

# 10387

Diagram No. 1265-3

NOAA FORM 76-35A

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

## DESCRIPTIVE REPORT

Type of Survey ..... Side Scan Sonar  
Field No. .... HE-10-1-91  
Registry No. .... H-10387

### LOCALITY

State ..... Florida  
General Locality ..... Gulf of Mexico  
Sublocality ..... Approaches to  
..... Pensacola Bay  
.....  
..... 1991  
.....  
CHIEF OF PARTY  
..... LCDR S.R. Iwamoto

### LIBRARY & ARCHIVES

DATE ..... July 14, 1993

10387

AKG  
PRODUCTS

11384

11383

11378 A

11382

11360

11006

411

CP5



HYDROGRAPHIC TITLE SHEET

H-10387 ✓

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.

HE-10-1-91 ✓

State FLORIDA ✓

General locality GULF OF MEXICO ✓

Locality APPROACHES TO PENSACOLA BAY

Scale 1:10,000 ✓ Date of survey July 11 - August 9, 1991 ✓

Instructions dated March 4, 1991 Project No. OPR-J452-HE ✓

Vessel NOAA Ship HECK (EDPN 9140) ✓

Chief of party LCDR Stanley R. Iwamoto, NOAA, Commanding Officer, HECK ✓

Surveyed by S.R. D.W. K.N. J.E. W.R. LCDR Iwamoto, LT Moeller, LT(jg) Harbison, ENS Martin, ST Morris

Soundings taken by echo sounder, ~~XXXXXXXXXX~~ HAND LEADLINE

Graphic record scaled by S.R. D.W. K.N. J.E. W.R. LCDR Iwamoto, LT Moeller, LT(jg) Harbison, ENS Martin, ST Morris

Graphic record checked by K.N. LT(jg) Harbison

Protracted by \_\_\_\_\_ Automated plot by HDAPS (FIELD)  
XYNETICS 12φ1 Plotter(AHS)

Verification by Atlantic Hydrographic Section personnel

Soundings in meters ~~feet~~ at MLLW ~~MLLW~~

REMARKS: All times UTC.

Data submitted to Atlantic Hydrographic Section, N/CG244

Notes in the Descriptive Report were made in red during office processing.

4W015/SURF 8/26/93 MUR

30 JAN 29 1997  
X.N.W.







DESCRIPTIVE REPORT TO ACCOMPANY  
SURVEY H-10387 ✓  
FIELD NUMBER HE-10-1-91 ✓  
FLORIDA ✓  
GULF OF MEXICO ✓  
APPROACHES TO PENSACOLA BAY ✓  
Scale 1:10,000 ✓  
NOAA SHIP HECK S-591  
LCDR Stanley R. Iwamoto, NOAA, CMDG

A. PROJECT

This survey was conducted in accordance with Hydrographic Project Instructions OPR-J452-HE, Approaches to Pensacola, Florida, dated March 4, 1991, and Change 1 dated 12 July 91.

The purpose of this project is to provide updated information in response to requests by the U.S. Navy for their Strategic Home porting Plan and by the U.S. Coast Guard to investigate several dangers to navigation.

B. AREA SURVEYED

The survey area, designated Sheet "C" in the Project Instructions, lies in the Gulf of Mexico south of the entrance to Pensacola Bay. The survey area is an irregular shape, formed by connecting the following points:

LAT 30° 14' 18" N	LON 087° 19' 06" W
LAT 30° 14' 48" N	LON 087° 16' 11" W
LAT 30° 15' 57" N	LON 087° 18' 20" W
LAT 30° 16' 23" N	LON 087° 16' 30" W
LAT 30° 17' 33" N	LON 087° 18' 57" W
LAT 30° 18' 03" N	LON 087° 17' 07" W

*Limits do not include area of investigation for AWDIS Item # 7867.*  
Survey operations began on July 11, 1991 (DOY 192), and were completed on August 9, 1991 (DOY 221).



### C. SURVEY VESSELS

All hydrographic data were collected by the NOAA Ship HECK (EDP 9140). No unusual vessel configurations were used.

### D. AUTOMATED DATA ACQUISITION AND PROCESSING

Survey data acquisition and processing were accomplished utilizing the HDAPS system hardware and the latest version of the NAVITRONIC NAVISOFT 300 software provided to the ship by N/CG24. A listing of actual programs and versions is appended in Section VI.\*

### E. SONAR EQUIPMENT

HECK is equipped with an EG&G model 260 slant range corrected Side Scan Sonar (SSS) recorder and model 272 dual frequency towfish. Serial numbers and dates of usage are as follows:

Towfish	S/N 10823	DOY 192 - 221
Recorder	S/N 012104	DOY 192 - 221

The beam width and down angle are not adjustable on this unit. All SSS data was collected using the 50, 75, and 100 meter range scales and 100 Khz frequency.

Confidence checks were obtained, and annotated on the sonargrams, by towing the side scan unit either past known items or linear bottom features. A minimum of two confidence checks were obtained on a daily basis as required.

Line spacing was set to allow for the required swath overlap, however strong currents, heavy vessel traffic, and shallow water caused some gaps in the side scan coverage. These holidays were rerun to allow 200% coverage. There were some cases where the towfish lost bottom, causing a pinching of the plotted swath. These pinched areas were not considered to be holidays, because in actuality full swath coverage was obtained.

Required proof of sonar coverage is demonstrated through the included sonar coverage plots. The hydrographer chose this method in lieu of the sonar coverage abstract. The choice of method is left to the hydrographer per Side Scan Sonar Manual section 3.1.3. The full sonar coverage can be seen by overlaying the three plots labeled Smooth Swath Plot 100%, Smooth Swath Plot 2nd 100% and Overlay Plot, which shows holiday lines. This method of presentation allows for clearer examination of the coverage.

Along the eastern and western edges of the sheet, where the swath runs parallel to the project boundary, there are some areas that do not have 200% coverage. These areas lay outside of the survey

\* Removed from original Descriptive Report and filed with the field records.



boundaries and are caused by the off set of the swaths for the 2nd 100% of coverage. Therefore, 200% coverage was attained up to the edge of the sheet.

The sonar contact list (Side Scan Sonar Manual 3.1.1.1.) is provided through the HECK's modified contact abstract table and the automated HDAPS contact table printout. Both are located in the separates.

Three contact tables were used during this survey. In order to prevent confusion all items were assigned a unique target number (1 - 73) which was logged in the remarks column on the contact table, in the target number column of the side scan sonar abstracts, and on the contact plot. Some contacts have more than one target number from successive hits during 200% coverage, developments, and detached positions. In this case the targets plotted on top of each other, however, the recommended charting positions were derived from their DP's.

#### F. SOUNDING EQUIPMENT

The following Raytheon DSF-6000N echosounder was used during this survey:

S/N A110N            DOY 192 - 221

Both low and high frequency depths were digitized, but only high frequency depths were plotted.

A leadline was used to measure all diver least depths. Good diving visibility (>30 ft) allowed scope to be minimized. A leadline calibration sheet is included in Separates Section IV.

#### G. CORRECTIONS TO ECHOSOUNDINGS

A velocity cast was conducted using the ODOM Digibar sound velocimeter (S/N 168) on July 10, 1991 (DOY 191) at:

LAT 30° 10.2'N    LON 87° 18.8'W

The velocity cast data were reduced and velocity corrections calculated using program VELOCITY. The computed velocity correctors were then applied on line to echosounder depths (both high and low frequency) by entering the correction data into the HDAPS sound velocity table.

On DOY 108 a dual leadline comparison was conducted and resulted in a mean difference of 0.040 meters or a corrector of 0.0 meters. On DOY 198 a second dual leadline comparison was conducted. The results are included in separates section IV but were not applied to the data.



