

# FE219

## WIRE DRAG

Diagrams 1116-3 & 1273-2

NOAA FORM 76-35A

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

### DESCRIPTIVE REPORT

Type of Survey ..... Wire Drag  
Field No. .... R/H-20-2-79  
Office No. .... FE-219WD  
(Previously designated  
FE No.2, 1979 W.D.)

#### LOCALITY

State ..... Louisiana  
General Locality ..... Gulf of Mexico  
Locality ..... Louisiana Offshore Oil Port

1979

CHIEF OF PARTY  
LCDR R.V. Smart

#### LIBRARY & ARCHIVES

DATE ..... May 5, 1980

FE219  
WIRE DRAG

HYDROGRAPHIC TITLE SHEET

FE-219 WD

~~F.E. No. 2, 1979~~  
(previously designated)

INSTRUCTIONS - 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.

R/H-20-2-79

State LOUISIANA

General locality GULF OF MEXICO

Locality LOUISIANA OFFSHORE OIL PORT

Scale 1: <sup>50,000</sup>~~20,000~~

Date of survey May 24 - July 31, 1979 & Aug. 2, 1979 - See Section M.2. of this report.

Instructions dated JANUARY 8, 1979

Project No. OPR-K630-RU/HE-79

Vessel RUDE (S590) and HECK (S591)

Chief of party LCDR. ROBERT V. SMART

Surveyed by LCDR. R.V. Smart, CDR. M.C. Grunthal, LCDR. R.S. Moody LT. D.A. Peterson, Ens. P. Connors

Soundings taken by echo sounder, hand lead, pole \_\_\_\_\_

Graphic record scaled by \_\_\_\_\_

Graphic record checked by \_\_\_\_\_

Protracted by \_\_\_\_\_

Automated plot by \_\_\_\_\_

Review Verification by M. B. Hickson, A.M.C.

Wire Drag GCLWD

Soundings in ~~fathoms~~ feet at ~~MLW~~ ~~MLLWX~~ ~~PREDICTED TIDES~~

*"Misc data filed with field records"*

*is considered complete*

REMARKS: Verification and Review of this field examination \_\_\_\_\_, no

further processing is planned, refer to the attached Review.

The following was removed from the Descriptive Report and filed with the field records:

Abstract of Electronic Correctors

Letter submitting Tide Gage Data.

Electronic Control Parameter Form

Letter of Tide Gage Removal

Projection Parameter Forms

Letter to Eighth Coast Guard District

Request for Predicted Tides

Project Instructions OPR-K630-

Letter to Continental Oil Co.

RU/HE-79 with Change No. 1

Photos of Tide Gage CAGC 47A

RWD 5/80

KWW 10/23/92

DESCRIPTIVE REPORT  
TO ACCOMPANY  
WIRE DRAG FIELD NO. 20-2-79  
PROJECT OPR-K630-RU/HE-79  
GULF OF MEXICO  
LOUISIANA OFFSHORE OIL PORT

I.

A. Authority

This project was authorized under Project Instructions OPR-K630-RU/HE-79, Wire Drag, LOOP, Gulf of Mexico, dated 8 January 1979.

B. Characters and Limits of Work

The project instructions called for the investigation of nine (9) items in the vicinity of the Louisiana Offshore Oil Port, Gulf of Mexico. All items were cleared to the required depth of 105' or greater, on a 1:20,000 scale boat sheet. <sup>↑</sup> All items were completed with no hangs encountered. *Item 157 was cleared by 104' - See the Review*

C. Control - ARGO Stations

The new ARGO DM54 system was the only electronic control used for the project. The units operated on a frequency of 1643 KHz, which provided a lane width of 91.196 meters. The two ARGO shore stations were located at:

R1 = RED = <del>H-1-LA-77</del> at Grand Isle, LA	}	GAULT RM NO. 3, 1979
Lat. 29°15' 25.671"N		
Long. 89°57' 41.081"W		
R2 = GREEN = H-5-LA-78 at Venice, LA	}	H-5-LA-78, 1978
Lat. 29°13' 42.6270"N		
Long. 89°23' 25.0142"W		

Radar ranges were recorded each fix, along with a bearing to the ships, thereby putting a limit on any lane ambiguity if one vessel's control remained good.

This command felt strong initial concern over the use of the ARGO site at Venice, LA (R2). This site is several miles inland and the ARGO signal had to pass over from 4.3 nm (at one of the items) to 6.25 nm (at the point where 3-point fix calibrations were made) of land. This land was composed of dry land and fresh and salt water marshes whose salinity changed depending on the stage of the tide, the run-off from the Mississippi River and the amount of local rainfall. This can be a significant problem since the speed of the ARGO signal is different over land and water and will vary according to the salinity of the water. Fortunately, however, this concern was found to be exaggerated and no major discrepancies could be traced to the location of the ARGO site. However, the use of this site may have contributed to minor discrepancies between 3 point ARGO calibrations off Grand Isle, LA and circle calibrations around two oil platforms (see the next section).

D. Shore Signals and Calibration

Initially the ARGO system was calibrated by three point fix calibration on the following shore signals:

~~GRAND ISLE FREEPORT SULPHUR CO MICROWAVE , 1966~~

~~G.I. Freeport Sulfur Microwave Tower (SAM)~~  
 Lat. 29° 15' 28.31005" N. X = 2437431.78  
 Long. 89° 57' 41.69767" W. Y = 217608.19

~~GRAND ISLE MUNICIPAL WATER TANK , 1963~~

~~G.I. Municipal Water Tank (MAT)~~  
 Lat. 29° 14' 28.65248" N. X = 2431862.86  
 Long. 89° 58' 45.37377" W. Y = 211515.49

~~GRAND ISLE HUMBLE OIL CO TANK, 1955~~

~~G.I. Humble Oil Co. Water Tank (HOT)~~  
 Lat. 29° 14' 44.601" N. X = 2432689.00  
 Long. 89° 58' 35.833" W. Y = 213136.34

~~GRAND ISLE CATC MICROWAVE MAST, 1966~~

~~G.I. CATC Microwave Mast (MUM)~~  
 Lat. 29° 15' 25.41609" N. X = 2436393.02  
 Long. 89° 57' 53.46448" W. Y = 217303.43

~~GRAND ISLE HUMBLE OIL CO COMMUNICATION TOWER, 1966~~

~~G.I. Humble Oil Co. Communication Tower (CAT)~~  
 Lat. 29° 15' 20.01314" N. X = 2435614.96  
 Long. 89° 58' 02.32206" W. Y = 216748.36

~~LIVINGSTON, 1966~~

~~Fort Livingston Light (LIV)~~  
 Lat. 29° 16' 22.29417" N. X = 2442482.32  
 Long. 89° 56' 43.93219" W. Y = 223122.36

~~RBN GRAND ISLE GNI, 1963~~

~~Aero Beacon West of G.I. (ARO)~~  
 Lat. 29° 11' 19.93035" N. X = 2402400.26  
 Long. 90° 04' 20.31337" W. Y = 192115.05

~~BEACH, 1979~~

~~Triangulation Station on West End of G.I. (TRY)~~  
 Lat. 29° 12' 06.448" N. X = 2413047.72  
 Long. 90° 02' 19.589" W. Y = 196936.94

All of the above stations were recovered by ships' personnel before use as calibration signals.

In addition, two oil platforms where horizontal control had previously been established were chosen to be used as sites for circle calibration. Recovery of the stations on these two platforms (CAGC-GI-48-D and SH-WD-152-A) was attempted by a party formed by personnel from AMC Operations and the NOAA Ships RUDE and HECK. Recovery of the actual stations proved impossible since the discs had been covered over by new helicopter landing decks. The station descriptions did provide sufficient information to determine the approximate position of the hidden stations. In both cases these positions were near (2-3 meters) a large vertical leg which supported the oil platform. These legs were marked with signal cloth and used as objects for circle calibration.

CATC 48 D, 1963 - 1979

The station established on oil platform ~~CAGC-GI-48-D~~ is located at:

Lat. 28° 57' 37.68359"N. X = 2412509.46      Signal 140 on H-9832 (1979)  
 Long. 90° 02' 36.80797"W. Y = 109165.40

SHELL WEST DELTA 152 A, 1975 - 1979

The station established on oil platform ~~SH-WD-152-A~~ is located at:

Lat. 28° 35' 13.422"N.      Signal 160 on H-9832 (1979)  
 Long. 89° 41' 59.227"W.

Comparison between Three Point Fix Calibration at Grand Isle, LA and Circle Calibration at Oil Platform CAGC-GI-48-D

22 May 79 - Three Point Fix Calibration:

RUDE - R1	R2	HECK - R1	R2
(1) <u>-0.04</u>	<u>-0.03</u>	<u>-0.25</u>	<u>0.00</u>
(2) <u>-0.05</u>	<u>-0.01</u>	<u>-0.17</u>	<u>+0.01</u>
(3) <u>-0.03</u>	<u>0.00</u>	<u>-0.15</u>	<u>-0.01</u>
Avg. <u>-0.04</u>	<u>-0.01</u>	<u>-0.19</u>	<u>0.00</u>

22 May 79 - Circle Calibration at 48D:

RUDE - R1	R2	HECK - R1	R2
(1) <u>-0.10</u>	<u>+0.01</u>	<u>-0.16</u>	<u>+0.11</u>
(2) <u>-0.10</u>	<u>+0.04</u>	<u>-0.15</u>	<u>+0.11</u>
Avg. <u>-0.10</u>	<u>+0.03</u>	<u>-0.16</u>	<u>+0.11</u>

A comparison between the Three Point Fix Calibration at Platform CAGC-GI-48-D shows a maximum variance of 0.06 lane for R1 and 0.11 lane for R2.

Comparison between Three Point Fix Calibration at Grand Isle, LA and Circle Calibration at Oil Platform SH-WD-152-A:

28 June 1979 - Three Point Fix Calibration:

RUDE - R1	R2	HECK - R1	R2
(1) <u>0.00</u>	<u>-0.01</u>	<u>+0.07</u>	<u>-0.02</u>
(2) <u>+0.06</u>	<u>-0.05</u>	<u>+0.10</u>	<u>-0.01</u>
Avg. <u>+0.03</u>	<u>-0.03</u>	<u>+0.09</u>	<u>-0.02</u>

28 June 1979 - Circle Calibration:

RUDE - R1	R2	HECK - R1	R2
<u>+0.03</u>	<u>+0.03</u>	<u>+0.14</u>	<u>-0.13</u>

A comparison between the Three Point Fix Calibration and the Circle Calibration shows a maximum variance of 0.05 for R1 and 0.11 for R2.

Comparison between Circle Calibration at Platform CAGC-GI-48-D and Platform SH-WD-152-A

21 June 1979 - CAGC-GI-48-D:

RUDE -	R1	R2		HECK -	R1	R2	
(1)	+0.05	+0.01	(Morning)		+0.02	+0.03	✓
(2)	+0.04	-0.03	(Evening)		+0.04	-0.03	

21 June 1979 - SH-WD-152-A:

RUDE -	R1	R2		HECK -	R1	R2	
(1)	+0.04	-0.17	(Morning)		+0.05	-0.16	✓
(2)	+0.08	-0.07	(Evening)		0.00	-0.25	✓

Note that although the calibrations at CAGC-GI-48-D were, by themselves, within limits and the calibrations at SH-WD-152-A were, by themselves, within limits, the difference between calibrations at the two platforms in the R2 rate is excessive. For this reason it was the command's decision always to open and close calibration on the same platform. It is possible that this discrepancy between calibrations at the two platforms is the result of the location of the ARGO station at Venice, although there is no positive proof. *Concur*

E. ARGO Lane Loss

There was only one instance of lane loss throughout the entire project and it caused no loss of acceptable survey data. The lane loss occurred aboard the HECK during severe electrical activity about 25 miles offshore. The RUDE suffered no lane loss during the electrical activity. During this electrical storm the RUDE was using an ARGO Smoothing Code of 2 and the HECK a Smoothing Code of 0.

After this incident, it was decided that both ships would use a Smoothing Code of 2 except at anchor with possible severe weather approaching, when a higher Smoothing Code would be used. No other lane loss occurred throughout the remainder of the survey even though severe electrical activity was encountered repeatedly.

F. Survey Dates

The ships arrived in Grand Isle, LA on 8 May 1979. Because of problems in obtaining permission for installation of our ARGO shore station sites, recovery of stations on Towers 48-D and 152-A, installation of a tide gauge on Tower CAGC-GI-47-A and various other setbacks, actual wire drag operations did not begin until 24 May 1979. The project was completed on 31 July 1979.

G. Tide Reducers

Field processing of the daily work was completed, using predicted tides for the reference station at Pensacola, FL, with the following correctors applied:

Items East of Long. 89°41'W:  
(Items 160 and 161)

<u>High Water</u>	<u>Low Water</u>	<u>Ratio</u>
-2 hrs, 22 min.	-2 hrs, 21 m.	0.92

Items West of Long. 89°41'W:  
(Items 154,155,156,157,158,159 & 162)

<u>High Water</u>	<u>Low Water</u>	<u>Ratio</u>
-2 hrs, 12m.	-2 hrs, 8 m.	0.92

#### H. Junctions and Splits

There were no junctions during this project, and although there were no splits as defined in the Ulm, Wire Drag Manual, it has been the practice in the past to overlap the outside of the 1-mile position circle by 400 feet as described in the above manual for work at 1:20,000 scale. This "unwritten rule" was again carried out on all items except Item 155. On the western-most portion of this 1 NM radius circle, several oil platforms were encountered. Because the closest tower to the circle was approximately 600 feet outside the circle, due caution was exercised when dragging this section and overlap of about 100 feet outside the circle was obtained. It was the command's decision that this was sufficient, since no large tanker would approach any closer to these towers. *Concur*

#### I. Incomplete Items

All items assigned to this project were completed.

#### J. Current and Winds

All drags were set up to take maximum advantage of favorable currents and winds. Most currents encountered were steady and seldom exceeded 1/2 knot in velocity. However, heavy run-off from the Mississippi River caused severe westerly rip currents in the vicinity of several items. These currents were easily recognized by the difference in color caused by the sediment suspended in the run-off water. These currents, often in excess of 2 knots, migrated in a north/south direction and their location was unpredictable. If these currents were encountered during a drag, the drag would eventually have to be aborted because of loss of horizontal control and excessive lifts.

All drags were conducted in conditions of calm or light winds for two reasons. First, winds in excess of 15 knots make a drag impossible to control unless the wind is from astern and second, winds in excess of 15 knots will create seas of 3'-4', which will usually prohibit effective wire drag operations.

#### K. Diving Procedures

Divers were not needed during this survey because no hangs were encountered.

## L. Testing

Testing results were recorded in both the rough and smooth tester volumes. The rough tester records are actual height of the mark on the tester pole after pick-up. In the smooth tester volume, the test is recorded corrected to the tester wire length. The smooth tester record shows the actual lift and sag. In the smooth test record an asterisk (\*) next to the section indicates the test came from the HECK's Launch 20.

Definition of a Sag Miss (SM): A test in which the tester rod has definitely been thrown in ahead of the ground wire, picked up after the ground wire has passed, yet has no marks on the pole. The wire is assumed to have passed underneath the tester rod and the test is considered valid.

