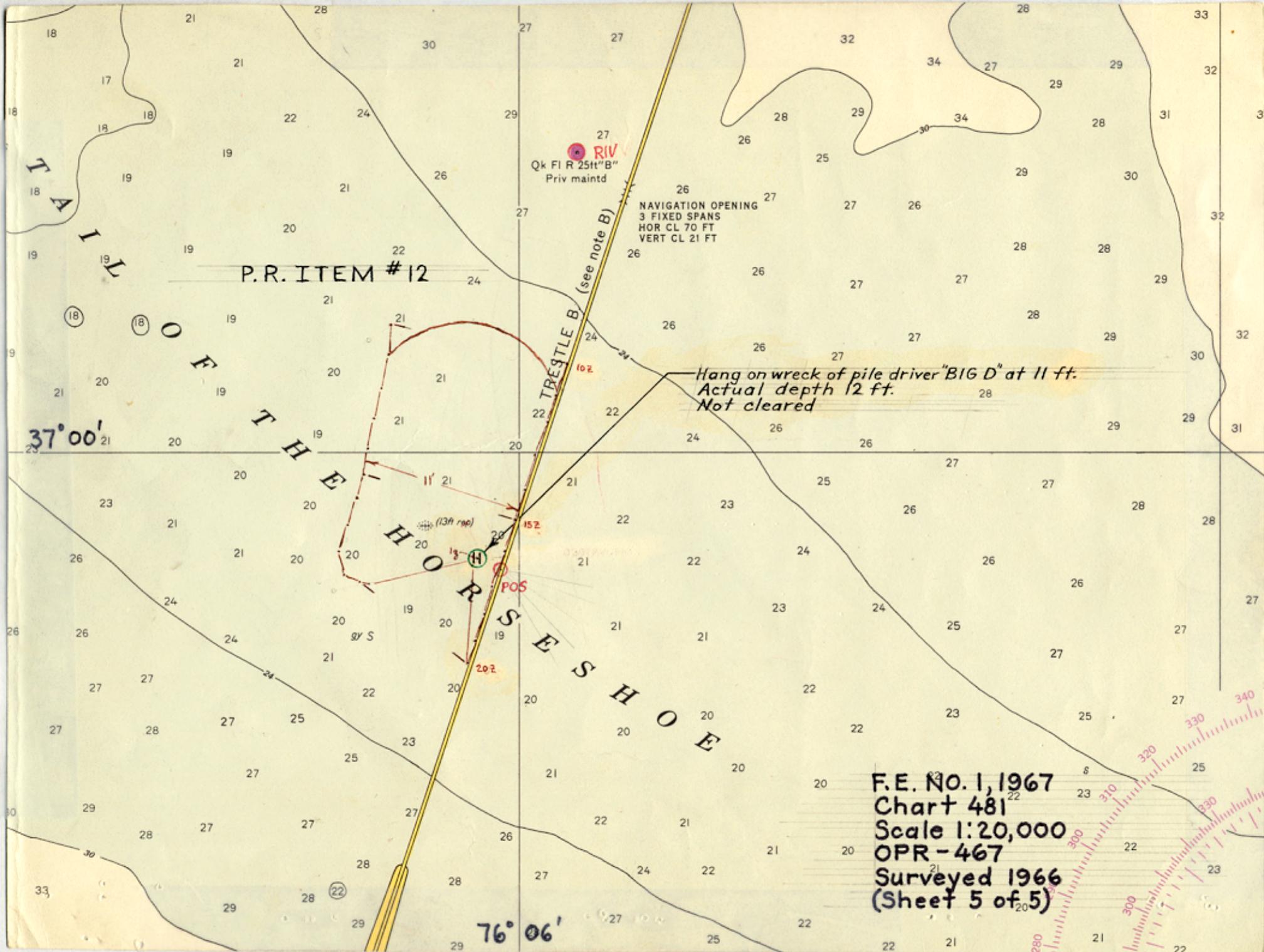
RESTRICTED AREA 204.50
(see note A)

F.E. NO. 1, 1967
Chart 562
Scale 1:40,000
OPR-467
Surveyed 1966
(Sheet 4 of 5)

ALLOUGHBY BANK

THIMBLE SHOAL CHANNEL
SOUTH AUXILIARY CHANNEL

THIMBLE SHOAL CHANNEL
SOUTH AUXILIARY CHANNEL



Qk Fl R 25ft "B"
Priv maintd

NAVIGATION OPENING
3 FIXED SPANS
HOR CL 70 FT
VERT CL 21 FT

P.R. ITEM #12

TRESTLE B (see note B)

Hang on wreck of pile driver "BIG D" at 11 ft.
Actual depth 12 ft.
Not cleared

37°00'

(13ft rap)

POS

76°06'

F.E. No. 1, 1967
Chart 481
Scale 1:20,000
OPR-467
Surveyed 1966
(Sheet 5 of 5)

Chesapeake Light (36°54.5'N 76°42.8')
 Weather Bureau Building, Cape Henry (36°55.8'N 76°00.5')
 Fort Monroe (37°00.1'N 76°18.5')
 Newport News (36°58.3'N 76°25.9')
 Norfolk, Royster Bldg. (36°50.9'N 76°17.5')
 Norfolk Navy Base, Pier 7 (36°57.1'N 76°19.9')
 Oyster (37°17.2'N 75°55.5')
 *Lafayette Yacht Club (36°53.3'N 76°16.9')
 Little Creek, Va. (36°55.1'N 76°10.5')
 *Seasonal

OR Tr. (WGH)
 1310 Kc (Night only)

NOTE A

Navigation regulations are published in Chapter 2, Coast Pilots 3 and 4, or subsequent yearly supplements and weekly Notices to Mariners. Copies of the regulations may be obtained at the office of the District Engineer, Corps of Engineers in Norfolk. Refer to section numbers shown with area designation.

OR TR (WGH)
 1310 Kc (Day only)

Mooring facility

NOTE C
 HAMPTON ROADS TUNNEL
 APPROACH SPANS
 HOR. CL 45 FT. AUTH.
 VERT. CL. 10 FT.

DISPOSAL AREA
 CLOSED TO NAVIGATION

RADIO TOWERS (WAVY)
 1350kc

F.E. No. 11967
W.D.



Chart - 1222

CAUTION
 Only marine radiobeacons have been calibrated for surface use. Radio direction-finder bearings to commercial broadcasting stations are subject to error and





**F.E.No.1-1967
W.D.**

Chart-78