The static draft of 2.10 meters was applied on line to all echosoundings via the HDAPS offset table.

Settlement and squat correctors for the HECK were determined on March 13, 1991 (DOY 72), in the vicinity of Craney Island fuel pier in Norfolk, Virginia using the level rod method. Settlement and squat values were applied on line to hydrographic soundings via the HDAPS offset table.

Heave is measured by a Datawell B.V. (S/N 19110-C) heave, roll, and pitch sensor (HIPPY) located midships near the transducer. The sensor gathers on line data which is applied to the soundings in near real time. All data acquired in the echosounder mode have been corrected by applying HIPPY correctors.

The tidal datum for this survey was mean lower low water (MLLW). The tide station at Municipal Pier, Pensacola, Florida was the reference station for this survey. The station was maintained under contract by Chapin and Assoc. and observed by Eilene Beard (904) 433-4319. Contact with the observer was made and the station inspected by HECK's crew member. No tide stations were established by the HECK in support of this survey.

All hydrographic depths have been corrected for predicted tides using the zone correctors specified in the project instructions. Tidal correctors were applied on line via the HDAPS predicted tide table. *Approved tides and zoning correctors were applied during office processing.*

H. CONTROL STATIONS - *See also section 2.2. of the Evaluation Report.*

The horizontal datum for this project is the North American Datum of 1983 (NAD 83). Three temporary stations were established by HECK personnel using standard geodetic methods and instruments. Those stations were:

Number	Station	Method
101	- VISTA DEL MAR (temp)	Direct T2 Azimuth/EDM Dist.
102	- PECOLA LIGHT (temp)	Tape Dist/Measured Azimuth
115	- SANS SOUCI (temp)	T2/EDM Traverse

The records and Horizontal Control Report for these stations were submitted to N/CG23322, Coastal Surveys Unit.

One existing published station, H-73-FL-80, was used.

A list of the horizontal control stations appears in appendix III, LIST OF HORIZONTAL CONTROL STATIONS submitted with this survey.



I. HYDROGRAPHIC POSITION CONTROL - See also section 2.a. of the Evaluation Report.

Position control was multiple LOP, utilizing Motorola Mini-Ranger shore stations. Control station positions were entered into the HDAPS Control Station Tables. (See APPENDIX III, LIST OF HORIZONTAL CONTROL STATIONS). The appropriate Mini-Ranger codes were attached to the station number on this table. C-0 Table 1 reflects the Mini-Ranger station numbers and corresponding code placement/Baseline Corrector values.

Equipment serial numbers appear as part of the header information on each days data print out. The Falcon remote units are identified by their position and code numbers.

System checks were conducted in accordance with the Field Procedures Manual and appear as HDAPS screen dumps on the data printouts.

All survey offsets were applied on-line using the HDAPS Offset Table number 1.

At no time during this project did the maximum residual consistently exceed 0.5 mm at the survey scale (5 meters) nor did the 95% confidence ECR consistently exceeded 1.5 mm at the survey scale (15 meters). Data not meeting these requirements were examined and high residuals either accepted or smoothed and high ECR's smoothed or rejected.

J. SHORELINE - See also section 2.b. of the Evaluation Report

Not applicable as per project instructions.

K. CROSSLINES - See also section 3.a. of the Evaluation Report.

12.9 miles of crosslines were run on this survey and they represent 6.5% of all hydrography. Comparison to main scheme soundings showed good agreement with random differences of  $\pm 0.2$  meters.

L. JUNCTIONS - See also section 5. of the Evaluation Report.

Two sounding overlap was maintained with H-10375 and H-10383. The majority of the soundings agreed within  $\pm 0.1$  meters, with an occasional  $\pm 0.2$  meters difference.

M. COMPARISON WITH PRIOR SURVEYS - See also section 6. of the Evaluation Report

Comparisons were made to prior surveys H-9971, 1981-82, 1:20,000 and H-9968, 1981-82, 1:10,000.



Comparisons showed excellent agreement with the majority of survey soundings 0 to 2 feet shoaler than the prior survey. Bottom samples also showed good agreement.

N. COMPARISON WITH THE CHART - *See also section 7. of the Evaluation Report.*

Comparison of surveyed soundings were made to NOS chart 11382, 32nd edition, Nov/90 and NOS chart 11383, 44th edition, Apr/90. The soundings agreed well with the charted soundings consistently 0 to 3 feet shoaler than the survey. Several areas of specific interest are the seven isolated 30 foot soundings shown on the chart just outside of the channel and between buoys "2"/"3" and "1" (see chartlet on next page). These areas were developed further on DOY 210 by running line splits. The shoals did not show up on this survey, or the prior survey, with the exception of the elongated shoal at position: LAT 30°16'40" LON 087°17'10" and the point shoal at position: LAT 30°17'18" LON 087°18'03. We recommend that the isolated 30 foot soundings be removed from the chart.

One danger to navigation report was submitted as a result of this survey. Copy appended.

Seventy-Three (73) contacts were identified during this survey. Thirty-Two (32) targets were identified as warranting additional investigation based on either their height off the bottom ( $\geq .5$  meters in  $< 20$  meters of water or  $\geq .7$  meters in  $> 20$  meters of water), their locality, or their appearance. All such contacts were investigated with additional side scan coverage and/or divers. The following is the list of targets with associated investigation results and recommendations:

TARGET

NARRATIVE

2

Target 2 is identified on contact table 1 as position number 9.52 with a computed height off the bottom of 0.1 meters (0.3ft) in 10.6 meters (34.8ft) of water. The target was seen on two different side scan passes and is the same as Target 14. This target, because of it's proximity to AWOIS item 7090, was investigated on DOY 198 at position number 444 utilizing divers. The divers found a small boat, completely covered with sand with the exception of the railing that ran around the bow. There were also several tires and some metal debris in the vicinity. A least depth of 10.3<sup>33</sup> meters (~~34.0~~ft) and height off the bottom of 0.3 meters (1.0ft) was obtained at the following position:

LAT 30°17'28.8<sup>2</sup>N      LON 087°17'07.8<sup>48</sup>W  
E 56593.5              N 32296.2  
LORAN w:13203.7 x:47107.4 y:30434.5 z:64082.5





(Pensacola Bay)

11383

SOUNDINGS IN FEET - SCALE 1:30,000



Recommendation: This item is insignificant and should not be charted. - *Do not concur. This item is shown on the present survey as a wreck with a depth of 10' m (33 Ft). Chart as shown on the present survey.*

3

Target 3 is identified on contact table 1 as position number 19.38 with a computed height off the bottom of 0.1 meters (0.3ft) in 11.2 meters (36.7ft)✓ of water. The target was seen on two different side scan passes and is the same as Target 25. This target, because of it's proximity to AWOIS item 7090, was investigated on DOY 198 at position number 443 utilizing divers. The divers found a piece of metal pipe protruding from the bottom. A least depth of ~~11.0~~<sup>10.8</sup> meters (36.0ft) and height off the bottom of 0.2 ~~1.0~~<sup>1.0</sup> meters (~~1.0~~<sup>1.0</sup>ft) was obtained at the following position: ~~φ.6~~

LAT 30°17'25.0<sup>4</sup>"N LON 087°17'13.25"W  
E 56439.2 N 32179.8  
LORAN w:13229.7 x:47107.1 y:30433.3 z:64082.4

Recommendation: This item is insignificant and should not be charted. - *Do not concur. This item is shown on the present survey as an obstruction (pipe) with a depth of 10<sup>8</sup> m (36 ft). Chart as shown on the present survey.*