## M. General Notes

1. The strip chart (sawtooth) recorder used with both ARGO and Raydist systems, provides a very valuable record. It not only helps to resolve possible lane ambiguities by providing a continuous record of the lane counts, it also provides information on the path of the ships between fixes and in the case of wire drag provides an immediate visual clue in the event of a hang (the trace immediately flattens out). The sawtooth record can be analyzed after a drag is completed to insure that overlap requirements are met at all points during a drag. Unfortunately, the recorders provided with the RUDE and HECK's ARGO systems are the older Raydist recorders. They cannot be interfaced properly with the ARGO system and all fixes must be recorded manually. This in itself is a minor problem; however, it creates a major problem. The signal fed to the sawtooth recorder from the ARGO is a processed signal and lags behind the actual ARGO rates by from 0.05 to 0.10 lane. This introduces an error into the sawtooth record which cannot be resolved.

2. The NOAA Ship MT MITCHELL requested that the RUDE & HECK investigate two items within her project area by wire drag. These items were said to be capped off well heads showing least depths of 15 fm and 22 fm. They were shown on Chart 11340 at Latitude 28°44.3'N, Longitude 89°44.2'W and Latitude 28°44.0'N, Longitude 90°03.3'W respectively. Both of these items are described as submerged wells in the Coast Guards Listing of Offshore Oil Well Structures and Submerged Wells in the Eighth Coast Guard District. The first, SH-WD-134-A, is stated to be located at Latitude 28°44'09"N, Longitude 89°44'19"W, covered by 90' of water and marked by an unlighted buoy. The second, SH-GI-75-1, is said to be located at Latitude 28°44'02"N, Longitude 90°03'55"W, covered by 133' of water and marked by an unlighted buoy.

*see Review para 6.a.2. of the present survey. Chart present survey information.*

Communications with Marine Requirements, C351, determined that it was unnecessary to investigate submerged well SH-GI-75-1 since it was well below the 105' depth to which the LOOP wire drag investigations (OPR-K630-RU/HE-79) were being conducted. In addition, it was deemed inadvisable to wire drag the remaining item since ship's personnel felt that

40 SH-GI-75-1 See V.R. H-9832 (79) para. 7.a.1. Retain as charted.  
SH-WD-134-A " " " para. 7.a.2, also

the wire might damage the wellhead, releasing oil into the water. Also, SH-WD-134-A is located near an operating oil platform, SH-WD-134-D, in an area of known strong currents. (See Section J).

Therefore, on August 2, 1979, (JD 214) between 1810Z and 1855Z, a limited hydrographic investigation was conducted on submerged well SH-WD-134-A. Control used was visual bearings and radar ranges supplemented by LORAN-C (Chain SL-2). Bearings were taken to the SW corner of Oil Platform SH-WD-134-D and Oil Platform SH-WD-122-C and radar ranges were also taken to these same objects. The above referenced Coast Guard listing gives the position of SH-WD-134-D as Latitude 28°44'04"N, Longitude 89°44'07"W and the position of SH-WD-122-C as Latitude 28°45'05"N, Longitude 89°42'30"W. No marker buoy was found, therefore the RUDE ran three short lines (Pos 1a-1c, 2a-2c and 3a-3c). An indication of a shoal was detected between positions 2a and 2b. Therefore, the ship returned to this area and took detached positions 4, 7 and 8 in addition to running the two position line 5a-5b.

Plots of the positions were made using both visual and LORAN-C as control. The LORAN-C positions are doubtful and should be used only for reference - the LORAN-C was used principally to initially position the ship and provide guidance for the lines.

Indications of the submerged well were found on the fathogram between positions 2a and 2b, between 5a and 5b, and at positions 4, 7 and 8. The least depth found was ~~13.2~~ fm (unadjusted for tides) at position ~~4~~?  
13.8 (adjusted for draft)

Two overlays were plotted. One used SH-WD-134-D as a reference point and plotted all positions based on distances and bearings from this point. The second used LORAN-C as the reference and plotted all positions based on LORAN-C readings. Filed with field records

*This data is contained in the survey records in an envelope appropriately annotated. As the position control is unsatisfactory and there is no Tidal data (smooth) this information is of questionable value in charting. See the Review.*

3. Relative pen lengths were entered on each strip chart record by means of a rubber stamp to aid in interpreting the strip chart record.
4. All buoy and tester uprights were personally verified correct by the Officer-in-Charge before the project began.
5. The areas covered by drags on H-day and N-day were entirely redragged even though usable data had been obtained. On H-day a strong current was encountered (see Section J), which made vessel control nearly impossible and which eventually caused the drag to be aborted due to excessive lifts. This area was redragged on P-day. On N-day winds associated with a thunderstorm made vessel control difficult and eventually caused excessive lifts. This area was redragged on Q-day.

#### N. Discrepancies and Comparisons with Recent Charts.

Any discrepancies and comparisons with recent charts are either noted in the recommendations section of the item description at a later time in this report, or have been submitted as Coast Pilot changes.

*Incomplete - See the Review*

O. Personnel and Equipment

Throughout the project the RUDE was the guide vessel and the HECK was the end vessel. Control was the ARGO DM-54 system in the Range-Range Mode.

Both vessels are equipped with a Raytheon DE-723 fathometer for reconnaissance hydrography and detached positions on items.

Again, the new Decca radars enabled the ships to limit any lane ambiguity between vessels on each fix. Both of the ships' Bristol launches were used as drag tenders. Bearings to the opposite vessel and the end buoys were made on Sperry Gyro Repeaters. Standard wire drag equipment was used throughout the project.

The officers participating in the survey were: LCDR R.V. Smart, LCDR M.C. Grunthal, LCDR R.S. Moody, LT D.H. Peterson and ENS P.M. Connors.

P. Miscellaneous

For the purpose of smooth plotting tides for this survey, a standard pressure recording bubbler tide gauge was installed in the immediate vicinity of the working grounds. Tide Gauge #876-1689 was installed on Continental's oil rig tower CAGC-GI-47-A (Lat. 28°56'42"N, Long. 90° 01'51"W) on 14 May 1979. It was removed on 4 July 1979 after receiving permission from the Tides and Water Level Division in Rockville. All tide gauge records were submitted to Tides and Water Level Division, Rockville, for processing.

Q. Approval

All records of this survey, including the smooth plots, except for the addition of the effective depths (which must await smooth tides) and the drafting of a composite A&D sheet, are hereby approved. The field work was personally supervised by the undersigned. The boat sheets and records were inspected daily. This survey is considered complete and adequate for charting.

*M.C. Grunthal*

M. C. Grunthal, CDR, NOAA  
Commanding Officer  
NOAA Ships RUDE & HECK

## II.

A. Statement on Item 154

This PA item originates with Notice to Mariners 50 of 1961. The item is described as a trawler sunk in 124 feet of water at Lat. 28°52'N and Long. 89°59'W.

B. Groundings or Hangs

None.

C. Noted Occurrences During the Survey

On A-day (24 May) initial coverage of this item was accomplished. The one drag covered the middle third of the position circle with no less than ~~107 1/2~~ feet effective. ~~based on predicted tides~~. On B-day (4 June) two well controlled drags were accomplished on this item leaving a small holiday due to insufficient overlap. E-day (7 June) completed this item by dragging the small holiday previously mentioned.

D. Summary

This item was thoroughly investigated with no hangs encountered throughout the 1-mile radius position circle. The least effective depth ~~(based on predicted tides)~~ for this item was ~~107 1/2~~ feet.

108

E. Recommendations

Since project instructions required only that the item be cleared to 105 feet, the existence of the item was not disproved, but it is recommended that a symbol showing that the item has been cleared to ~~107~~ feet ~~(based on predicted tides)~~ by wire drag be placed on the chart. <sup>108'</sup>

*(The reported position was cleared by 108')*

## III.

A.(1) Statement on Item 155

This PA item charted in the vicinity of Lat. 28°49'03"N and Long. 89°45'49"W, originates with Notice to Mariners 49 of 1965. The obstruction is not described, but was reported at five (5) fathoms.

A.(2) Statement on Item 156

This dangerous submerged obstruction (16 fathoms reported), charted at Lat. 28°48'54"N and Long. 89°46'18"W, originates with Notice to Mariners 42 of 1965. The obstruction is described as a collapsed oil well structure with a least depth of 100 feet.

B. Groundings or Hangs

None.

C. Noted Occurrences During the Survey

The 1-mile radius circle required for item 155 completely encompasses the 1/2 mile radius circle required of item 156. Both items are described together here because area coverage of item 155 also completes item 156.

Initial coverage of these items occurred on H-day (20 June). The drag (although theoretically acceptable) was not well controlled and eventually had to be aborted due to excessive lifts (previously mentioned in M - General Notes). On M-day (17 July) coverage of the eastern third of the circle was accomplished with good results, and on P-day (30 July), the

other 2/3rds of the circle was accomplished with one large (12,000 foot) drag.

D. Summary

Both items were completed with no hangs encountered. The least effective depth within the position circle was 107 feet, ~~based on predicted tides.~~

E. Recommendations

Since project instructions required only that both items be cleared to 105 feet, the existence of these items was not disproved. It is recommended, however, that a symbol showing a cleared depth of 107 feet (~~based on predicted tides~~) by wire drag be assigned to both of these items.

*(The reported positions of both items were cleared by 110')*

IV

A. Statement on Item 157

Item 157 is a pipe, PA, charted at Lat. 28°42'00"N and Long. 89°<sup>58'</sup>~~50'~~30"W, originating with Notice to Mariners 39 of 1964. The obstruction is described as a 16 inch pipe extending 3 feet above the water.

B. Groundings or Hangs

None.

C. Noted Occurrences During the Survey

Item 157 was initially started with two drags on C-day (5 June), both drags covering 1/3 of the position circle. The remaining 1/3 of the 1-mile radius circle was completed on D-day (6 June).

D. Summary

This item's position circle was accomplished with no hangs and a least effective depth of ~~105 1/2 feet, based on predicted tides.~~

<sup>104'</sup> *(one small area in the southeast radial portion of the one mile radius circle had an effective depth of 104')*

E. Recommendations

Since project instructions required that the item be cleared to 105 feet, the existence of this pipe is not disproven. However, it is recommended that a symbol showing that the item has been cleared to ~~105 feet (based on predicted tides)~~ by wire drag be assigned.

<sup>104'</sup> *(The reported position was cleared by 108')*

V.

A(1) Statement on Item 158

This dangerous submerged obstruction, charted in Lat. 28°43'54"N and Long. 89°50'30"W, originates with Notice to Mariners 50 of 1965. The obstruction is described as a partially submerged section from an oil rig.

A(2) Statement on Item 159

Item 159 is a dangerous submerged obstruction, PA, charted in Lat. 28°43'30"N and Long. 89°50'W. It originates with Notice to Mariners 40 of 1968, and is described as a collapsed oil rig.

B. Groundings or Hangs

None.

C. Noted Occurrences During the Survey

The 1-mile radius circle originating from Item 159 covers almost the entire 1/2 mile radius circle originating from Item 158. For this reason these items were treated as a single item and both items are discussed together.

These items were initially started on F-day (18 June) with a drag covering the center 1/3 of the 1-mile radius position circle of item 159. The items were completed with two drags on G-day (19 June) that covered both the Western 1/3 and Eastern 1/3 of the above mentioned circle. *2 days*

D. Summary

Both items position circle were adequately dragged with no hangs. The least effective depth during their investigation was 105 ~~72~~ feet, ~~based on predicted tides.~~

E. Recommendations

Since the project instructions required only that the items be cleared to 105 feet, the existence of both items was not disproved. However, it is recommended that a symbol showing a cleared depth of 105' feet ~~(based on predicted tides)~~ by wire drag be assigned to both item 158 and 159.

*(The reported position of item 158 was cleared by 109')  
(The reported position of item 159 was cleared by 105')*

VI.

A. Statement on Item 160

This item originates with Notice to Mariners 40 of 1968, located at Lat. ~~28°43'39"~~ 28°47'39" N and Long. ~~89°59'33"~~ 89°53' W. It is a dangerous submerged obstruction, PA, described as the remains of a collapsed oil rig.

B. Groundings or Hangs

None.

C. Noted Occurrences During the Survey

This item was initially investigated on N-day (18 July) with a 12,000 foot drag. However, as thunderstorms approached, variable winds of 15+ knots made control impossible and excessive lift resulted. The entire 1-mile radius position circle was completed with 2 drags on Q-day (31 July).

D. Summary

This item was thoroughly investigated with no hangs encountered. The least effective depth for this item's 1-mile radius position circle was 107' feet, ~~based on predicted tides.~~

E. Recommendations

Since project instructions required only that the item be cleared to 105 feet, the existence of this item was not disproved; however, it is recommended that a symbol showing a cleared depth of 107' feet ~~(based on predicted tides)~~ by wire drag be assigned to this item.

*(The reported position was cleared by 107')*

VII.

A. Statement on Item 161

This dangerous submerged obstruction, PA, charted at Lat. 28°36' N and Long. 89°38' W, originates with Notice to Mariners 43 of 1972.

B. Groundings or Hangs

None

C. Noted Occurrences During the Survey

This item was initially investigated on J-day (21 June) with a 12,000 foot drag and completed with another drag of 8,800 feet on K-day (28 June).

D. Summary

Item 161's 1-mile radius position circle was thoroughly investigated with no hangs encountered. The least effective depth for this item was 106<sup>1/2</sup> feet, ~~based on predicted tides.~~

E. Recommendations

Since project instructions required only that the item be wire dragged to 105 feet, the existence of this obstruction was not disproved, however, it is recommended that a symbol showing a cleared depth of 106<sup>1/2</sup> feet ~~(based on predicted tides)~~ by wire drag be assigned to item 161.

(The reported position was cleared by 106')

## VIII.

A. Statement on Item 162

Item 162 is described as a 20 fathom shoal, PA, reported at Lat. 28°28'N and Long. 89°51'W. The shoal originates with Notice to Mariners 37 of 1975, and Chart Letter 155 of 1975.

B. Groundings or Hangs

None.

C. Noted Occurrences During the Survey

This item's 1-mile radius position circle was initially investigated on L-day (9 July) with a 12,000 foot drag. Item 162 was completed on M-day with another 12,000 foot drag. It should also be noted, that although a thorough hydrographic (depth sounding) survey of the area was not performed, the ships' fathometers indicated a least depth of 92 fathoms in this area. This agreed with the hydrographic survey of 1936.

→ These fathograms were not included with the survey records.

D. Summary

This item's 1-mile radius position circle was thoroughly investigated with no hangs or groundings encountered. The least cleared depth for this item's position circle was 106<sup>1/2</sup> feet, ~~based on predicted tides.~~

(only a very small portion in the north-northwest radial of the 1 mile radius circle was cleared by less than 108')

E. Recommendations

Since project instructions only required that a cleared depth of 105 feet be obtained, the existence of this 20 fathom shoal was not disproved. However, it is recommended that a symbol showing a cleared depth of 106<sup>1/2</sup> feet ~~(based on predicted tides)~~ by wire drag be assigned to item 162.