4

Target 4 is identified on contact table 1 as position number 36.67 with a computed height off the bottom of 0.2 meters (0.7ft) in 11.2 meters (36.7ft)✓ of water. The target corresponded with a hydro hit on DOY 196, position number 245.50. This target was further investigated on DOY 221 at position number 1282 utilizing divers. The divers found several tires tied together. A least depth of 10.8~~2~~ meters (~~35.8~~<sup>33</sup>ft) and height off the bottom of 0.5 meters (1.5ft) was obtained at the following position: ~~6~~

LAT 30°17'20.8<sup>77</sup>"N LON 087°17'26.0<sup>1</sup>"W  
E 56098.2 N 32048.5  
LORAN w:13227.5 x:47106.6 y:30430.9 z:64082.5

Recommendation: This item is insignificant and should not be charted. - *Do not concur. This item is shown on the present survey as an obstruction (tires) with a depth of 10<sup>2</sup> m (33 ft). Chart as shown on the present survey.*

5

Target 5 is identified on contact table 1 as position 42.15 with a computed height off the bottom of 0.1 meters (0.3ft)✓ in 7.7 meters (25.3ft)✓ of water. This target, because of it's proximity to AWOIS item 7866, was investigated on DOY 217 at position number 1208 and on DOY 221 at position number 1286 utilizing divers. The divers found an anchor and a small boat. The boat was almost completely buried and the anchor was recovered by the divers. A least depth of 7.8~~8~~<sup>2.3</sup> meters (~~24.8~~<sup>2.3</sup>ft) and height off the bottom of 0.2 meters (0.6ft) was obtained at the following position:



LAT 30°17'48.~~9~~"N LON 087°17'05.~~9~~"W  
E 56636.1 <sup>89</sup> N 32914.3 <sup>89</sup>  
LORAN w:13225.1 x:47108.9 y:30430.0 z:64082.1

Recommendation: This item is believed to be AWOIS 7866. Charted as "Submerged Dangerous Wreck" <sup>PA</sup> on charts 11382 and 11383, and as a "Visible Wreck" in 24 feet of water on chart 11384, Due to the sedimentation that has occurred, it is now insignificant and should be removed from the chart. - Do not concur. Wreck is 1122 meters east of the AWOIS item. This wreck may be the AWOIS item. No wreck found at AWOIS position. Delete charted wreck and chart wreck found by this survey

8

Target 8 is identified on contact table 1 as position number 76.44 with a computed height off the bottom of 0.1 meters (0.3ft) in 16.7 meters (54.8ft) of water. The target corresponded with a hydro hit of 1.7 meters (5.6ft) on DOY 204, position number 792.10. This target was investigated on DOY 205 at position number 880 utilizing divers. The divers found a car along side a large tank. A least depth of 15.5 meters (49.7ft) ~~(51.0ft)~~ and height off the bottom of 1.8 meters (6.0ft) was obtained from the tank at the following position:

LAT 30°15'23.~~2~~"N LON 087°16'42.~~1~~"W  
E 57271.2 <sup>18</sup> N 28427.1 <sup>08</sup>  
LORAN w:13232.4 x:47097.3 y:30429.8 z:64083.8

Recommendation: This item is significant. Chart as "obstruction" with least depth 15.5 meters (49) ~~(51.0ft)~~ at position shown.

12

Target 12 is identified on contact table 1 as position number 203.60 with a computed height off the bottom of 0.1 meters (0.3ft) in 7.9 meters (25.9ft) of water. This target, because of it's proximity to AWOIS item 7866, was investigated on DOY 197 at position number 333 utilizing divers. The divers performed a 40 meter circle search and found nothing. The circle search radiated from the following position:

LAT 30°17'56.8"N LON 087°17'40.1"W  
E 55721.4 N 33157.4  
LORAN w:13225.7 x:47109.6 y:30431.0 z:64082.0

Recommendation: This item is insignificant and should not be charted. - Concur.

13

Target 13 is identified on contact table 3 as position number 203.77 with a computed height off the bottom of 0.2 meters (0.7ft) in 8.2 meters (26.9ft) of water. The target was seen on two different side scan passes



and is the same as Target 16. This target, because of its proximity to AWOIS item 7866, was investigated on DOY 197 at position number 331 utilizing divers. The divers found a large mushroom anchor, shank down, buried in the sand. A least depth of ~~8.0~~<sup>7.7</sup> meters (25.8ft) and height off the bottom of 0.2 meters (0.7ft) was obtained at the following position:

LAT 30°17'57.~~8~~"N LON 087°17'35.~~8~~"W  
E 55834.8 ~~57~~ N 33181.7 ~~88~~  
LORAN w:13226.8 x:47109.7 y:30432.1 z:64082.0

Recommendation: This item is insignificant and should not be charted. - *Do not concur. Surrounding depths range from 7' to 8' meters (25-26ft). Chart as shown on the present survey.*

19 Target 19 is identified on contact table 1 as position number 299.20 with a computed height off the bottom of 0.3 meters (1.0ft) in 20.5 meters (67.2ft)✓ of water. This target was further investigated with side scan sonar on DOY 210 between positions 1072 and 1073 using 75 meter range scale. This target was found to be insignificant and investigation beyond this point was not needed. The target is located at the following position:

LAT 30°14'58.0"N LON 087°17'27.8"W  
E 56047.9 N 27651.9

Recommendation: This item is insignificant and should not be charted. - *Concur.*

28 Target 28 is identified on contact table 2 as position 485.25 with a computed height off bottom of 0.2 meters (0.7ft) in 20.2 meters (66.3ft)✓ of water. The target was seen on two different side scan passes and is the same as Target 34. This target was further investigated with side scan sonar on DOY 210 between positions 1074 and 1075 using 75 meter range scale. It was found to be insignificant and investigation beyond this point was not needed. The target is located at the following position:

LAT 30°14'53.1"N LON 087°16'52.5"W  
E 56993.8 N 27501.8

Recommendation: This item is insignificant and should not be charted. - *Concur.*

30 Target 30 is identified on contact table 2 as position number 493.45 with a computed height off the bottom of 0.0 meters (0.0ft) in 16.6 meters (54.4ft)✓ of water.



This target was further investigated with side scan sonar on DOY 210 between positions 1070 and 1071 using 75 meter range scale. It was found to be insignificant and investigation beyond this point was not needed. The target is located at the following position:

LAT 30°15'32.7"N LON 087°17'17.4"W  
E 56327.1 N 28720.3

Recommendation: This item is insignificant and should not be charted. - *Concur.*

31 Target 31 can be identified on contact table 2 as position number 496.64 with a computed height off the bottom of 1.6 meters (5.3ft) in 16.9 meters (55.4ft) of water. This target was further investigated with side scan sonar on DOY 210 between positions 1067 and 1069 using 75 meter range scale. It was found to be insignificant and investigation beyond this point was not needed. The target is located at the following position:

LAT 30°16'05.9"N LON 087°17'29.5"W  
E 56004.4 N 29744.4

Recommendation: This item is insignificant and should not be charted. - *Concur.*

32 Target 32 can be identified on contact table 2 as position number 496.68 with a computed height off the bottom of 0.0 meters (0.0ft) in 16.6 meters (54.4ft) of water. This target was further investigated with side scan sonar on DOY 210 between positions 1067 and 1069 using 75 meter range scale. It was found to be insignificant and investigation beyond this point was not needed. The target is located at the following position:

LAT 30°16'05.0"N LON 087°17'34.2"W  
E 55879.1 N 29716.1

Recommendation: This item is insignificant and should not be charted. - *Concur.*

38 Target 38 can be identified on contact table 2 as position number 520.75 with a computed height off the bottom of 0.2 meters (0.7ft) in 14.5 meters (47.6ft) of water. The target was seen on two different side scan passes and is the same as Target 59. This target was further investigated with side scan sonar on DOY 210 between positions 1057 and 1060 using 100 and 75 meter



range scales. It was found to be insignificant and investigation beyond this point was not needed. The target is located at the following position:

LAT 30°16'18.3"N LON 087°17'01.7"W  
E 56747.4 N 30125.1

Recommendation: This item is insignificant and should not be charted. - *Concur.*

42

Target 42 can be identified on contact table 6 as position number 540.30 with a computed height off the bottom of 0.2 meters (0.7ft) in 12.5 meters (41.0ft) of water. This target was further investigated with side scan sonar on DOY 210 between positions 1061 and 1062 using 75 meter range scale. Nothing was found in the target area and investigation beyond this point was not needed. The target is located at the following position:

LAT 30°16'31.6"N LON 087°16'53.9"W  
E 56954.5 N 30534.0

Recommendation: This item is insignificant and should not be charted. - *Concur.*

45

Target 45 can be identified on contact table 2 as position number 567.48 with a computed height off the bottom of 0.4 meters (1.3ft) in 12.9 meters (42.3ft) of water. The target was seen on two different side scan passes and is the same as Target 61. This target was investigated on DOY 210 at position number 1065 utilizing divers. The divers found a large anchor and chain (Target 46/62). A least depth of ~~11.3~~ meters <sup>10.8</sup> (~~37.0~~ft) and height off the bottom of 1.8 meters (6.0ft) was obtained at the following position:

LAT 30°17'14.~~8~~"N LON 087°16'51.~~4~~"W  
E 57023.9 <sup>19</sup> N 31845.5 <sup>37</sup>  
LORAN w:13233.1 x:47106.2 y:30436.1 z:64082.7

Recommendation: This item is significant and should be charted as a "dangerous obstruction" at the above position and with a least depth of ~~11.8~~ meters <sup>10.8</sup> (~~37.0~~ft). - *Concur.*  
<sup>35</sup>

A "Danger to Navigation" letter was filed concerning this item, a copy is included.

46

Target 46 can be identified on contact table 2 as position number 567.55 with a computed height off the



bottom of 0.2 meters (0.7ft) in 13.3 meters (43.6ft) of water. The target was seen on two different side scan passes and is the same as Target 62. This target was investigated on DOY 210 at position number 1065 utilizing divers. The divers found a chain associated with a large anchor (Target 45/61). It was found to be insignificant in comparison with the anchor. The target is located at the following position:

LAT 30°17'15.1"N LON 087°16'52.0"W  
E 57007.9 N 31874.5

Recommendation: This item is insignificant and should not be charted. - *Concur.*

47

Target 47 can be identified on contact table 2 as position number 573.35 with a computed height off the bottom of 0.4 meters (1.3ft) in 19.1 meters (62.7ft) of water. The target was seen on two different side scan passes and is the same as Target 64. The target also corresponded with a hydro hit on DOY 197, at position number 367. This target was further investigated with side scan sonar on DOY 210 between positions 1082 and 1085 using 75 meter range scale and on DOY 221 at position number 1281 utilizing divers. The divers found a sail boat, approximately 25 feet in length. A least depth of ~~17.1~~ <sup>16.5</sup> meters (~~56.0~~ <sup>54</sup> ft) and height off the bottom of 1.5 meters (5.0ft) was obtained at the following position:

LAT 30°15'09.3"N LON 087°18'04.8"W  
E 55059.6 N 28001.6

Recommendation: This item is significant and should be charted as a "Non-dangerous wreck" at the above position and with a least depth of ~~17.1~~ <sup>16.5</sup> meters (56.0ft). - *Do not concur. Chart as a 54. a least depth of 16.5 m (54 ft) as shown on the present survey. dangerous sunken wreck with*

48

Target 48 can be identified on contact table 3 as position number 602.24 with a computed height off the bottom of 0.4 meters (1.3ft) in 16.1 meters (52.8ft) of water. This target, because of it's proximity to AWOIS item 7867, was further investigated with side scan sonar on DOY 217 between positions 1273 and 1276 using 75 meter range scale. Nothing was found and investigation beyond this point was not needed. The target is located at the following position:

LAT 30°19'36.9"N LON 087°18'28.7"W  
E 54425.3 N 36240.0



Recommendation: This item is insignificant and should not be charted. -Concur.

- 49 Target 49 can be identified on contact table 3 as position number 603.00 with a computed height off the bottom of 0.2 meters (0.7ft) in 15.2 meters (49.9ft) of water. This target, because of its proximity to AWOIS item 7867, was further investigated with side scan sonar on DOY 217 between positions 1277 and 1278 using 75 meter range scale. Nothing was found in the target area, investigation beyond this point was not needed. The target is located at the following position:

LAT 30°19'27.3 "N LON 087°18'26.8"W  
E 54476.6 N 35944.4

Recommendation: This item is insignificant and should not be charted. -Concur.

- 50 Target 50 is identified on contact table 3 as position number 604.43 with a computed height off the bottom of 0.2 meters (0.3ft) in 14.3 meters (46.9ft) of water. This target was further investigated with side scan sonar on DOY 217 between positions 1279 and 1280 using 75 meter range scale. Nothing was found in the target area, investigation beyond this point was not needed. The target is located at the following position:

LAT 30°19'06.6"N LON 087°18'23.6"W  
E 54561.7 N 35307.2

Recommendation: This item is insignificant and should not be charted. Concur.

- 51 Target 51 is identified on contact table 3 as position number 624.05 with a computed height off the bottom of 0.4 meters (1.3ft) in 17.8 meters (58.4ft) of water. This target was further investigated with side scan sonar on DOY 210 between positions 1080 and 1081 using 75 meter range scale. Nothing was found in the target area, investigation beyond this point was not needed. The target is located at the following position:

LAT 30°14'37.3"N LON 087°18'20.6 "W  
E 54637.9 N 27015.8

Recommendation: This item is insignificant and should not be charted. -Concur.



52

Target 52 is identified on contact table 3 as position number 643.08 with a computed height off the bottom of 0.5 meters (1.6ft) in 18.0 meters (59.0ft) of water. This target was further investigated with side scan sonar on DOY 210 between positions 1076 and 1079 using 75 and 50 meter range scales. It was found to be insignificant and investigation beyond this point was not needed. The target is located at the following position:

LAT 30°14'25.4"N LON 087°18'23.5"W  
E 54558.7 N 26649.9

Recommendation: This item is insignificant and should not be charted. - *Concur.*

56

Target 56 can be identified on contact table 3 as position number 727.50 with a computed height off the bottom of 0.6 meters (2.0ft) in 16.1 meters (52.8ft) of water. This target was further investigated with side scan sonar on DOY 210 between positions 1067 and 1069 using 75 meter range scale. This target was found to be insignificant and investigation beyond this point was not needed. The target is located at the following position:

LAT 30°16'05.6"N LON 087°17'32.1"W  
E 55935.8 N 29734.5

Recommendation: This item is insignificant and should not be charted. - *Concur.*

60

Target 60 can be identified on contact table 3 as position number 806.70 with a computed height off the bottom of 0.1 meters (0.3ft) in 11.6 meters (38.1ft) of water. This target was further investigated with side scan sonar on DOY 178 between positions 1063 and 1064 using 75 meter range scale. It was then investigated on DOY 210 at position number 1066 utilizing divers. The divers found a <sup>35</sup> metal cribbing. A least depth of <sup>108</sup> ~~11.3~~ meters (~~37.0~~ ft) and height off the bottom of 0.6 meters (2.0ft) was obtained at the following position:

LAT 30°16'30.6"N LON 087°17'04.9"W  
E 56660.9 N 30502.0

Recommendation: This item is insignificant and should not be charted.