(The reported position was cleared by 109')

DATE	DAY LETTER	STRIP	VOL. #	POSITIONS	L.N.M.	S.N.M.	RED CORR. (R1)	GREEN CORR. (R2)	LENGTH OF DRAG	SMOOTH PLOT	REMARKS
24 May (144)	A	1	I	32	3.1	2.8	+050 -.01	+06 +.06	7200	Yes	Initial coverage Item 154 HECK
4 June (155)	B	1	I	26	2.9	2.3	+01 +.02	+05 -.03	6400	Yes	95% of Item 154 completed - a small holiday left
5 June (156)	C	1	I	30	2.8	2.5	+02 +.07	+05 -.02	7200	Yes	Initial coverage Item 157 Additional coverage Item 157
6 June (157)	D	1	II	64	3.2	3.2	+01 +.05	+05 -.01	8000	Yes	Completed Item 157
7 June (158)	E	1	II	18	1.5	1.1	+04 -.03	+02 -.11	3200	Yes	Completed Item 154
18 June (169)	F	1	II	29	2.9	2.6	+06 +.06	-.02 -.02	7200	Yes	Initial coverage Items 158 & 9
19 June (170)	G	1	II	28	2.9	2.6	+07 +.06	+01 +.01	7200	Yes	Completed Items 158 & 159 " " " " "
20 June (171)	H	1	III	35	2.6	2.6	+05 +.07	+03 -.02	7800	Yes	Initial coverage Items 155&6
21 June (172)	J	1	III	45	3.2	4.6	+04 +.03	-.01 +.00	12K	Yes	Initial coverage Item 161
28 June (179)	K	1	III	41	2.9	3.5	+07 +.15	-.04 -.10	8800	Yes	Completed Item 161
9 July (190)	L	1	III	56	3.0	4.8	+05 -.05	+04 +.01	12K	Yes	Initial coverage Item 162
17 July (198)	M	1	IV	33	2.8	2.9	+05 +.02	+02 +.05	7800	Yes	Additional coverage Item 155 Completed Item 162
18 July (199)	N	1	IV	20	1.3	2.1	+12 -.02	+09 +.12	12K	Yes	Initial coverage Item 160
30 July (211)	P	1	V	41	2.9	4.4	+06 +.01	+01 -.01	12K	Yes	Completed Items 155 & 156
31 July	Q	1	V	24	2.8	4.2	+04 +.02	+05 +.02	12K	Yes	Additional coverage Item 160 Completed Item 160
		2	V	22	2.6	2.9			8800	Yes	

ATTACHMENT III

G.P.s of Shore Stations used for Three  
Point Fix and Circle Calibrations

Three Point Fix:

Grand Isle Freeport Sulfur Microwave Tower (SAM)	Lat. 29° 15' 28.31005" N. Long. 89° 57' 41.69767" W.
G.I. Municipal Water Tank (MAT)	Lat. 29° 14' 28.65248" N. Long. 89° 58' 45.37377" W.
G.I. Humble Oil Co. Tank(HOT)	Lat. 29° 14' 44.601" N. Long. 89° 58' 35.833" W.
G.I. CATC Microwave Mast (MUM)	Lat. 29° 15' 25.41609" N. Long. 89° 57' 53.46448" W.
G.I Humble Oil Co. Communication Tower (CAT)	Lat. 29° 15' 20.01314" N. Long. 89° 58' 02.32206" W.
G.I. Humble Oil Co. Radio Mast (HOR)	Lat. 29° 15' 19.221" N. Long. 89° 58' 01.866" W.
Fort Livingston (LIV)	Lat. 29° 16' 22.29417" N. Long. 89° 56' 43.93219" W.
Aero-Beacon West (ARO)	Lat. 29° 11' 19.93035" N. Long. 90° 04' 20.31337" W.
G.I. West Triangulation Station (TRY)	Lat. 29° 12' 06.448" N. Long. 90° 02' 19.589" W.
Circle Calibration:	
OIL RIG CAGC 48-D	Lat. 28° 57' 37.68359" N. Long. 90° 02' 36.80797"W.
OIL RIG SH-WD-152-A	Lat. 28° 35' 13.422" N. Long. 89° 41' 59.227" W.

~~GAULT R.M. 3~~  
~~LAT. 29-15-25.6~~

DESCRIPTION OF TRIANGULATION STATION

ATTACHMENT III

NAME OF STATION: H-1-LA-77

STATE: LA

COUNTY: Jefferson

CHIEF OF PARTY: J.D.S.

YEAR: 1977

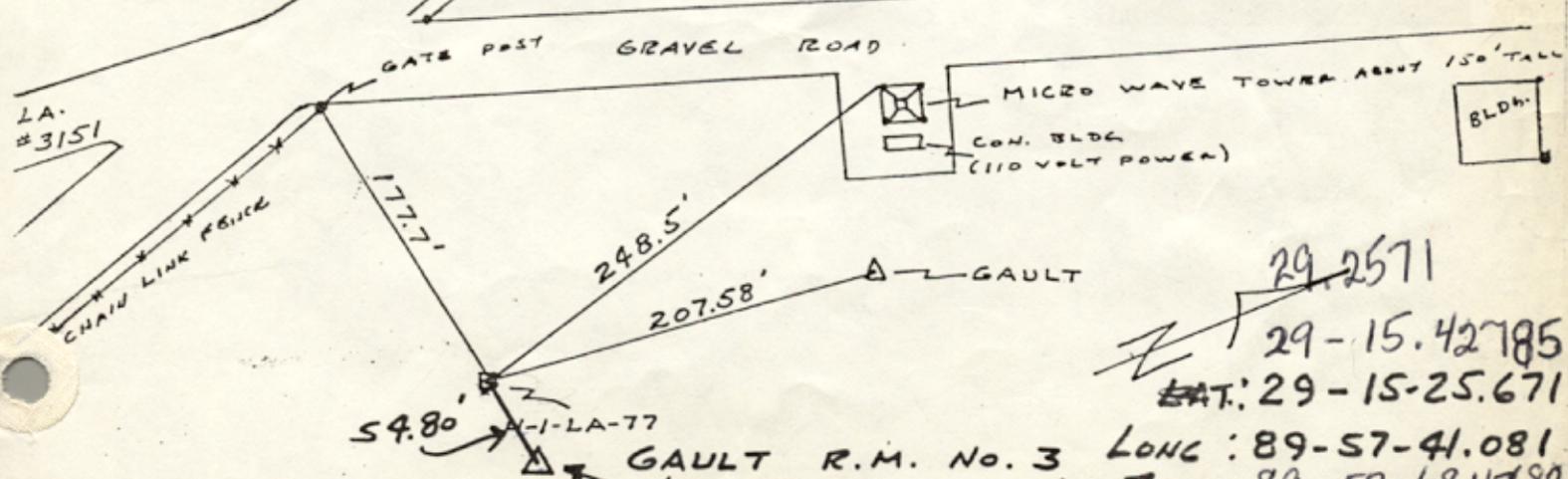
DESCRIBED BY: J.D.S.

NOTE.*	HEIGHT OF TELESCOPE ABOVE STATION MARK		METERS,†		HEIGHT OF LIGHT ABOVE STATION MARK		METERS.	
	SURFACE-STATION MARK, UNDERGROUND-STATION MARK		DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION					
	OBJECT		BEARING	DISTANCE		DIRECTION‡		
				FEET	METERS			
	GAULT		N	207.58		00	00	00
	GAULT R.M. 2		NNW	188.59		335	00	04
	X= 2,437,436.54							
	Y= 217,356.04							

Detailed description:

This station is located on property of the FREEPORT SULPHUR CO. at the Grand Isle, LA. Base Station which is about 0.5 mile southwest of the Coast Guard Station at Grand Isle. Permission to install a raydist station was obtained from Mr. Edward McNamara, 821 Gravier, Commerce Bldg., P.O. Box 61520, New Orleans, LA 70161. 110 volt electric power is available from the small building just south of the micro wave tower. Contact the base foreman at the operations building for power information. The station is a 3 inch aluminum disk stamped H-1-LA-77 1977 secured to the top of a one inch aluminum rod that is flush with the ground.

NOTE: GAULT R.M. 3 WILL BE THE ARGO STATION. IT IS A STANDARD N.G. REFERENCE MARK DISK (3 1/2" BRONZE DISK SECURED TO THE TOP OF A STEEL ROD FLUSH WITH THE GROUND) IT IS STAMPED GAULT NO. 3 1977.   
 LA. HGV. #1  
 PARKING STAMPED



\*Refers to notes in manuals of triangulation and state publications of triangulation. †Direction-angle measured clockwise, referred to initial station. ‡To nearest meter only, when no trigonometric leveling is being done.

29-25-71  
29-15-42-785  
LAT: 29-15-25.671  
LONG: 89-57-41.081  
89 57.684683  
89.9614

R<sub>1</sub>

LOUISIANA DATA  
NORTH= 0  
SOUTH= 1  
OFFSHORE= 2  
WHAT ZONE?  
SOUTH ZONE  
LOADED

GRID>>GEO= 0  
GEO>>GRID= 1  
WHICH WAY?  
>>>>STATION<<<<

TITUDE=  
DEG= 29  
MIN= 15  
SEC= 25.6210

NGITUDE=  
DEG= 89  
MIN= 57  
SEC= 41.0810

COORD.=  
X= 2437489.59

COORD.=  
Y= 217942.30

CONVERGENCE=  
DEG= 0  
MIN= 41  
SEC= 9.5222

1 Feb 88

28 Feb 88 - PC

28 Feb 88 - PC

1 Feb 88

29° 2285075  
 φ 29° 13.71045'

STATION DESCRIPTION - SHORT FORM

U.S. DEPARTMENT OF COMMERCE  
 NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.  
 U.S. COAST AND GEODETIC SURVEY

89-390268-172  
 89° 23.416903'

DRC CODE: D \*11\*QUAD: N290892 QSN: \*12\*SURF MK TYPE: D03 M CODE: \*13\*UNDERGROUND MK TYPE: M CODE: \*15\*STATE CODE/COUNTY: LA LA PLAQUEMINES  
 STATION NAME: S LA 78  
 E/MONUMENT BY AGENCY: NOS \*21\*YEAR: 1978 CHIEF OF PARTY: PCM \*22\*MARKER TRANSP PACK TYPE: D CODE: P TIME: 00 HRS, 10 MIN \*23\*HGT OF TELESCOPE: 1.6 METERS  
 RECOVERY BY AGENCY: \*25\*YEAR: CHIEF OF PARTY: \*26\*CONDI- TRANSP PACK TION: CODE TIME: HRS, MIN \*27\*HGT OF TELESCOPE: METERS

MARK PE	CODE	NAME OR DESCRIPTION OF REFERENCE OBJECT (edit and/or abbreviate as necessary)	COM- PASS HDNG	MEASURED DISTANCE		A if approx distance		DIRECTION	
				H-hor, S-slope, V-VG, N-not VG IN FEET	IN METERS	OTHER-THAN-MEASURED DISTANCE WITH UNITS	tenths of SEC DEG MIN SEC		
		φ 29° 13' 42.6270 "THIRD ORDER"							
		λ 89° 23' 25.0142							

\$. - append \*30\*\$\$ to indicate end of reference data. NOTE - Use V (VG) or N (not VG) for objects to which measured distance is not given.

\*\*\*\*\* ORIGINAL OR RECOVERY DESCRIPTIVE TEXT \*\*\*\*\*

THE STATION IS LOCATED 3.7 MILES SOUTH WEST OF VENICE AT THE GETTY OIL REFINERY.

TO REACH THE STATION FROM THE VENICE COAST GUARD BASE, GO NORTHWEST ON PAVED ROAD FOR 0.6 MILE TO A T-INTERSECTION. TURN LEFT AND GO SOUTHWEST ON PAVED ROAD FOR 2.3 MILES TO A SIDE ROAD LEFT. TURN LEFT AND GO SOUTHEAST AND SOUTH FOR 0.25 MILE TO A GATE AND LARGE METAL BUILDING ON THE RIGHT. THE STATION IS SOUTH WEST OF THIS BUILDING.

THE STATION IS A NOS DISK STAMPED, H-S-LA-78 1978, AFFIXED TO THE TOP OF A 1 X 30 INCH ALUMINUM PIPE, CEMENTED IN THE GROUND, E.L.S.H. IT IS 151.5 FEET NORTHEAST OF A FENCE CORNER, 149 FEET SOUTHEAST OF A PIPELINE VALVE, 106.9 FEET SOUTH-SOUTHWEST OF A FENCE CORNER AND 91.4 FEET WEST OF A FENCE.

\$. - insert \*40\*\$ between paragraphs and append \*40\*\$\$ to indicate end of descriptive text. NOTE - Do not divide words between records.

ATTACHMENT III

R2

GRID>>GEO= 0  
GEO>>GRID= 1  
WHICH WAY?  
>>>STATION<<<<

WRONG CODE

X COORD.?