AWOIS 7089: This item is listed as a wire drag hang on an old car body that extended off the bottom 3ft. <sup>v</sup> The  
(1 m)



HECK was required to complete 200% side scan coverage of this item in order to disprove it. In addition if anything was found within the AWOIS circle divers were required to investigate in order to verify or disprove this item. 200% side scan coverage was accomplished during the running of normal main scheme hydrography. Only one contact was found in the AWOIS circle. Further investigation showed this target did not exist. The center of the awois circle is located at the following position:

LAT 30°16'30.72"N LON 087°16'57.89"W

Recommendation: Complete 200% side scan coverage was accomplished of AWOIS 7089 and nothing was found. AWOIS 7089, charted as a "Obstruction hung at 35 feet", is considered disproved and should be removed from the chart. - *Do not concur. See also sections 1.b. and 6.b.1) of the Evaluation Report.*

AWOIS 7090

This item is listed as a wire drag hang on a pile of metal blocks that extended off the bottom 1ft. The HECK was required to complete 200% side scan coverage of this item in order to disprove it. In addition if anything was found within the AWOIS circle divers were required to investigate in order to verify or disprove this item. 200% side scan coverage was accomplished during the running of normal main scheme hydrography. Two contacts were found within the boundaries of the AWOIS circle. Targets 3/25 and 2/14 were investigated utilizing divers. Neither target fit the description of the AWOIS item. The center of the AWOIS circle is located at the following position:

LAT 30°17'27.72"N LON 087°17'14.89"W

Recommendation: AWOIS 7090, charted as "Obstruction Wire Cleared to 25ft", is considered disproved and should be removed from the chart. - *Do not concur. See also section 1.b and 6.b.2) of the Evaluation Report.*

AWOIS 7865:

This item is listed as a 16ft pleasure craft reported sunk in Caucus Channel. The HECK was required to complete 200% side scan coverage of this item in order to disprove it. In addition if anything was found within the AWOIS circle divers were required to investigate in order to verify or disprove this item. 200% side scan coverage was accomplished during the running of normal main scheme hydrography. No contacts were found anywhere within the boundaries of the AWOIS circle. The center of the AWOIS circle is located



at the following position:

LAT 30°18'02.72"N LON 087°18'04.20"W

Recommendation: Complete 200% side scan coverage was accomplished of AWOIS 7865 and nothing was found. Caucus Channel is being dredged to 44ft depth which is further evidence that this item no longer exists. AWOIS 7865, charted as a "Submerged Dangerous Wreck", is considered disproved and should be removed from the chart. ~~is~~ *not Concur. See also section 1.b. and 7.a.1) of the Evaluation Report. See section 7.a.1) of the Evaluation Report.*

AWOIS 7867:

This item is listed as a car body and debris in Caucus Channel. The HECK was required to complete 200% side scan coverage of this item in order to disprove it. In addition if anything was found within the AWOIS circle divers were required to investigate in order to verify or disprove this item. 200% side scan coverage was accomplished where water depths would allow it. Two contacts were found in the AWOIS circle. Further investigation showed these targets did not exist. The center of the AWOIS circle is located at the following position:

LAT 30°19'24"N LON 087°18'30"W

Recommendation: 200% side scan coverage was accomplished where possible and nothing was found. Caucus Channel is being dredged to 44ft which is further evidence that this item no longer exists. AWOIS 7867, charted as an "Obstruction", is considered disproved and should be removed from the chart. *-Concur. See also section 7.a.3) of the Evaluation Report.*

AWOIS 7868

This item is listed as a 27ft fishing vessel sunk in Caucus Channel. The HECK was required to complete 200% side scan coverage of this item in order to disprove it. In addition if anything was found within the AWOIS circle divers were required to investigate in order to verify or disprove this item. 200% side scan coverage was accomplished during the running of normal main scheme hydrography. No contacts were found anywhere within the boundaries of the AWOIS circle. The center of the AWOIS circle is located at the following position:

LAT 30°17'24"N LON 087°17'54"W

Recommendation: 200% side scan coverage was accomplished and nothing was found. Caucus



Channel is being dredged to 44ft which is further evidence that this item no longer exists. AWOIS 7868, charted as "Submerged Dangerous Wreck", is considered disproved and should be removed from the chart. - Concur. See also section 7.2.4) of the Evaluation Report.

#### O. ADEQUACY OF SURVEY

This survey meets or exceeds 1:10000 specifications, and is adequate to supersede all prior surveys for the purposes of charting the depths and hazards to navigation within the survey area.

See section R regarding dredging activity.

#### P. AIDS TO NAVIGATION

The aids to navigation found in the area of this survey were being moved frequently to allow for dredging operations. Therefore, no aids to navigation were positioned. All aids to navigation that appear on plots are for reference only.

#### Q. STATISTICS

ITEM	AMOUNT
1. Total No. of Positions	1286 Fixes
2. Lineal NM of Soundings	200.0 NMi
3. Square NM Hydrography	25.9 NMi <sup>2</sup>
4. Days of Production	16 Days
5. Bottom Samples	11
6. Tide Stations Established	None
7. Current Stations Established	None
8. Velocity Casts Performed	1 Cast
9. Magnetic Stations Established	None
10. Detached Positions	12

#### R. MISCELLANEOUS

No anomalies in either tide or current were noted.

Eleven bottom samples were taken, Log Sheet M appended, and submitted to the Smithsonian Institution. A copy will be included in section II of the separates. No actual samples were sent as per project instruction. Sampling was not extensive due to the adequacy of the prior survey work.



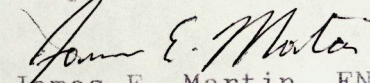
S. RECOMMENDATIONS

Dredging operations were still underway in Caucus Channel when this survey was completed. Therefore we recommend the use of Corps of Engineers soundings within the limits channel, and Coast Guard positions for the channel buoys.

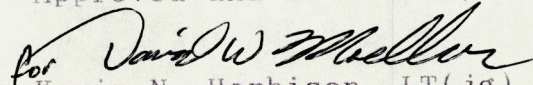
T. REFERRAL TO REPORTS

Horizontal Control report for OPR-J452-HE-91 was submitted to N/CG243 on June 7, 1991.

Respectfully Submitted,

  
James E. Martin, ENS, NOAA  
Junior Officer  
NOAA Ship HECK

Approved and Forwarded,

  
Kevin N. Harbison, LT(jg), NOAA  
Field Operations Officer  
NOAA Ship HECK



APPENDIX I

DANGER TO NAVIGATION REPORTS



August 7, 1991

Commander, Eighth Coast Guard District  
Aids to Navigation  
Hale Boggs Federal Building  
501 Magazine Street  
New Orleans, LA 70130-3396

Subject: Report of Danger to Navigation

Registry Number: H-10387

Survey Title: Florida  
Gulf of Mexico  
Approaches to Pensacola

Project Number: OPR-J452-HE, NOAA Ship HECK

The following item was located during hydrographic survey operations.

Object: Anchor, covered by 37 feet of water corrected to MLLW using predicted tides, surrounded by depths of 42 feet. Chart as "Obstruction" least depth 37ft.