GRID>>GEO= 0  
GEO>>GRID= 1  
WHICH WAY?  
>>>STATION<<<<

LATITUDE=  
DEG= 29  
MIN= 13  
SEC= 42.6270

LONGITUDE=  
DEG= 89  
MIN= 23  
SEC= 25.0142

X COORD.=  
X= 2619777.64

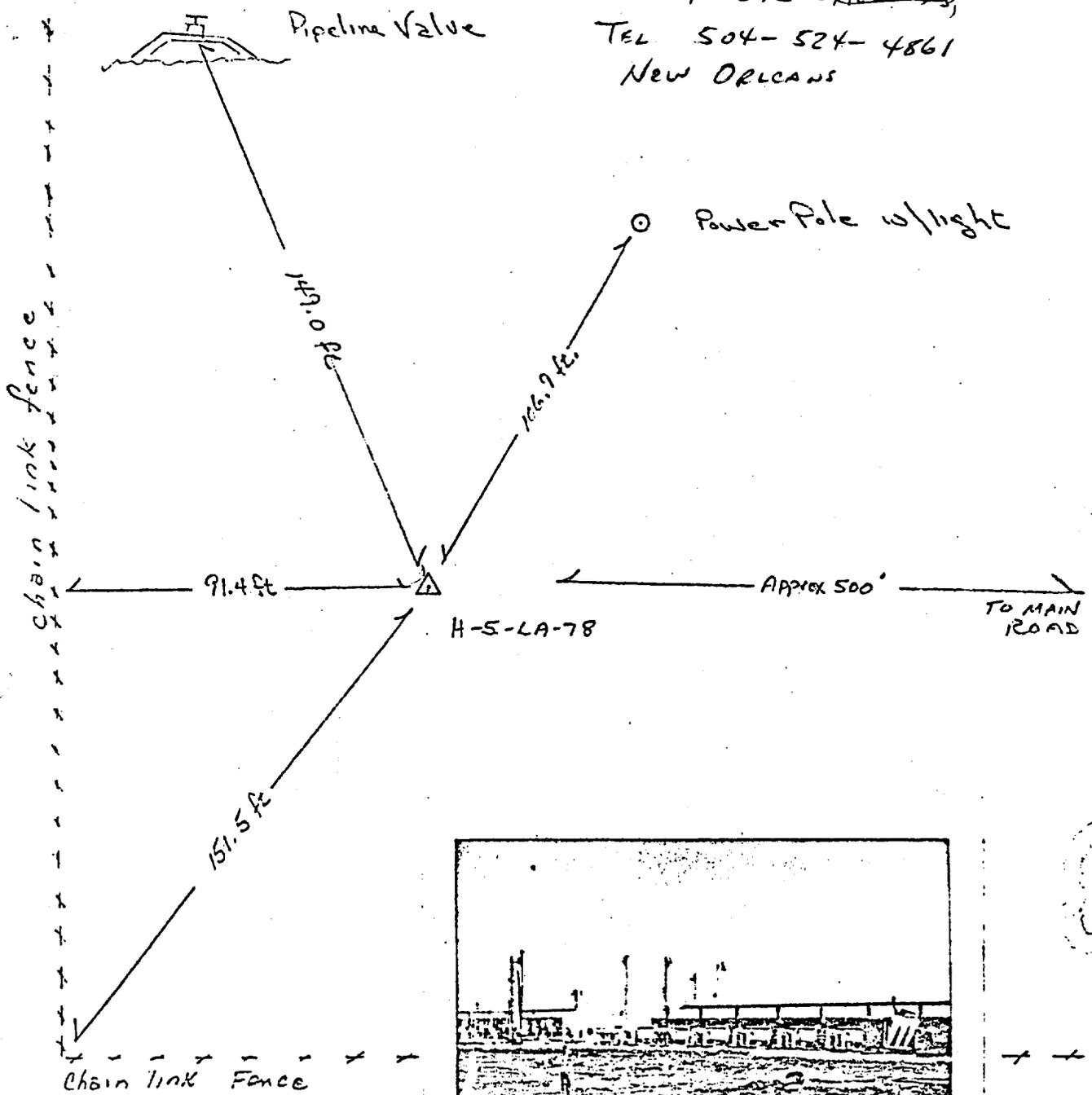
Y COORD.=  
Y= 209569.63

CONVERGENCE=  
DEG= 0  
MIN= 58  
SEC= 17.5817

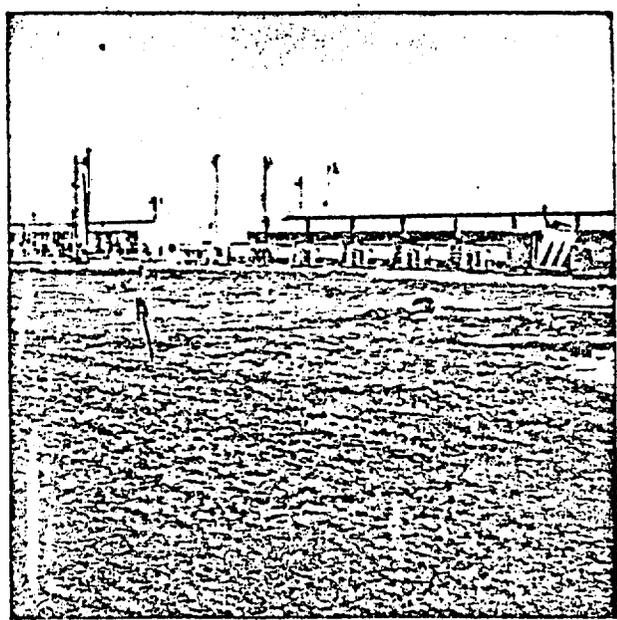
SCALE FACTOR=

Alternate R2

MR. PAUL ELLINGTON  
GERTY OIL ~~FIELD~~,  
TEL 504-524-4861  
NEW ORLEANS



LARGE BUILDING w/ DRIVE



SLUC

H-E-LA-78

TEST

Alternate R<sub>2</sub>

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

November 15, 1979

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for Form 362

Tide Station Used (NOAA Form 77-12): 876-1689 Continental Tower, LA, CAGC GI 47A  
876-1720 Grand Isle, LA

Period: May 24 - July 31, 1979

HYDROGRAPHIC SHEET: R/H 20-2-79

OPR: K630

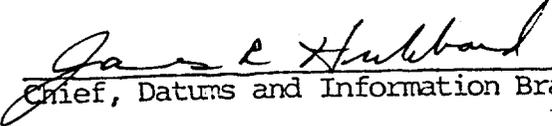
Locality: Gulf of Mexico

(Gulf Coast Low Water Datum): 3.6 ft. - Continental Tower  
(to 6/4, 1700 Hrs.)  
Plane of reference ~~(mean lower low water)~~ 2.4 ft. - Continental Tower  
(from 6/4, 1800 Hrs.)  
5.06 ft. - Grand Isle  
Height of Mean High Water above Plane of Reference is  
1.3 ft.

REMARKS: Recommended zoning:

For May - June 1979 zone direct on Continental Tower

For July zone direct on Grand Isle.

  
Chief, Datums and Information Branch

HYDROGRAPHIC SURVEY STATISTICS

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET		7	BOAT SHEETS & PRELIMINARY OVERLAYS		1-Cahier 20-WD Strips	
DESCRIPTIVE REPORT		1	SMOOTH OVERLAYS: POS. ARC, EXCESS		11	
DESCRIP-TION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES						
CAHIERS						
VOLUMES	10					
BOXES			1			1

T-SHEET PRINTS (List)

SPECIAL REPORTS (List) 2-Predicted Tide Notebook

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS		
	PRE-VERIFICATION	REVIEW VERIFICATION	TOTALS
POSITIONS ON SHEET			1332
POSITIONS CHECKED	234	109	343
POSITIONS REVISED	0	25	25
XXXXXXXXXXXX CORRECTIONS REVISED			
XXXXXXXXXX XXXXXXXXXX			
SIGNALS (CONTROL) ERRONEOUSLY PLOTTED	0	0	0
	TIME - HOURS		
CRITIQUE OF FIELD DATA PACKAGE (PRE-VERIFICATION) & Survey Automation	5	0	5
VERIFICATION OF CONTROL	6	2	8
VERIFICATION OF POSITIONS	12	8	20
VERIFICATION OF SOUNDINGS XXXXXX Individual Strips	0	31	31
COMPILATION OF SMOOTH SHEET XX A&D Sheets Position Number Ovr.	0	40	40
APPLICATION OF TOPOGRAPHY	0	0	0
APPLICATION OF PHOTOBATHYMETRY	0	0	0
JUNCTIONS	0	0	0
COMPARISON WITH PRIOR SURVEYS & CHARTS	0	9	9
XXXXXXXXXXXX Review Report	0	8	8
OTHER	0	48	48
TOTALS	23	146	169

Pre-Verification by <b>RUDE/HECK</b>	Beginning Date 05/24/79	Ending Date 08/02/79
Verification by Review <b>M.B. Hickson</b>	Beginning Date 10/19/79	Ending Date 03/12/80
Verification Check by Review <b>B.J. Stephenson</b>	Time (Hours) 4	Date 03/13/80
Marine Center Inspection by <b>Hydrographic Inspection Team (AMC)</b>	Time (Hours) 12	Date 03/14/80
Quality Control Inspection by <b>R.W. Derkazarian</b>	Time (Hours) 34	Date 5/23/80
Requirements Evaluation by <b>D.J. Hill</b>	Time (Hours) 2	Date 6/20/80

*B.K. Macee 22 hrs 5/30/80*

Reg. No. FE-219

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey the following shall be completed:

CARDS CORRECTED

DATE \_\_\_\_\_ TIME REQ'D \_\_\_\_\_ INITIALS \_\_\_\_\_

REMARKS:

Reg. No. \_\_\_\_\_

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made during evaluation and review.

When the magnetic tape has been updated to reflect the final results of the survey, the following shall be completed:

MAGNETIC TAPE CORRECTED

DATE \_\_\_\_\_ TIME REQ'D. \_\_\_\_\_ INITIALS \_\_\_\_\_

REMARKS:

ATLANTIC MARINE CENTER  
PROCESSING DIVISION  
WIRE DRAG SURVEY REVIEW

Registry No.: ~~F.E. NO. 2, 1979~~ FE-219 (1979) WD Field No.: R/H-20-2-79

Louisiana, Gulf of Mexico, Louisiana Offshore Oil Port

Surveyed: May 24 through July 31, 1979

Scale: 1:50,000 (Smooth Plot)

Project No.: OPR-K630

Soundings: Wire Drag

Control: Argo (Range-Range)

Chief of Party

R. V. Smart

Surveyed By

M. C. Grunthal  
R. S. Moody  
D. A. Peterson  
P. M. Connors

Automated Plot by (Rough Strips)

Xynetics 1201 Plotter  
(AMC)

Drag Strips Subdivided by  
Verified by  
Reviewed by

M. B. Hickson  
M. B. Hickson  
M. B. Hickson  
February 12, 1980

Inspected by

H. I. T. (AMC)

I. PURPOSE OF THE SURVEY

The purpose of the field examination was to investigate and provide clearance depths of nine (9) items in the vicinity of the Louisiana Offshore Oil Port (LOOP). Their reported positions and identities are as follows:

Item 154	-	Latitude	28°52'00" - Trawler
		Longitude	89°59'00"
Item 155	-	Latitude	28°49'03" - Unidentified
		Longitude	89°45'49"
Item 156	-	Latitude	28°48'54" - Submerged Collapsed Oil
		Longitude	89°46'18" - Well Structure
Item 157	-	Latitude	28°42'00" - Pipe-extending 3 ft. above
		Longitude	89°58'30" - water
Item 158	-	Latitude	28°43'54" - Metal Section of An Oil
		Longitude	89°50'30" - Rig
Item 159	-	Latitude	28°43'30" - Submerged Collapsed Oil
		Longitude	89°50'00" - Rig

Item 160	-	Latitude	28°47'00" - Submerged Drilling Rig
		Longitude	89°35'00"
Item 161	-	Latitude	28°36'00" - Unidentified
		Longitude	89°38'00"
Item 162	-	Latitude	28°28'00" - Shoal
		Longitude	89°51'00"

The results of the investigations are shown on the accompanying mylar overlays inserted in the Descriptive Report.

## 2. CONTROL AND SHORELINE

a. The source of control is adequately described in Sections C and D of the Descriptive Report.

b. There is no shoreline within the area of the field examination.

## 3. JUNCTIONS

There were no junctions on this field examination.

## 4. COMPARISON WITH HYDROGRAPHIC SURVEYS

Comparisons between the present field examination and hydrographic surveys (prior and contemporary) common to the items reveals the following:

a. Prior Hydrographic Survey H-6184 (1936) - Item 157 - No conflicts exist between hydrography and the field examination in the common area.

b. Prior Hydrographic Survey H-6185 (1936) - All items - No conflicts exist between hydrography and the field examination in the common areas.

c. Contemporary Hydrographic Survey H-9832 (1979) - Items 154, 155, 156, 157, 158, 159, and 162 - No conflicts exist between hydrography and the field examination in the common areas.

## 5. COMPARISON WITH CHARTS 11340, 38TH EDITION, JANUARY 6, 1979

11358, 27TH EDITION, JANUARY 13, 1979

Comparisons between Chart #11340 and the field examination indicates that the following revisions to the charts are necessary to reflect the final results of the investigations:

### a. HYDROGRAPHY

1. Item 154 - The dangerous sunken wreck, PA, originating with Notice to Mariners 50 of 1961, trawler, was not located by this examination. Wire drag strips covered in excess of the required one (1) mile radius circle of the reported position with effective depths ranging from 108 feet to 110 feet. As effective depths were required to be no deeper than 105 feet and not required to be within three feet of the bottom (approximately 20 fathoms), this item is not disproved. However, the examination does establish that no obstruction exists at depths less than 108 feet within the one (1) mile radius. It is recommended that the wire drag symbol with 108 feet (18 fathoms) be charted for this item.

N 28°52'00" W 89°59'00"

2. Item 155 - The dangerous submerged obstruction, (5 fm rep), PA, originating with Notice to Mariners 49 of 1965, identity unknown, was not located by this examination. Wire drag strips covered in excess of the required one (1) mile radius circle of the reported position with effective depths ranging from 107 feet to 110 feet. As effective depths were required to be no deeper than 105 feet and not required to be within three feet of the bottom (approximately 35 fathoms), this item is not disproved. However, this examination does establish that no obstruction exists at depths less than 107 feet within the one (1) mile radius. It is recommended that the wire drag symbol with 107 feet (17½ fathoms) be charted for this item. **N 28°49'03" W 89°45'49"**

3. Item 156 - The dangerous submerged obstruction, (16 fm rep), originating with Notice to Mariners 42 of 1965, collapsed oil well structure, was not located by this examination. Wire drag strips covered in excess of the required one-half (½) mile radius circle of the reported position with effective depths ranging from 109 feet to 110 feet. As effective depths were required to be no deeper than 105 feet and not required to be within three feet of the bottom (approximately 35 fathoms), this item is not disproved. However, this examination does establish that no obstruction exists at depths less than 109 feet within the one-half (½) mile radius. It is recommended that the wire drag symbol with 109 feet (18 fathoms) be charted for this item. **N 28°48'54" W 89°46'18"**

4. Item 157 - The pipe, reported, PA, originating with Notice to Mariners 39 of 1964, 16-inch pipe extending three feet above the water, was not located by this examination. Wire drag strips covered in excess of the required one (1) mile radius circle of the reported position with effective depths ranging from 104 feet to 109 feet. As effective depths were required to be no deeper than 105 feet and not required to be within three feet of the bottom (approximately 32 fathoms), this item is not disproved. However, this examination does establish that no obstruction exists at depths less than 104 feet within the one (1) mile radius. It is recommended that the wire drag symbol with 104 feet (17 fathoms) be charted for this item. **N 28°42'00" W 89°58'30"**

5. Item 158 - The dangerous submerged obstruction originating with Notice to Mariners 50 of 1965, metal section from an oil rig, was not located by this examination. Wire drag strips covered in excess of the required one-half (½) mile radius circle of the reported position with effective depths ranging from 105 feet to 110 feet. As effective depths were required to be no deeper than 105 feet and not required to be within three feet of the bottom (approximately 45 fathoms), this item is not disproved. However, this examination does establish that no obstruction exists at depths less than 105 feet within the one-half (½) mile radius. It is recommended that the wire drag symbol with 105 feet (17½ fathoms) be charted for this item. **N 28°43'54" W 89°50'30"**

6. Item 159 - The dangerous submerged obstruction, reported, PA, originating with Notice to Mariners 40 of 1968, collapsed oil rig, was not located by this examination. Wire drag strips covered in excess of the required one (1) mile radius circle of the reported position with effective depths ranging from 105 feet to 110 feet. As effective depths were required to be no deeper than 105 feet and not required to be within three feet of the bottom (approximately 47 fathoms), this item is not disproved. However, this examination does establish that no obstruction exists at depths less than 105 feet within the one (1) mile radius. It is recommended that the wire drag symbol with 105 feet (17½ fathoms) be charted for this item. **N 28°43'30" W 89°50'00"**

7. Item 160 - The dangerous submerged obstruction, (6½ fm rep), PA, originating with Notice to Mariners 45 of 1965, submerged drilling rig, was not located by this examination. Wire drag strips covered in excess of the required one (1) mile

radius circle of the reported position with effective depths ranging from 107 feet to 108 feet. As effective depths were required to be no deeper than 105 feet and not required to be within three feet of the bottom (approximately 46 fathoms), this item is not disproved. However, this examination does establish that no obstruction exists at depths less than 107 feet within the one (1) mile radius. It is recommended that the wire drag symbol with 107 feet (17½ fathoms) be charted for this item. N 28°47'00" W 89°35'00"

8. Item 161 - The dangerous submerged obstruction, reported, PA, originating with local Notice to Mariners 43 of 1972, identity unknown, was not located by this examination. Wire drag strips covered in excess of the required one (1) mile radius circle of the reported position with effective depths ranging from 106 feet to 107 feet. As effective depths were required to be no deeper than 105 feet and not required to be within three feet of the bottom (approximately 69 fathoms), this item is not disproved. However, this examination does establish that no obstruction exists at depths less than 106 feet within the one (1) mile radius. It is recommended that the wire drag symbol with 106 feet (17½ fathoms) be charted for this item. N 28°36'00" W 89°38'00"

9. Item 162 - The 20 fathom depth, (Rep 1975), PA, originating with Chart Letter 1955 of 1975, was not located by this examination. Wire drag strips covered in excess of the required one (1) mile radius circle of the reported position with effective depths ranging from 106 feet to 109 feet. As effective depths were required to be no deeper than 105 feet and not required to be within three feet of the bottom (ranging from approximately 92 to 235 fathoms), this item is not disproved. However, this examination does establish that no shoal exists at depths less than 106 feet within the one (1) mile radius. In view of the findings of the recent Hydrographic Survey H-9832 (1979), it is recommended that this item be deleted from the chart. N 28°28'00" W 89°51'00"

b. Aids to Navigation

There are no aids to navigation within the limits of the present field examination.