Affected Nautical Charts:

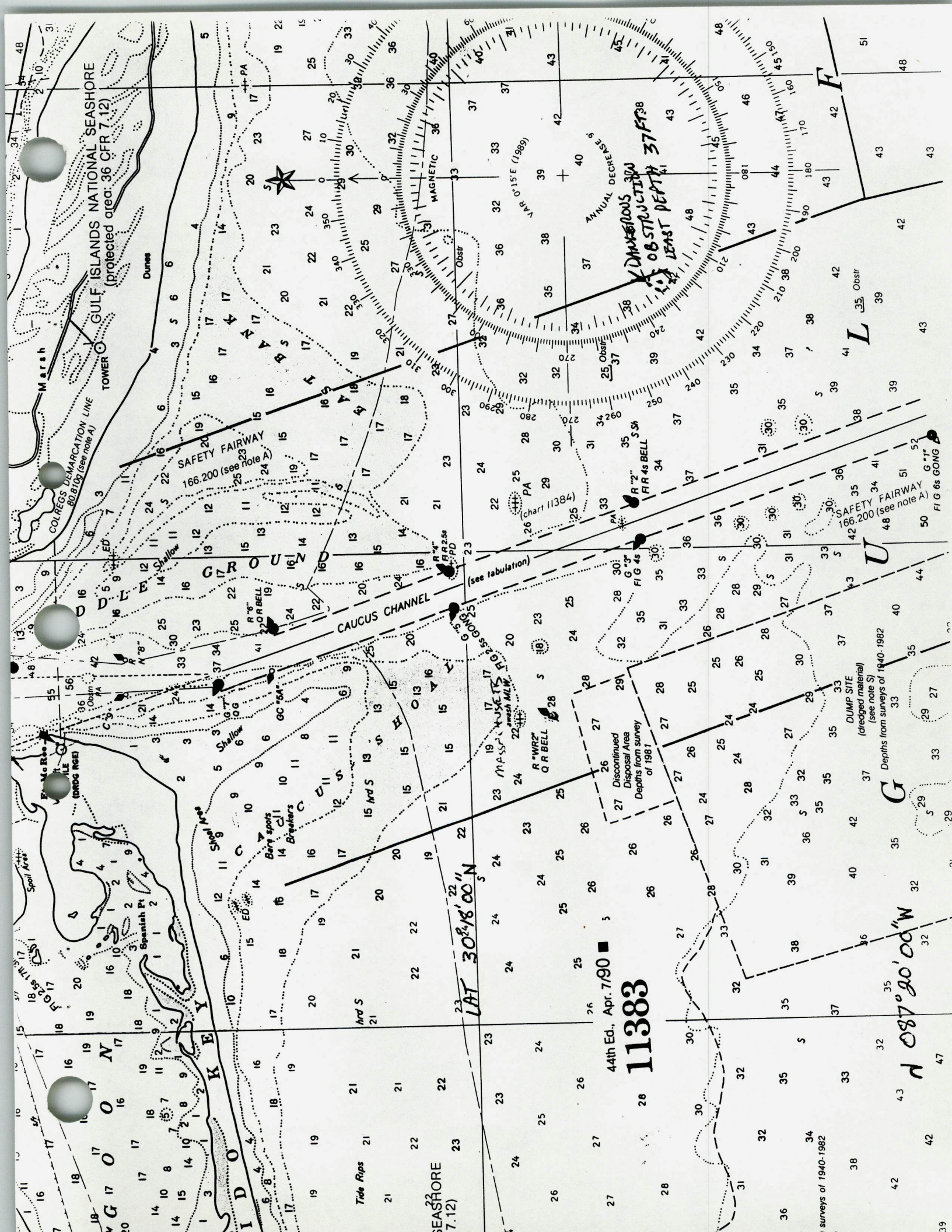
Chart Number	Edition No.	Date	Reported Depth	Datum	LAT	LON
11382	32	10 NOV 90	37 ft	NAD 83	30°17.24'N	087°16.86'W
11383	44	07 APR 90	37 ft	NAD 83	30°17.24'N	087°16.86'W
11384	28	26 MAY 90	37 ft	NAD 83	30°17.24'N	087°16.86'W
11378	24	13 JAN 90	37 ft	NAD 83	30°17.24'N	087°16.86'W

Questions concerning this report should be directed to ENS Martin on board NOAA HECK at (904) 572-5052.

cc.  
DMAHTC  
N/CG221  
N/CG2441

Stanley R. Iwamoto, LCDR, NOAA  
Commanding Officer, NOAA HECK





GULF ISLANDS NATIONAL SEASHORE  
(protected area: 36 CFR 7.12)

TOWER

SAFETY FAIRWAY  
166.200 (see note A)

CAUCUS CHANNEL

SHALLOW

Spanish Pt

Bar's spoils

BRITAINERS

TRIDE RIPS

SEASHORE  
(7.12)

surveys of 1940-1982



MAGNETIC  
VAR 0.15° E (1989)  
ANNUAL DECREASE 9'

DANGER  
OBSTRUCTION  
LEAST DEPTH 37 FT 38

R "6"  
R "2"  
R "WR"  
G "R"  
G "3"  
G "4"  
G "5"  
G "6"  
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G "99"  
G "100"

DISCONTINUED  
DISPOSAL AREA  
DEPTHS FROM SURVEY  
OF 1981

DUMP SITE  
(dredged material)  
(see note S)

DEPTHS FROM SURVEYS OF 1940-1982

FIG 25 17.3

FIG 25 17.3

FIG 25 17.3

FIG 25 17.3

FIG 25 17.3

44th Ed., Apr. 7/90  
11383

LAT 30° 18' 00" N  
LONG 87° 20' 00" W





UNITED STATES DEPARTMENT OF COMMERCE  
 National Oceanic and Atmospheric Administration  
 NATIONAL OCEAN SERVICE  
 Coast and Geodetic Survey  
 Norfolk, Virginia 23510-1114  
 ATLANTIC MARINE CENTER  
 Atlantic Hydrographic Section  
 439 West York Street  
 Norfolk, VA 23510-1114

March 22, 1993

*Pror rec'd  
 L-766(93)*

Commander  
 Eighth Coast Guard District (oan)  
 Hale Boggs Federal Building  
 501 Magazine Street  
 New Orleans, LA 70130-3396

Dear Sir,

The following item was previously reported as a danger to navigation on August 7, 1991:

REPORT OF DANGER TO NAVIGATION

Hydrographic Survey Registry Number...H-10387  
 State.....Florida  
 General Locality.....Gulf of Mexico  
 Locality.....Approaches to Pensacola  
 Project Number.....OPR-J452-HE  
 Surveyed by.....NOAA Ship Heck

Object Addressed:

The 37-ft (11<sup>3</sup>m) least depth reported (corrected to MLLW using predicted tides) on an obstruction, has been corrected during office processing to 35-ft (10<sup>8</sup>m) @ MLLW using approved tides.

Affected Nautical Charts:

<u>Chart Number</u>	<u>Edition No.</u>	<u>Date</u>	<u>Reported Depth</u>	<u>Datum</u>	<u>Latitude</u>	<u>Longitude</u>
11382	32 10	NOV 90	10 <sup>8</sup> m / 35ft	NAD 83	30°17'14.19"N	87°16'51.37"W
11383	44 07	APR 90	10 <sup>8</sup> m / 35ft	NAD 83	30°17'14.19"N	87°16'51.37"W
11384	28 26	MAY 90	10 <sup>8</sup> m / 35ft	NAD 83	30°17'14.19"N	87°16'51.37"W
11378	24 13	JAN 90	10 <sup>8</sup> m / 35ft	NAD 83	30°17'14.19"N	87°16'51.37"W

Questions concerning this report should be directed to the Atlantic Hydrographic Section by calling 804-441-6746.

Sincerely,

*Christopher B. Lawrence*

Christopher B. Lawrence, CDR, NOAA  
 Chief, Atlantic Hydrographic Section

Attachments









CESAM- FO-PC(1145)

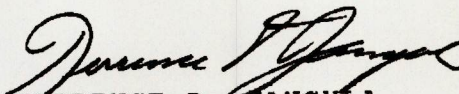
BUSH/763-2881/12 APRIL 93

MEMORANDUM FOR HYDROGRAPHIC SURVEY BRANCH (NOAA)

SUBJECT. WRECK LOCATIONS ON NOAA CHART 11384

1. We recommended that the wreck locations at AWO1S #7868, AWO1S #7865, AWO1S #7867 be removed from NOAA chart 11383. This recommendation is based on recent dredging activities at the reported wreck locations.