6. CONDITION OF SURVEY

The condition of the field examination is satisfactory except as follows:

a. Field Work and Records

1. Calibration and control signals are not listed in the volume indexes.

2. The hydrography accomplished on 2 August 1979 (JD 214), fathometer search for submerged well head SH-WD-134-A, was done using non-standard and unacceptable horizontal control (Loran C and gyro bearings to unsurveyed structures). Smooth tides are not obtainable as the temporary tide gage had been removed. This data is of questionable value for charting but a rough geographic position of Latitude 28°44'5.10", Longitude 89°44'20.68" and the depth of the obstruction from the fathogram of 13.8 fathoms (corrected for draft) and the velocity correction of 3.2 feet from H-9832 (1979) may be of some use in charting. It is recommended that this submerged well head be charted using the above information (86 ft. rep.) with the "PA" notation and it is further recommended that this item be retained for investigation by future field work. Field records of this data are filed with the survey records in an envelope appropriately annotated. The 86 ft reported has been transferred to H-9832 (1979)

3. Some lifts applied by the field were not in concurrence with computed lifts in verification and review. This was due to the field not considering lift values valid until entering the one-half mile or one mile radius circle of search. In verification and review, all lifts are considered valid unless specifically rejected and were applied as standard wire drag practice requires.

b. Descriptive Report

1. Section N. does not list the chart used for comparison. The comparisons made are inadequate.

2. This field examination was not compared with any other surveys (neither prior nor contemporary) by the field.

3. Sections C and D did not have the proper triangulation station names or the establishment dates.

4. Necessary corrections made by the reviewer to the Descriptive Report are denoted in red ink.

c. Field Plotting

Field plotting consisted of individual strips plotted on individual mylar sheets and color coded field A & D sheets (for each item). Although this is not in accordance with the Wire Drag Manual, it is considered adequate.

7. COMPLIANCE WITH PROJECT INSTRUCTIONS

This wire drag field examination was made in compliance with Project Instructions OPR-K630-RU/HE-79, Wire Drag, LOOP, Gulf of Mexico, dated 8 January 1979, excepting the submerged well head investigation noted in Section 6 of this review.

8. ADDITIONAL FIELD WORK

All assigned items of this field examination were satisfactorily investigated in regard to the project requirements although no items were either proved or disproved by these investigations. However, Item 162 is considered disproved by H-9832 (1979). The unassigned item discussed in Section 6. A. 2. of this report was not satisfactorily resolved and requires additional investigation.

9. MISCELLANEOUS

a. Since no hangs or grounding were encountered during this field examination, all of the acceptable clearing strips are plotted in a smooth A & D sheet and a smooth position number overlay for each item investigated.

b. This field examination was processed in accordance with the "Guidelines for Processing Wire Drag Surveys" dated October 19, 1979. Of particular note in variance of past procedure is the color coded strips without positional radials on the smooth position number overlay.

c. This field examination was constructed, compiled, verified, and reviewed at the 1:20,000 scale. The 1:20,000 scale plotter strips are included with the survey records. Several 1:20,000 scale control overlays, covering all items, are included with

the survey records. This obviates the necessity to consider control arcs on the 1:50,000 smooth overlays.

d. The following factors were considered in smooth plotting this field examination at the 1:50,000 scale:

1. Contemporary Hydrographic Survey H-9832 (1979) was conducted at the 1:50,000 scale.

2. No hangs or groundings were encountered and therefore, no critical positional plotting was required.

3. Due to the offshore, deep water nature of the surveyed area, the added definition of 1:20,000 scale was not required.

4. At the 1:50,000 scale, all smooth A & D sheets and smooth position number overlays could be included in the Descriptive Report.

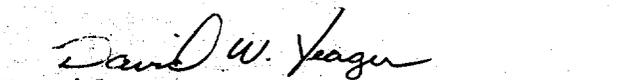
e. The Descriptive Report adequately covers all other matters pertinent to this examination. No further discussion is considered necessary.

Inspection Report  
FE-No. 2, 1979

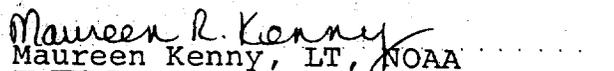
Any verification errors regarding procedures and presentation of survey data detected during inspection by the Hydrographic Inspection Team have been corrected before submission for administrative approval. Inspection comments regarding quality of field work, compliance with instructions, and adequacy of the survey have been incorporated within the verifier's Review Report.

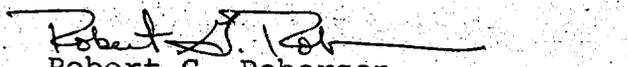
Examined and Approved:  
Hydrographic Inspection Team  
Date: 3/14/80

  
Robert A. Trauschke, CDR, NOAA  
Chief, Processing Division

  
David W. Yeager, Lt Cdr., NOAA  
Field Procedures Officer  
Operations Division

  
R.D. Sanocki  
Technical Assistant  
Processing Division

  
Maureen R. Kenny, LT, NOAA  
Chief, Electronic Data  
Processing Branch

  
Robert G. Roberson  
Team Leader  
Verification Branch

Approved/Forwarded

  
Richard H. Houlder  
RADM, NOAA  
Director, Atlantic Marine Center



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SURVEY  
Rockville, Md. 20852

OA/C352:RWD

May 23, 1980

TO: Glen R. Schaefer *GS*  
Chief, Hydrographic Surveys Division

THRU: Chief, Quality Control Branch *gm*

FROM: R. W. DerKazarian *RW DerKazarian*  
Quality Evaluator

SUBJECT: Quality Control Report for FE-219 (1979) WD, Louisiana, Gulf  
of Mexico, Louisiana Offshore Oil Port

A quality control inspection of FE-219 WD was accomplished to monitor the survey for obvious deficiencies with respect to data acquisition, determination of the validity of hangings, groundings, and least depths, validity of cleared effective depths over obstructions in the survey area, A&D sheet, Verifier's Report, decisions and actions by the verifier, and cartographic presentation of data.

In general, the present survey was found to conform to National Ocean Survey standards and requirements except as discussed in the Verifier's Report and as follows:

Current observations noted in the wire-drag journals were added to the A&D sheets during the quality evaluation. (See Hydrographic Manual, chapter 1.1.2, part A, section VI.)

cc:  
OA/C35  
OA/C351





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SURVEY  
Rockville, Md. 20852

OA/C351:DJ

JUN 25 1980

TO: OA/CAM - Richard H. Houlder

FROM: *[Signature]*  
F/ OA/CS - Roger F. Lanier

SUBJECT: FE-219 (1979) WD, OPR-K630, Louisiana, Gulf of Mexico, Louisiana  
Offshore Oil Port, Report of Compliance with Project Instructions

The smooth sheet and Descriptive Report for the subject survey have been examined. This survey, except as noted in the Quality Control Report, dated May 23, 1980 (copy attached), and the Hydrographic Survey Inspection Team Report, dated March 14, 1980, is complete and adequate for the purposes intended and is in compliance with Project Instructions OPR-K630-RU/HE-79, dated January 8, 1979.

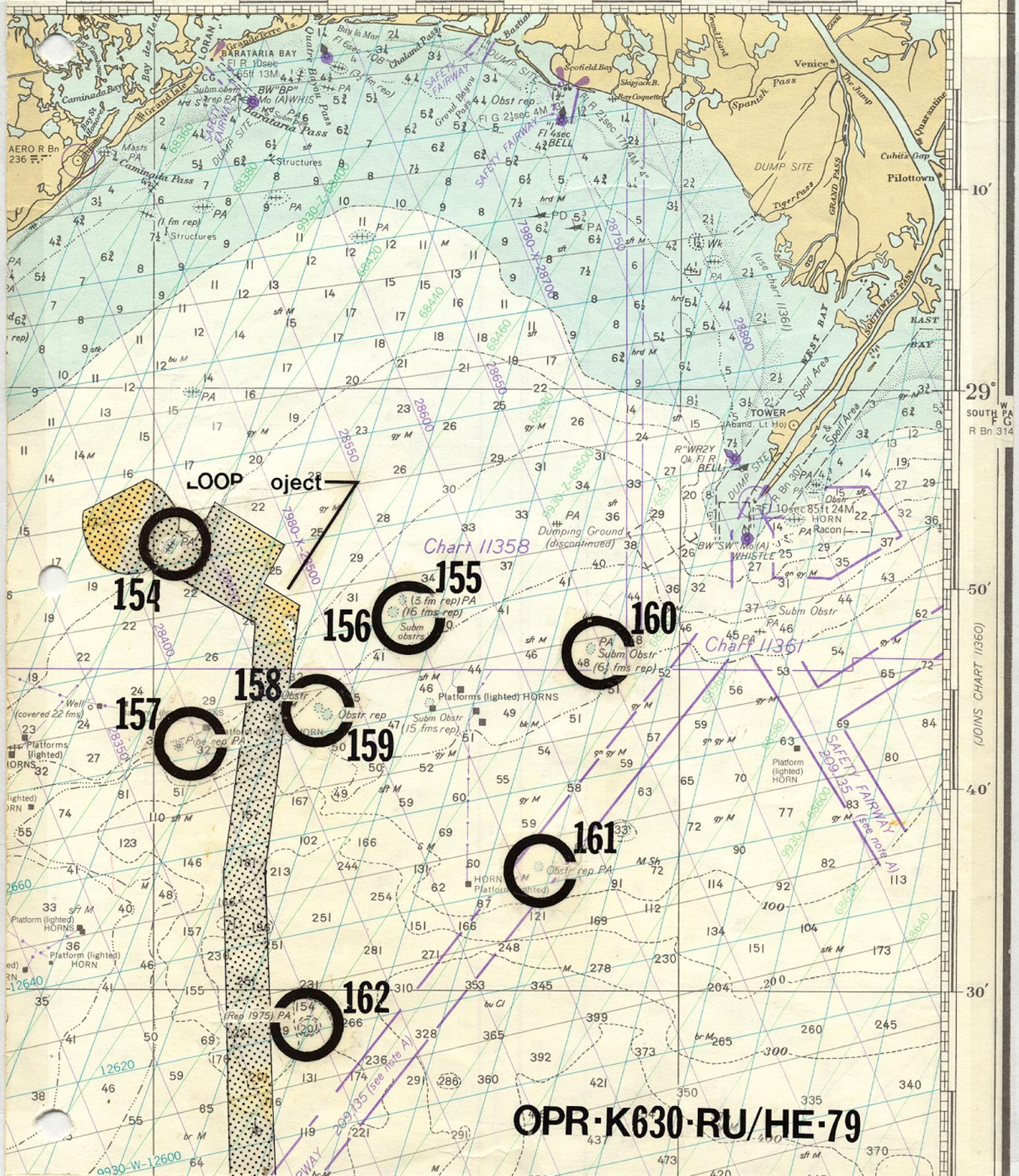
Attachment

cc:  
OA/C352 w/o att.



10TH ANNIVERSARY 1970-1980  
National Oceanic and Atmospheric Administration

90° 50' 40' 30' 20'



29° SOUTH PA F G R Bn 314

50' (JOINS CHART 11360)

40'

30'

20'

38th Ed., Jan. 6/79

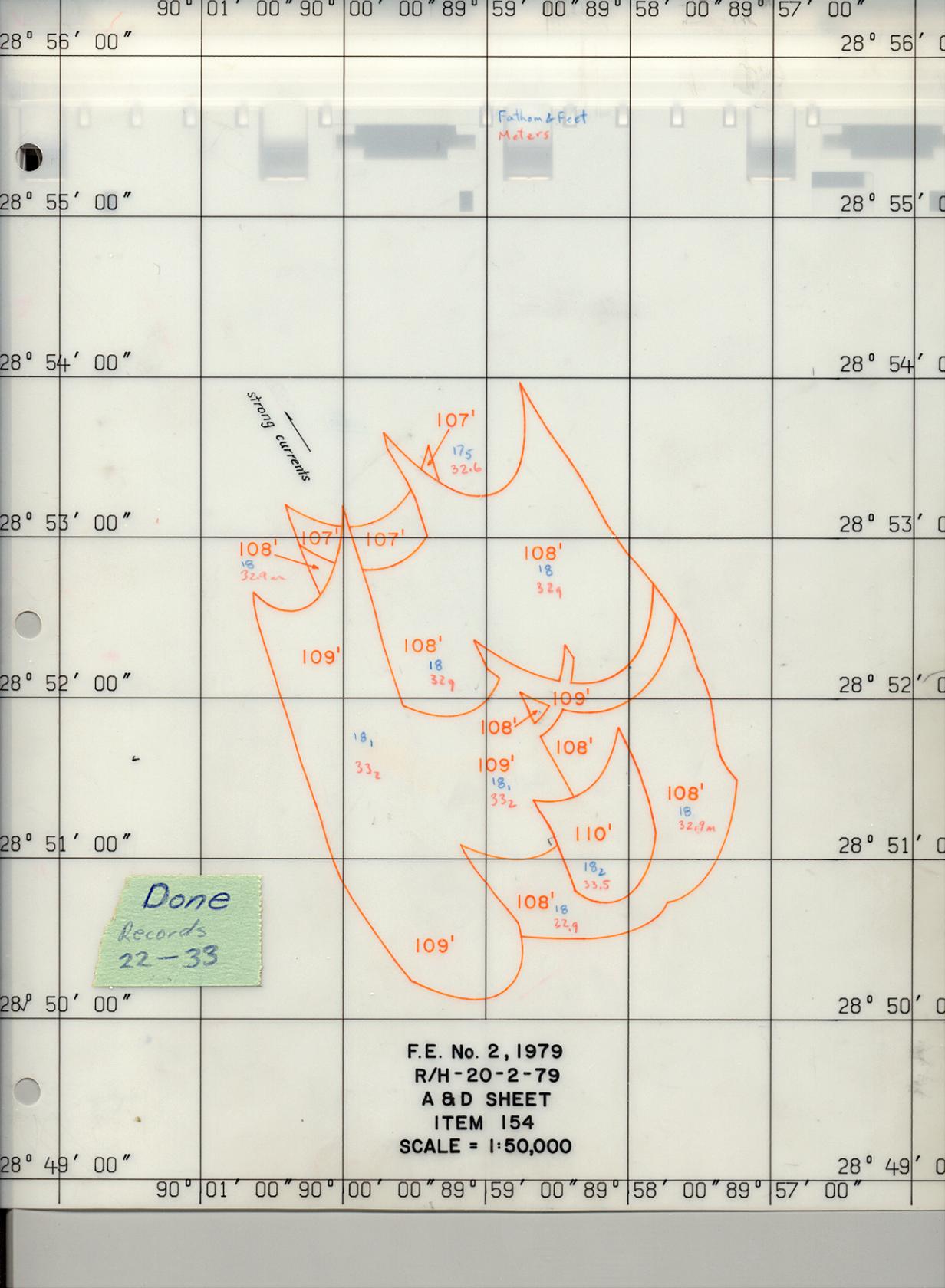
(Mississippi River to Galveston)

SOUNDINGS IN FATHOMS - SCALE 1:458,596

OPR-K630-RU/HE-79

11340

LORAN-C OVERPRINTED



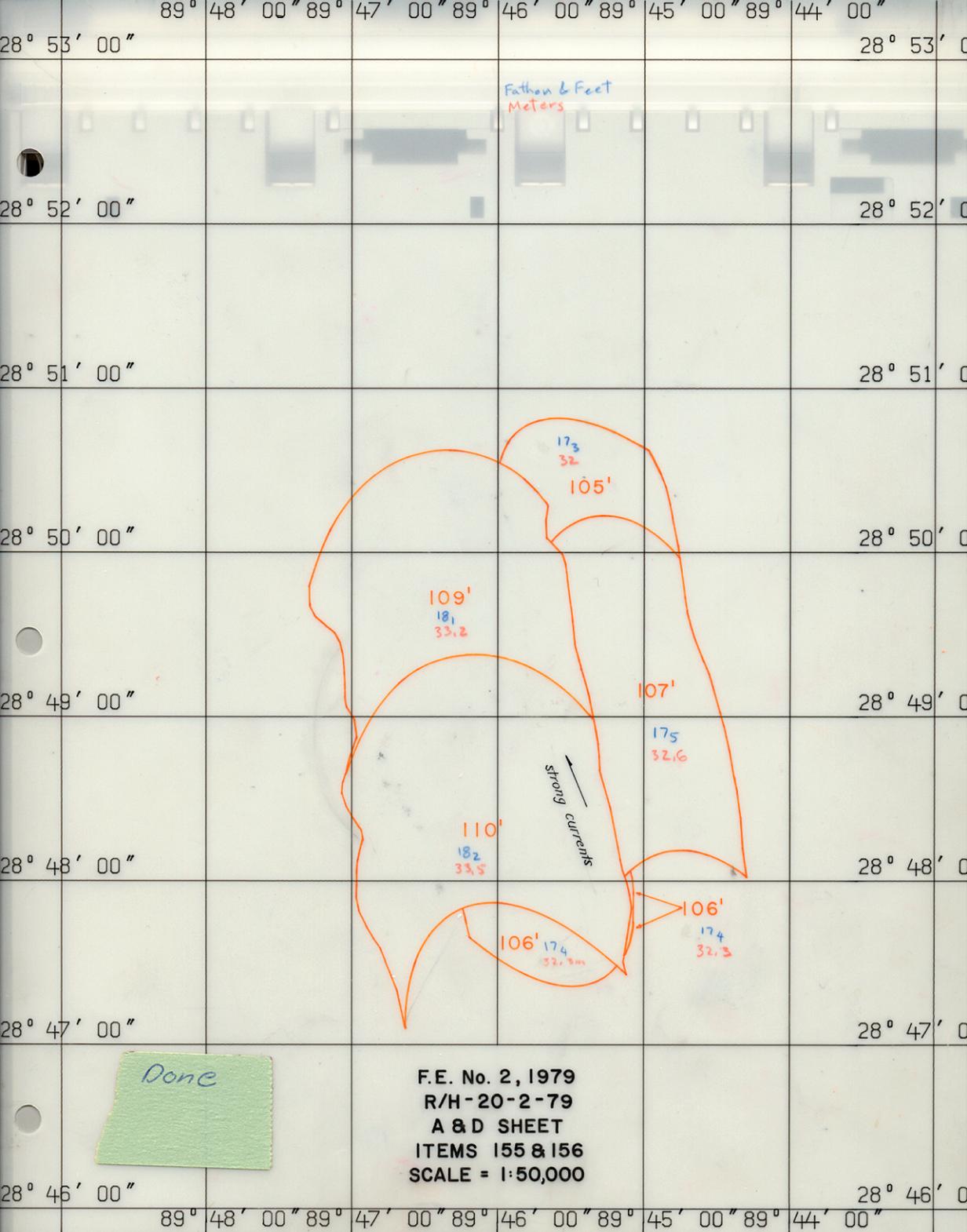
Fathom & Feet  
Meters

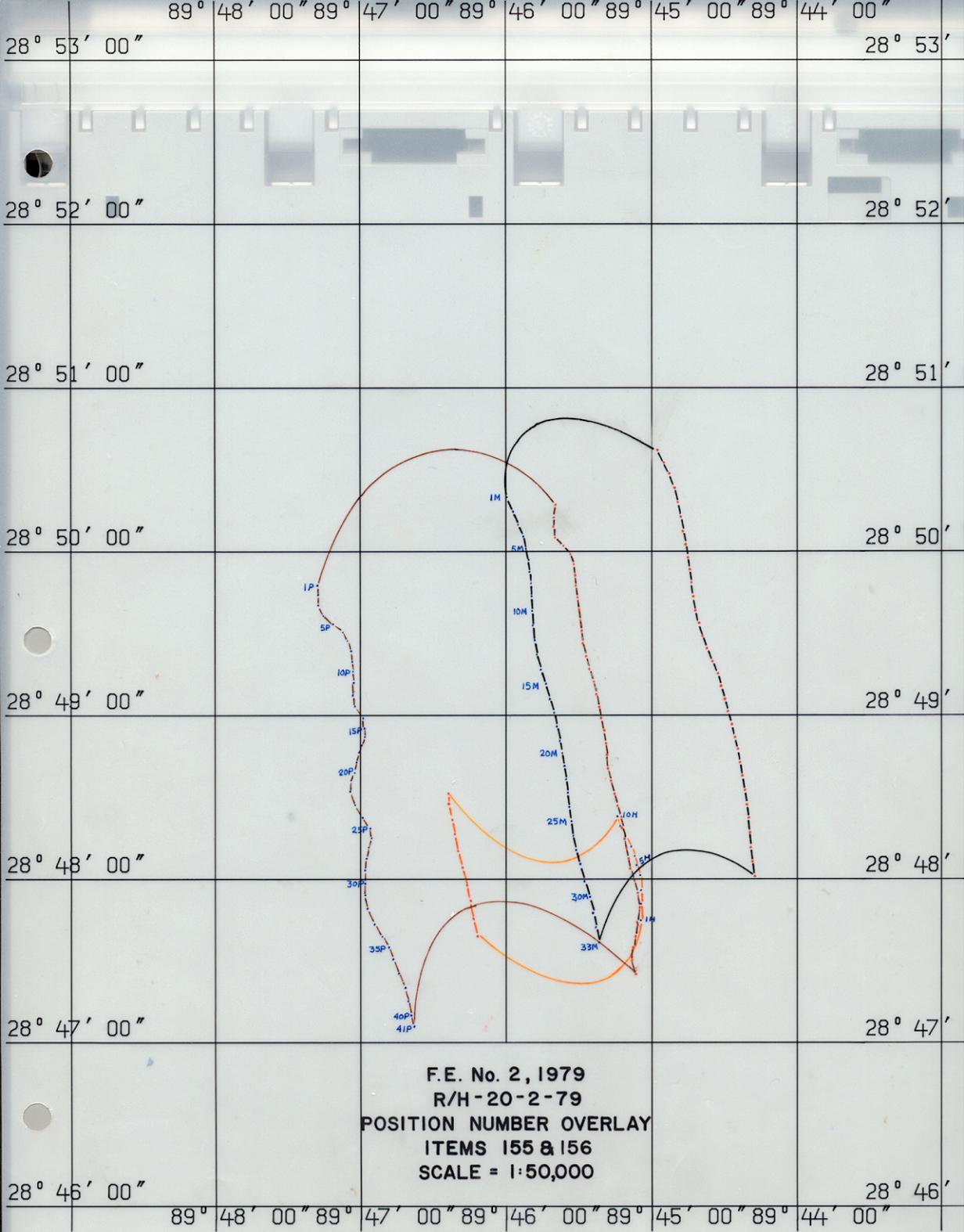
Strong currents  
←

Done  
Records  
22-33

F.E. No. 2, 1979  
R/H-20-2-79  
A & D SHEET  
ITEM 154  
SCALE = 1:50,000







28° 44' 00"

28° 44' 00"

Fathoms and Feet  
Meters

28° 43' 00"

28° 43' 00"

28° 42' 00"

28° 42' 00"

28° 41' 00"

28° 41' 00"

28° 40' 00"

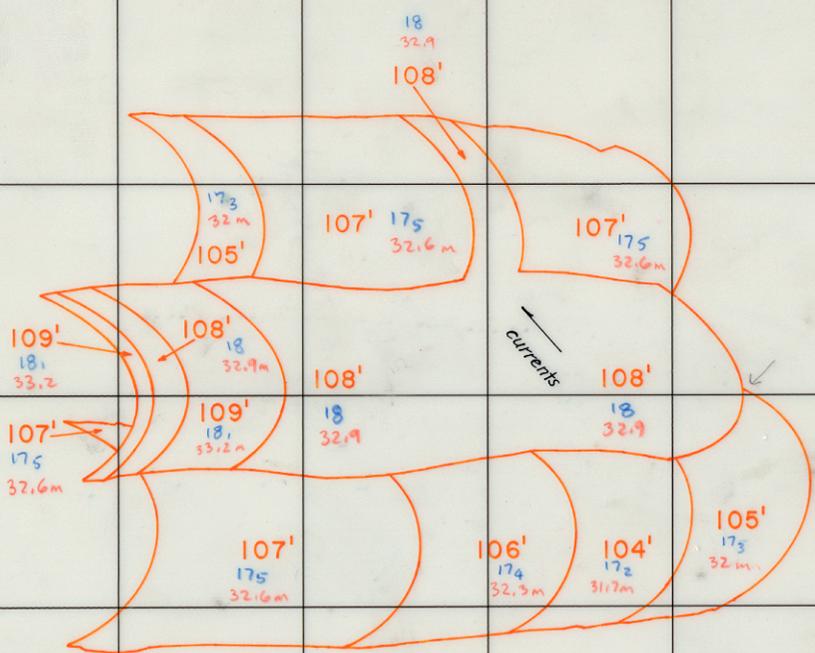
28° 40' 00"

28° 39' 00"

28° 39' 00"

Raw Plot of  
Done  
ACY-011

F.E. No. 2, 1979  
R/H-20-2-79  
A & D SHEET  
ITEM 157  
SCALE = 1:50,000



90° 01' 00" 90° 00' 00" 89° 59' 00" 89° 58' 00" 89° 57' 00" 89° 56' 00" 89° 55' 00"

28° 44' 00"

28° 44' 00"

28° 43' 00"

28° 43' 00"

28° 42' 00"

28° 42' 00"

28° 41' 00"

28° 41' 00"

28° 40' 00"

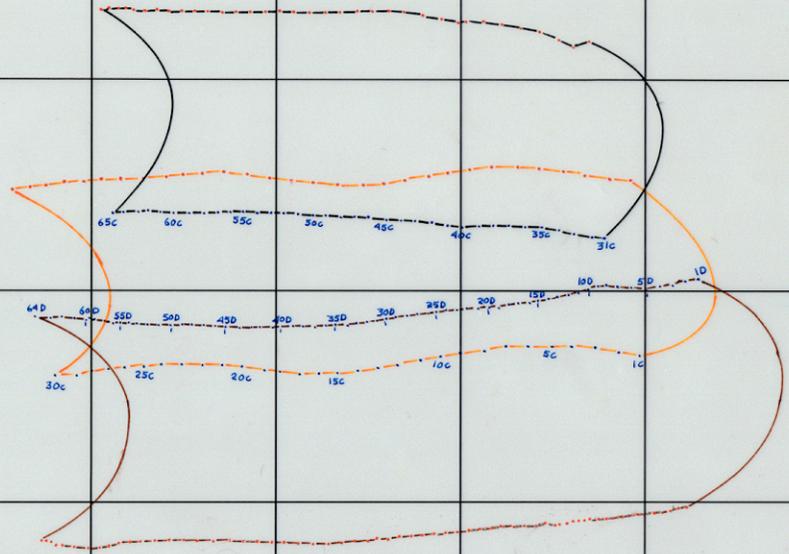
28° 40' 00"

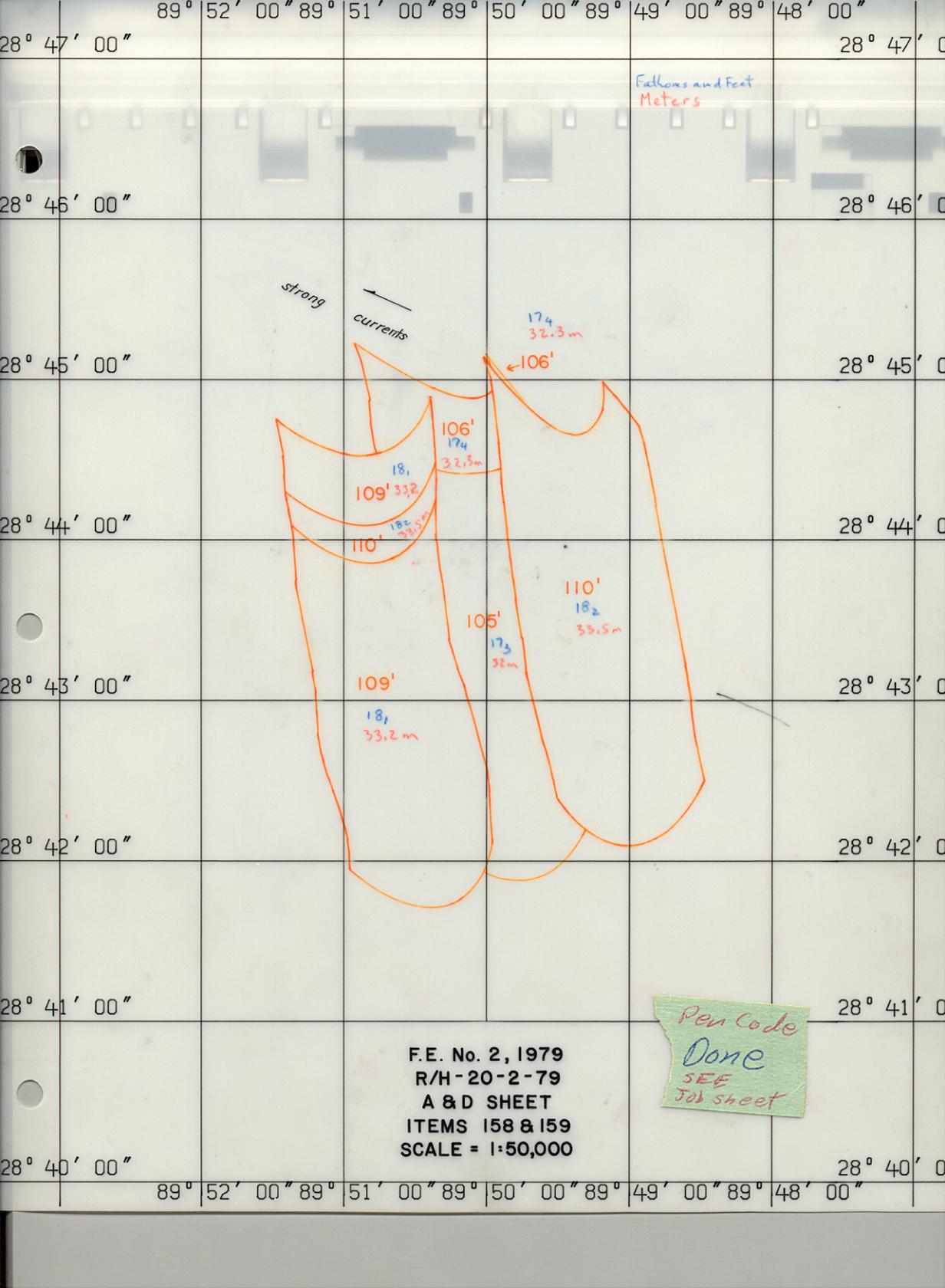
28° 39' 00"