2. Please direct any questions to Roger Bush at (904/763-2881)

  
TERRENCE D. JANGULA  
AREA ENGINEER



APPENDIX III

LIST OF HORIZONTAL CONTROL STATIONS







CONTROL STATIONS as of 11 Jul 1991

No	Type	Latitude	Longitude	H	Cart	Freq	Uel Code	MM/DD/YY	Station Name
101	F	030:17:53.043	087:25:11.984	30	250	0.0	0.0	1 07/10/91	VISTA DEL MAR (TEMP)
102	F	030:20:46.001	087:18:29.132	56	250	0.0	0.0	2 07/10/91	PECOLA LIGHTHOUSE (TEMP)
103	F	030:19:19.106	087:17:06.099	12	250	0.0	0.0	8 07/10/91	H-73-FL-80
115	F	030:19:38.644	087:09:49.572	36	250	0.0	0.0	5 07/10/91	SANS SOUCI (TEMP)



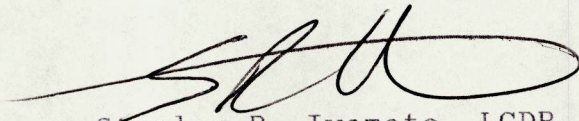
APPENDIX VII

APPROVAL SHEET



VII. LETTER OF APPROVAL

Field operations contributing to the accomplishment of this survey were conducted under my direct supervision with frequent personal checks of progress and data quality. This report, field sheets, and data records have been closely reviewed and are complete and adequate for charting.

A handwritten signature in black ink, appearing to read 'S. Iwamoto', with a large, sweeping flourish at the end.

Stanley R. Iwamoto, LCDR, NOAA  
Commanding Officer  
NOAA Ship HECK



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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: September 27, 1991

MARINE CENTER: Atlantic

OPR: J452-HE-91

HYDROGRAPHIC SHEET: H-10387

LOCALITY: Gulf of Mexico, approaches to Pensacola Bay, FL

TIME PERIOD: July 11- August 9, 1991

TIDE STATIONS USED: Pensacola, FL (872-9840)

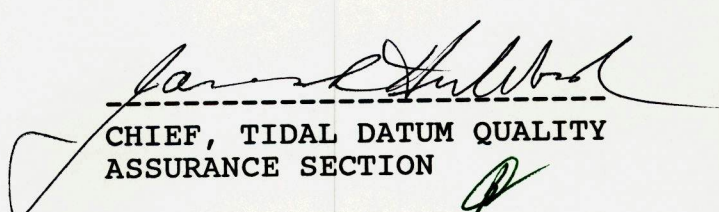
Lat.  $30^{\circ} 24.2'N$  Lon.  $87^{\circ} 12.8'W$

PLANE OF REFERENCE (MEAN LOWER LOW WATER): = 8.28 ft.

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: = 1.2 ft.

REMARKS: RECOMMENDED ZONING

Apply a X1.11 range ratio to all heights, and a -02hr 30min time correction on 872-9840.

  
CHIEF, TIDAL DATUM QUALITY  
ASSURANCE SECTION



GEOGRAPHIC NAMES

H-10387

Name on Survey	ON CHART NO. 10383, 10382											
	A	B	C	D	E	F	G	H	K			
	ON PREVIOUS SURVEY NO.	CON U.S. QUADRANGLE MAPS	FROM LOCAL INFORMATION	ON LOCAL MAPS	P.O. GUIDE OR MAP	GRAND McNALLY ATLAS	U.S. LIGHT LIST					
CAUCUS SHOAL	X											1
EAST BANK	X											2
FLORIDA (title)	X											3
MEXICO, GULF OF (title)	X											4
MIDDLE GROUND	X											5
PENSACOLA (title)	X											6
												7
												8
												9
												10
												11
												12
												13
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												25

Approved:

*Charles E. Harrington*  
Chief Geographer - 11/05/2005

MAR 23 1993



06/30/93

HYDROGRAPHIC SURVEY STATISTICS  
REGISTRY NUMBER: H-10387

NUMBER OF CONTROL STATIONS		4
NUMBER OF POSITIONS		1227
NUMBER OF SOUNDINGS		7565
	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	68	10/10/91
VERIFICATION OF FIELD DATA	107	03/26/92
ELECTRONIC DATA PROCESSING	54	
QUALITY CONTROL CHECKS	49	
EVALUATION AND ANALYSIS	140	05/05/93
FINAL INSPECTION	30	06/29/93
TOTAL TIME	448	
ATLANTIC HYROGRAPHIC SECTION APPROVAL		06/29/93



N/CG244-83-93

LETTER TRANSMITTING DATA

DATA AS LISTED BELOW WERE FORWARDED TO YOU BY (Check):

- ORDINARY MAIL  AIR MAIL
- REGISTERED MAIL  EXPRESS
- GBL (Give number) \_\_\_\_\_

TO:

NOAA/National Ocean Service  
Chief, Data Control Section, N/CG243  
SSMC3, Station 6815  
Silver Spring, MD 20910

DATE FORWARDED

06 July 1993

NUMBER OF PACKAGES

two (2)

**NOTE:** A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate cover. The copy will be returned as a receipt. This form should not be used for correspondence or transmitting accounting documents.

H-10387

(HE-10-1-91) OPR-J452

Florida, Gulf of Mexico, Approaches to Pensacola Bay

Package #1 (tube):

- ✓ 1 Smooth Sheet
- ✓ 1 Smooth Position Overlay
- ✓ 2 Excess Overlays (level 1/3 and level 2&3/3)
- ✓ 1 Smooth Field Sounding Plot
- ✓ 1 Smooth Field Position Plot
- ✓ 2 Smooth Field Swath Plots
- ✓ Original Descriptive Report

Package #2 (box):

- ✓ 1 Envelope containing "Separates and Material Removed From the Original Descriptive Report"
- ✓ 1 Folder containing "Material Removed from Original Descriptive Report"
- ✓ 14 Envelopes containing Sonargrams Printouts and Fathograms for Days: 192, 193, 196, 197, 198 fathogram & printout), 200, 203-206, 210, 213, 217, and 221
- ✓ 1 Cahier containing Final Psotion and Control Listings
- ✓ 1 Cahier containing Final Sounding Listing and Line File Listing

FROM: (Signature)

*Robert G. Roberson*  
Robert G. Roberson

RECEIVED THE ABOVE  
(Name, Division, Date)

Return receipted copy to:

Atlantic Hydrographic Section, N/CG244  
439 W. York Street  
Norfolk, VA 23510-1114

*D. S. Clark*

JUL 13 1993



**COAST AND GEODETIC SURVEY  
ATLANTIC HYDROGRAPHIC SECTION  
EVALUATION REPORT**

**SURVEY NO.:** H-10387

**FIELD NO.:** HE-10-1-91

Florida, Gulf Of Mexico, Approaches To Pensacola Bay

**SURVEYED:** 11 July through 9 August 1991

**SCALE:** 1:10,000

**PROJECT NO.:** OPR-J452-HE-91

**SOUNDINGS:** RAYTHEON DSF-6000N Fathometer, EG&G Model 260 Side Scan Sonar, and Leadline

**CONTROL:** MOTOROLA Falcon 484 Mini-Ranger (Range/Range)

Chief of Party.....S. R. Iwamoto

Surveyed by.....D. W. Moeller  
.....K. N. Harbison  
.....J. E. Martin  
.....W. R. Morris

Automated Plot by.....XYNETICS 1201 Plotter (AHS)

**1. INTRODUCTION**

a. This is primarily a side scan sonar survey. A RAYTHEON DSF-6000N fathometer was operated concurrently with the side scan sonar. A leadline was used to determine least depths during dive operations. No wire drag was accomplished during this survey.

b. During office processing of this survey, very low contrast was noted on side scan sonargrams. This problem made interpretation of side scan sonar contacts difficult. Of particular concern was extreme difficulty in scaling target heights on these records because the shadow was difficult to see for most targets. Some contacts seen on the sonargrams were deemed insignificant but were found to be significant after dive investigations. Some contacts on the sonargrams that were not considered targets resemble other contacts that were investigated and found to be significant. It is not possible to determine whether the low-contrast records can be attributed to poor signal return due to bottom composition in the area (fine sand), or side scan sonar equipment problems. For these reasons, 200% side scan sonar coverage can not be claimed for this survey and all AWOIS items considered disproved by side scan sonar records, should be retained as presently charted.



c. Notes in the Descriptive Report were made in red during office processing.