28° 39' 00"

F.E. No. 2, 1979  
 R/H-20-2-79  
 POSITION NUMBER OVERLAY  
 ITEM 157  
 SCALE = 1:50,000

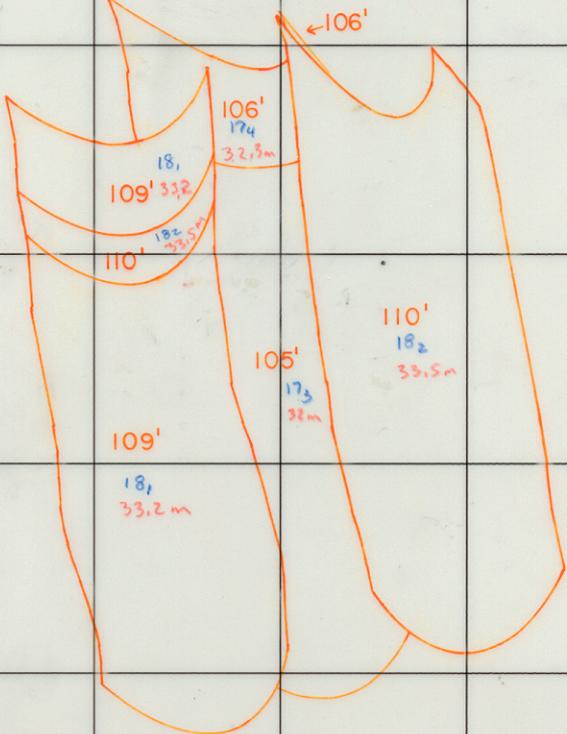
90° 01' 00" 90° 00' 00" 89° 59' 00" 89° 58' 00" 89° 57' 00" 89° 56' 00" 89° 55' 00"





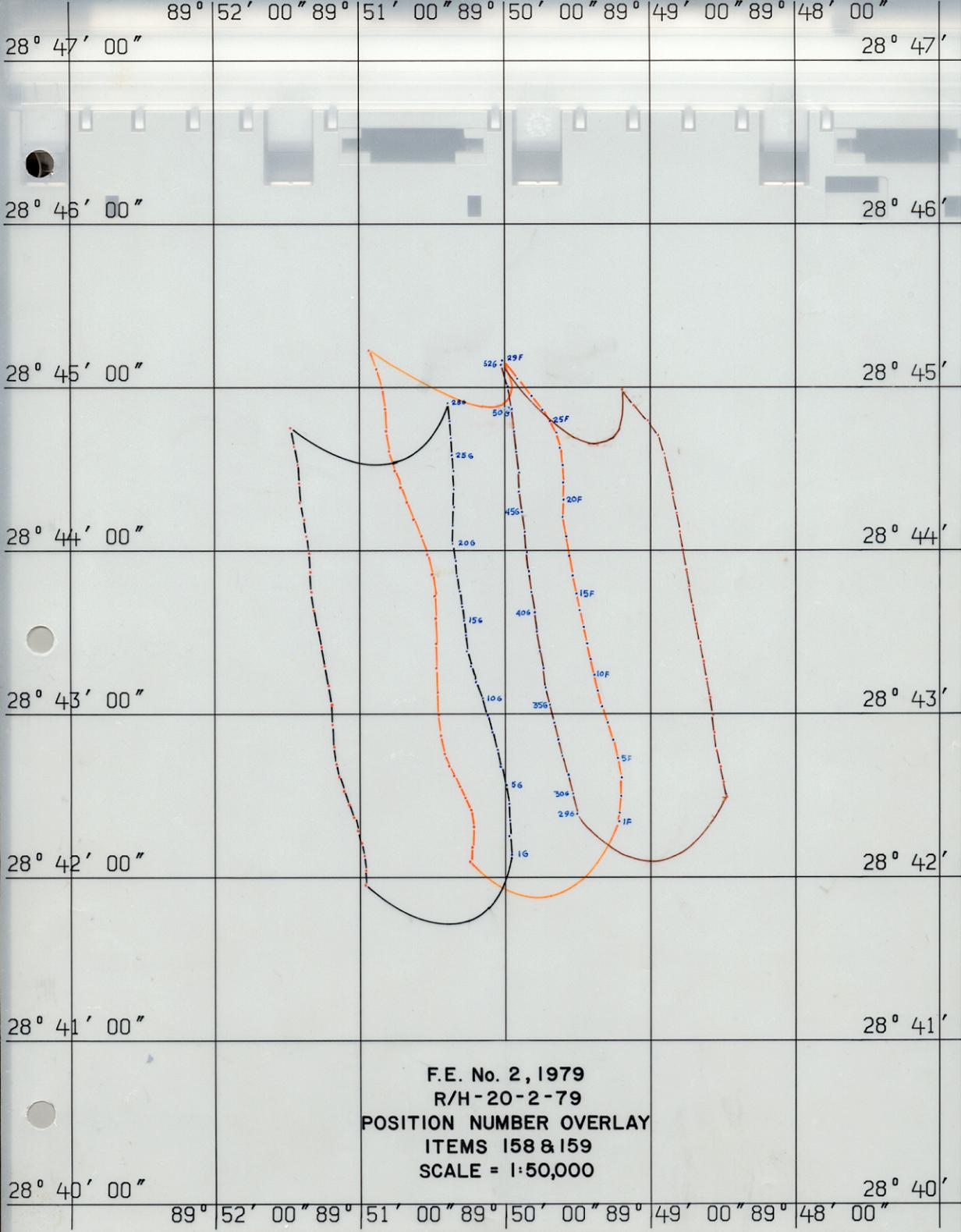
Fathoms and Feet  
Meters

strong  
currents

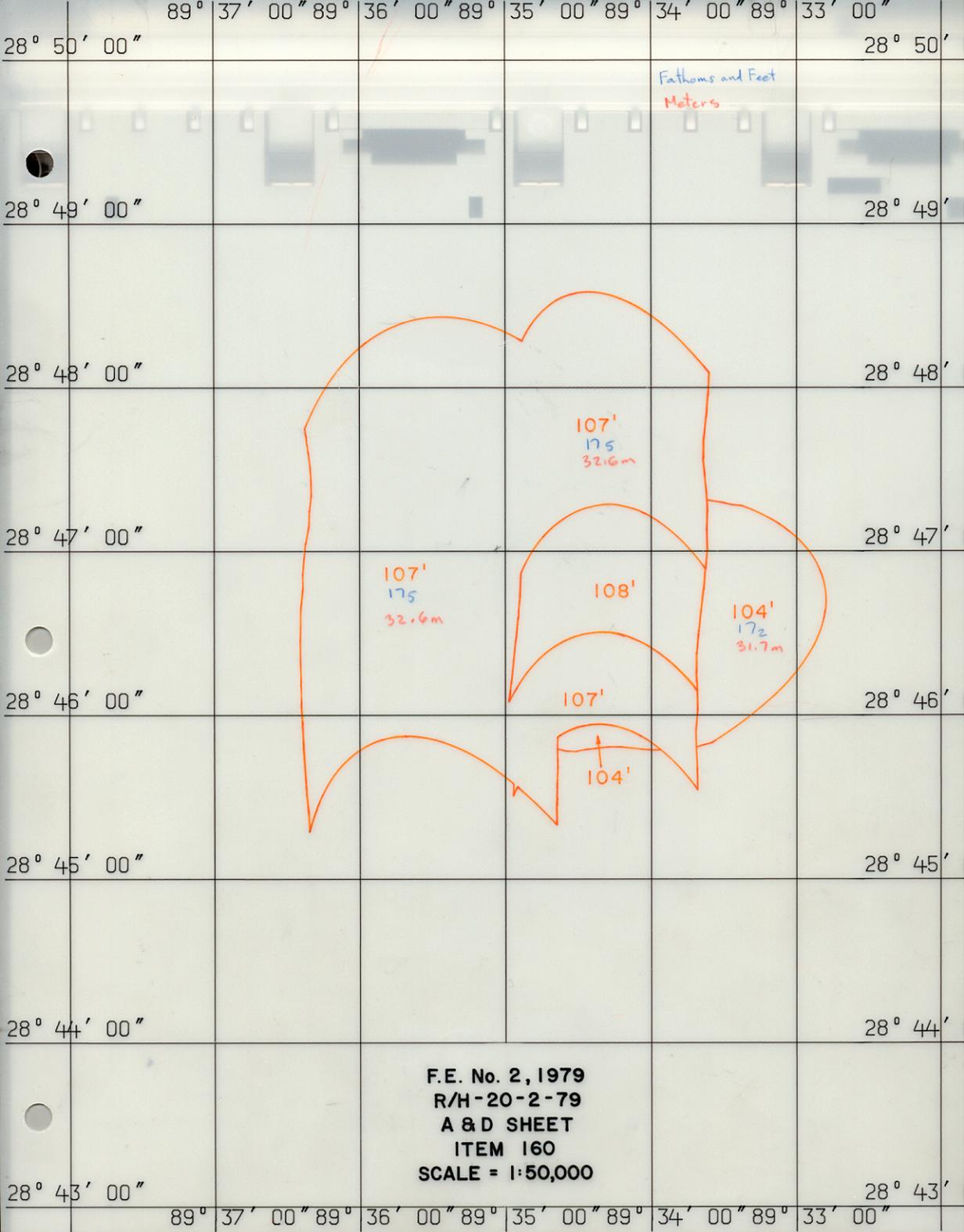


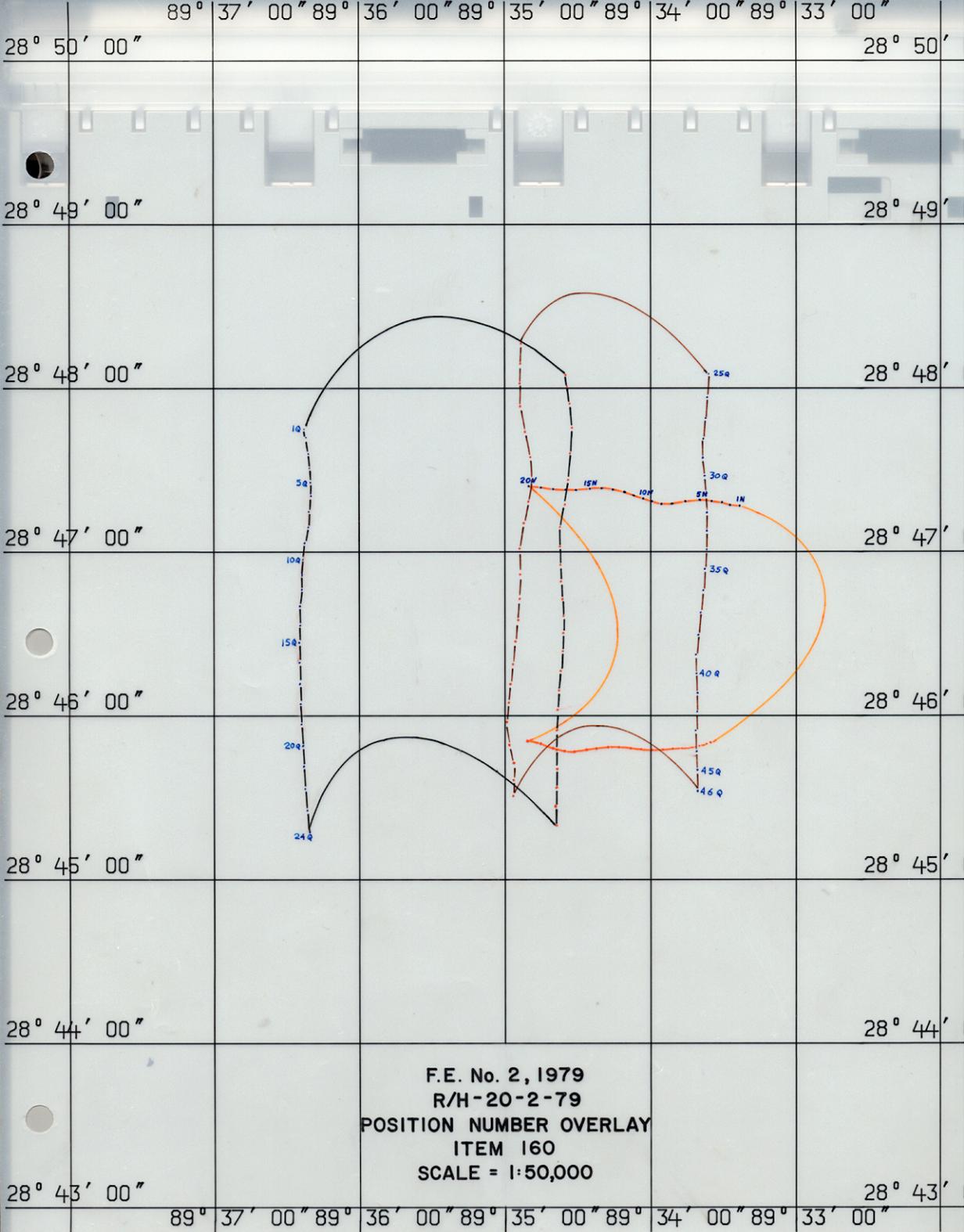
F.E. No. 2, 1979  
R/H-20-2-79  
A & D SHEET  
ITEMS 158 & 159  
SCALE = 1:50,000

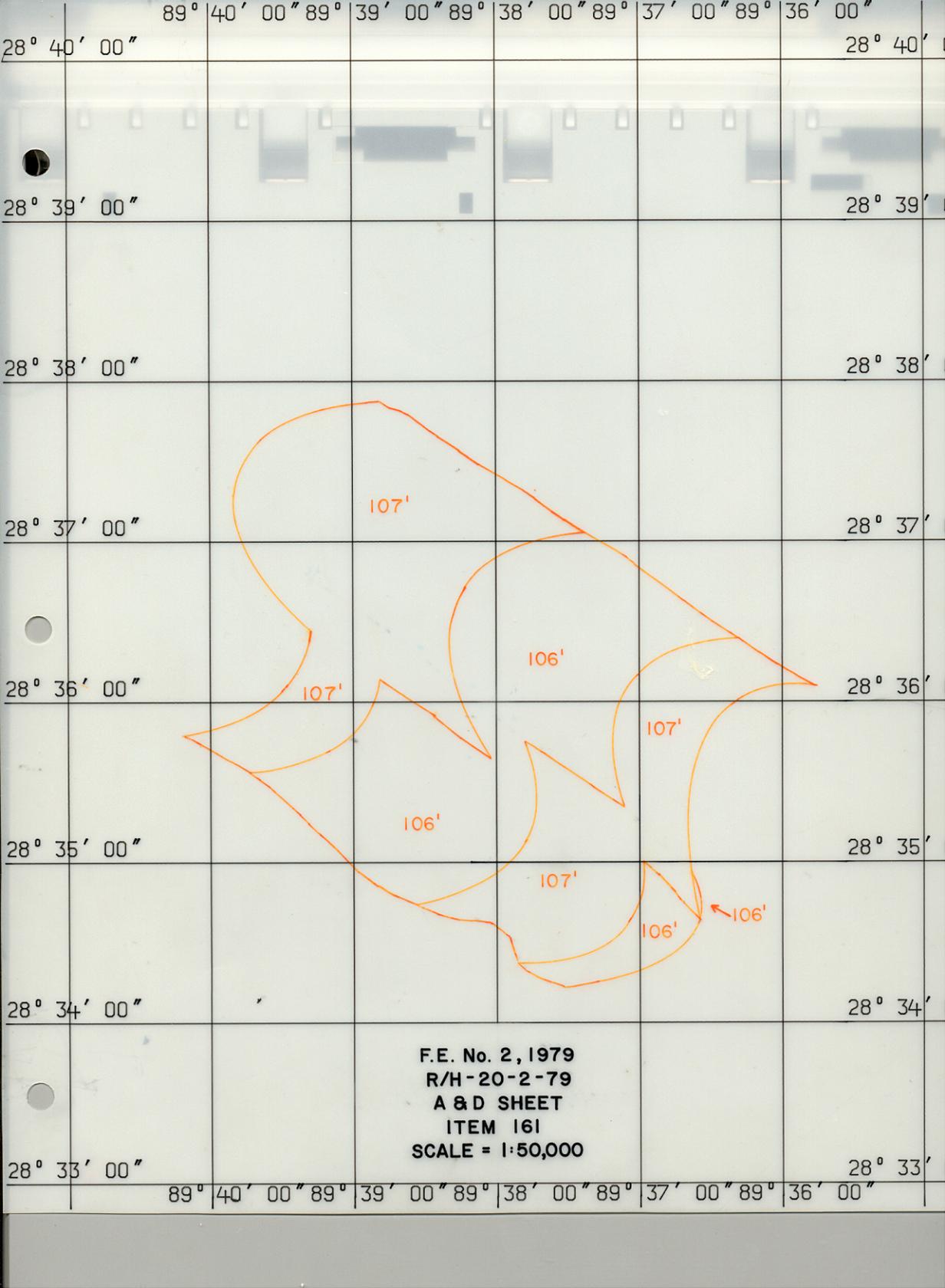
Pen Code  
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SEE  
Job sheet



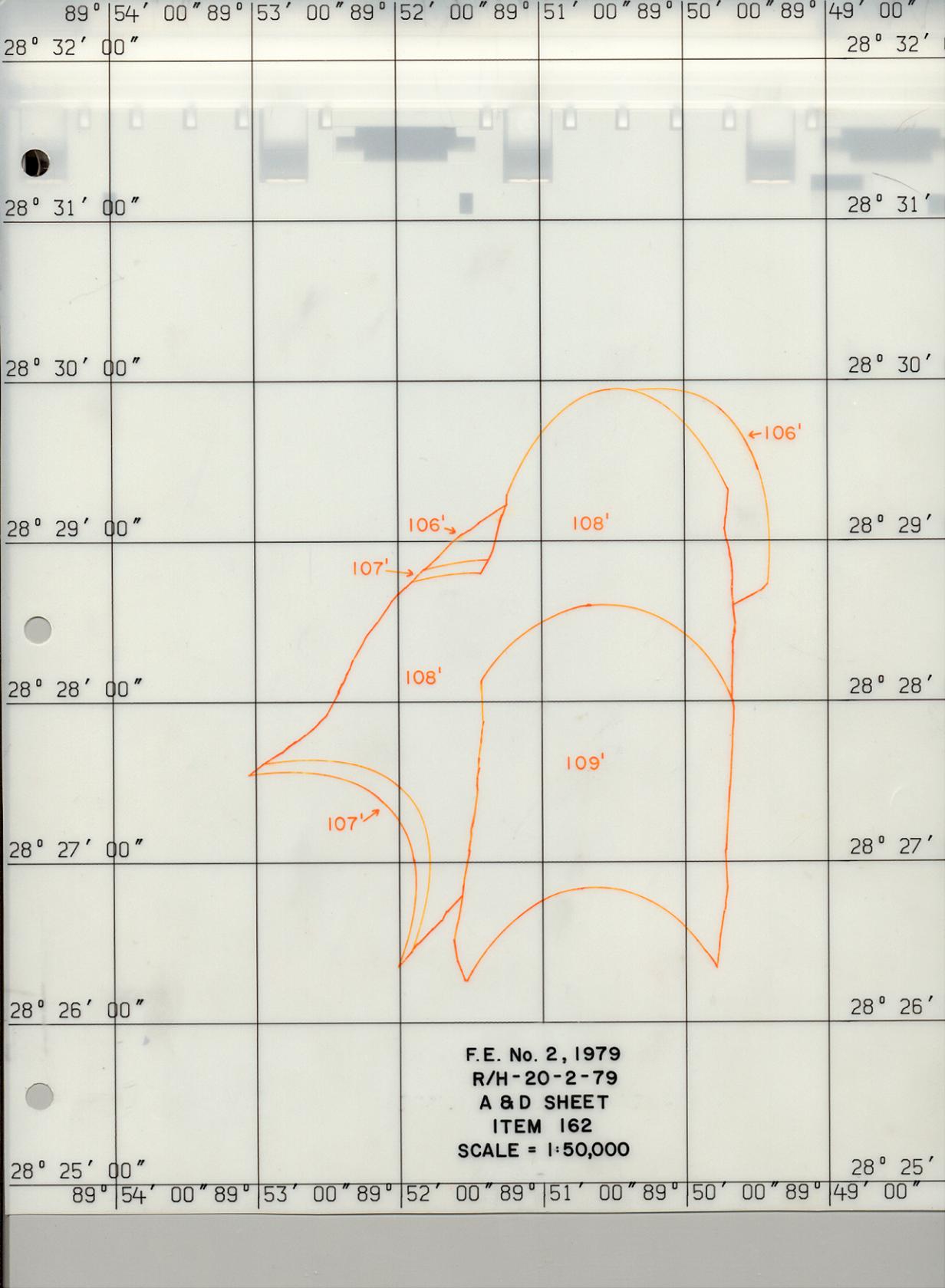
F.E. No. 2, 1979  
 R/H-20-2-79  
 POSITION NUMBER OVERLAY  
 ITEMS 158 & 159  
 SCALE = 1:50,000



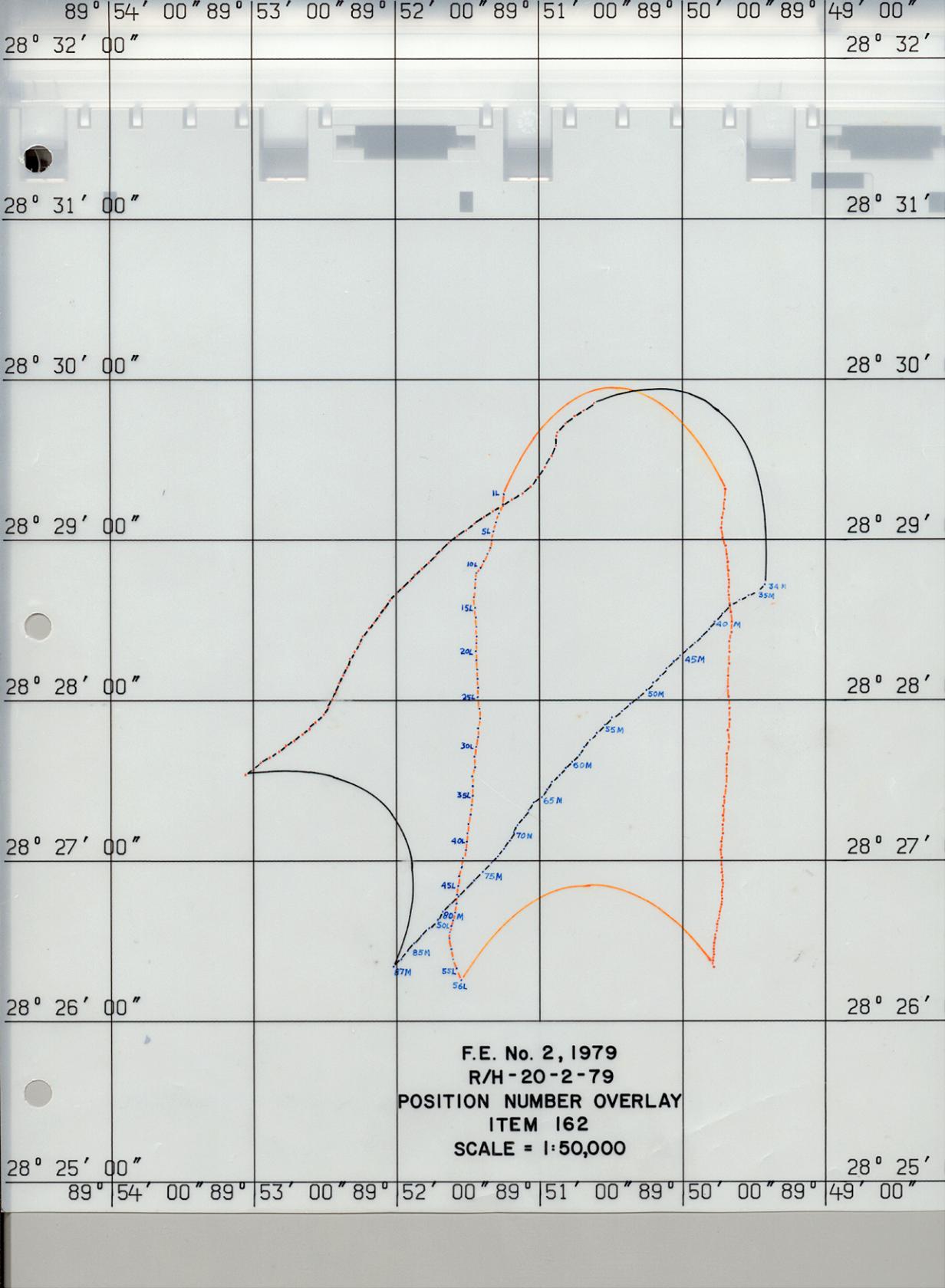


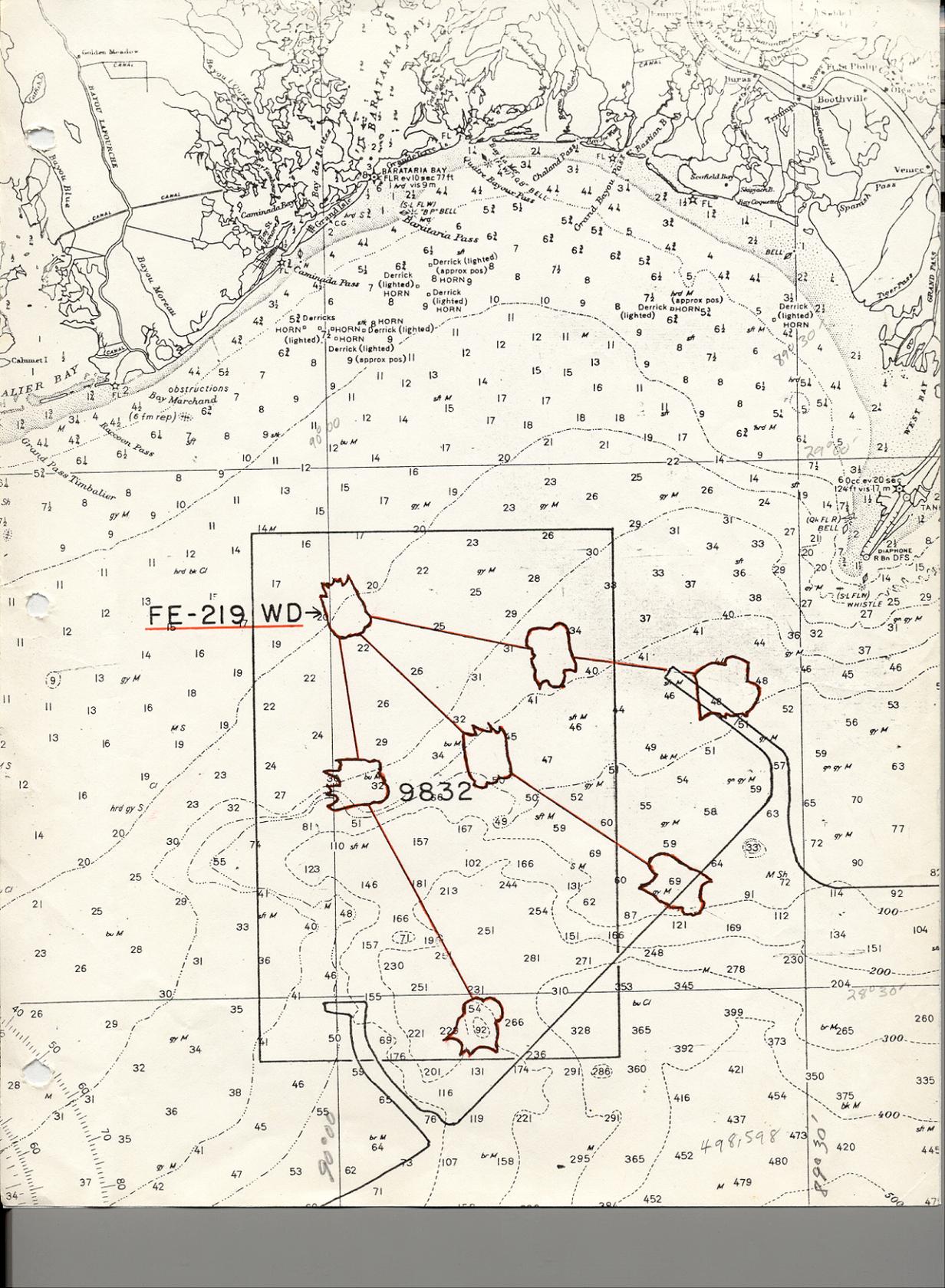






F.E. No. 2, 1979  
R/H-20-2-79  
A & D SHEET  
ITEM 162  
SCALE = 1:50,000





FE-219 WD →

9832

9800

4981598

9800

9800

500

47

445

420

400

375

350

325

300

275

250

225

200

175

150

125

100

75

50

25

0

25

50

75

100

125

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175

200

225

250

275

300

325

350

375

400

425

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500

525

550

575

600

625

650

675

700

725

750

775

800

825

850

875

900

925

950

975

1000

1025

1050

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1100

1125

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1175

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