## 2. CONTROL AND SHORELINE

a. Control is adequately discussed in sections H., I, and T. of the Descriptive Report.

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD 83). Office processing of this survey is based on these values. The smooth sheet has been annotated with ticks showing the computed mean shift between the NAD 83 and the North American Datum of 1927 (NAD 27).

To place this survey on the NAD 27 datum, move the projections .723 seconds (22.277 meters or 1.11 mm at the scale of the survey) north in latitude, and 0.101 seconds (2.690 meters or .13 mm at the scale of the survey) west in longitude.

All geographic positions listed in this report are on the NAD 83 datum unless otherwise specified.

b. There is no shoreline within the limits of this survey.

## 3. HYDROGRAPHY

a. Where applicable, soundings at crossings are in good agreement and comply with the criteria found in sections 4.6.1 and 6.3.4.3. of the HYDROGRAPHIC MANUAL.

b. Where applicable, standard depth curves could be drawn in their entirety.

c. The development of the bottom configuration and determination of least depths of items located and shown on the smooth plot is considered adequate except where noted in this report.

## 4. CONDITION OF SURVEY

The smooth plots and accompanying overlays, hydrographic records and reports are adequate and conform to the requirements of the HYDROGRAPHIC MANUAL, SIDE SCAN SONAR MANUAL, and FIELD PROCEDURES MANUAL.

## 5. JUNCTIONS

H-10375 (19<sup>9</sup>81) on the east  
H-10383 (1991) on the south

Adequate junctions were effected between the present



survey and the junctional surveys listed above.

## 6. COMPARISON WITH PRIOR SURVEYS

### a. Hydrographic

H-9968	(1981)	1:10,000
H-9971	(1981-82)	1:20,000

The prior surveys listed above cover the present survey area in its entirety.

1) H-9968 (1981) covers the northern half of the present survey area. The present and prior survey are in excellent agreement with depth differences varying plus or minus ( $\pm$ ) 1 to 2 feet ( $0^3$  to  $0^6$  m). The following should be noted:

a) In the vicinity of Latitude  $30^{\circ}19'30''N$ , Longitude  $87^{\circ}08'30''W$ , which is the entrance to Pensacola Bay, prior survey depths are as much as 14 feet ( $4^3$  m) deeper than present survey depths. This shoaling can be attributed to natural changes in the bottom configuration.

b) In the vicinity of Caucus Channel, changes were noted with prior survey depths generally being 1 to 6 feet ( $0^3$  to  $1^8$  m) shoaler than the present survey. These differences can be attributed to dredging of the channel.

2) H-9971 (1981-82) covers the southern half of the present survey area. Excellent agreement with prior hydrography is noted, with depth differences varying plus or minus ( $\pm$ ) 1 to 2 feet ( $0^3$  to  $0^6$  m). These differences can be attributed to natural changes in the bottom configuration.

The present survey is adequate to supersede the prior surveys in the common area.

### b. Wire Drag

H-9466WD	(1974)	1:40,000
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Prior wire drag survey H-9466WD (1974) covers the entire present survey area. AWOIS Items #7089 and #7090 originate with this prior wire drag survey. The following should be noted:

1) AWOIS item #7089, a charted obstruction with a wire drag clearance of 35-ft ( $10^7$  m) and a danger curve, in



Latitude 30°16'30.72"N, Longitude 87°16'57.89"W, originates with prior survey H-9466WD (1974). Due to poor quality side scan sonar records, the investigation for this item failed to verify or disprove the existence of this item. This obstruction has been brought forward from the prior survey to supplement the present survey. No change in charting status is recommended. Additional field work is recommended for this item.

2) AWOIS item #7090, a charted obstruction with a wire drag clearance of 25-ft (7<sup>6</sup> m) and a danger curve, in Latitude 30°17'27.72"N, Longitude 87°17'14.89"W, originates with the prior survey. Due to poor quality side scan sonar records, the investigation for this item failed to verify or disprove the existence of the item. This obstruction has been brought forward from the prior survey to supplement the present survey. No change in charting status is recommended. Additional field work is recommended for this item.

3) Scattered conflicts of 1 foot (0<sup>3</sup> m) or less were noted between the present survey depths and prior survey effective depths shown on the prior survey. In the following areas, the effective depths are 1 to 4 feet (0<sup>3</sup> to 1<sup>2</sup> m) deeper than the present survey depths:

Effective Depths (ft/m)	Latitude (N)	Longitude (W)	Present Depths
24/ 7 <sup>3</sup>	30°16'58.0"	87°18'40.0"	21-23/ 6 <sup>4</sup> -7
33/10 <sup>1</sup>	30°16'38.5"	87°17'56.0"	30-31/ 9 <sup>1</sup> -
9 <sup>4</sup>			
39/11 <sup>9</sup>	30°15'55.0"	87°18'12.0"	33-36/10 <sup>1</sup> -
11			
46/14	30°15'37.0"	87°17'59.0"	42-44/12 <sup>8</sup> -
13 <sup>4</sup>			
53/16 <sup>2</sup>	30°15'19.0"	87°17'00.0"	51-52/15 <sup>5</sup> -
15 <sup>8</sup>			

These differences may be attributed to subsequent change in the bottom configuration. It is recommended that these conflicts be disregarded.

The present survey is adequate to supersede the prior wire drag survey in the common area.

7. COMPARISON WITH CHARTS 11382 (32<sup>nd</sup> Edition, Nov. 10/90)  
11383 (44<sup>th</sup> Edition, Apr. 1/90)  
11384 (28<sup>th</sup> Edition, May 26/90)



a. Hydrography

The charted hydrography originates with the previously discussed prior surveys and miscellaneous sources and requires no further consideration. Attention is directed to the following:

1) AWOIS Item #7865, a charted dangerous sunken wreck, PD with a danger curve, in Latitude 30°18'02.72"N, Longitude 87°18'04.20"W, originates with Local Notice to Mariners 42 of 1983 (LNM42/83). The field unit investigated this item using side scan sonar with negative results. Considering the poor quality of the side scan sonar records, the investigation for this item is not considered adequate to verify or disprove the existence of the item. Subsequent information provided by the U. S. Army Corp of Engineers (COE) recommends removal of this wreck based on after dredging surveys conducted by the COE. A copy of the COE recommendation is appended to the Descriptive Report. It is recommended that the charted dangerous sunken wreck, PD with a danger curve be deleted from the chart.

2) AWOIS Item #7866, a charted dangerous sunken wreck, PA with a danger curve, in Latitude 30°17'48.72"N, Longitude 87°17'47.89"W, originates with LNM37/89. The field unit investigated this item using side scan sonar with negative results. Considering the poor quality of the side scan sonar records, the investigation for this item is not considered adequate to verify or disprove the existence of this item. It is recommended that the charted dangerous sunken wreck, PA with a danger curve remain as presently charted pending additional field work.

3) AWOIS Item #7867, a charted dangerous submerged obstruction, PA with a danger curve, in Latitude 30°19'24.72"N, Longitude 87°18'29.90"W, originates with LNM22/89. The field unit investigated this item using side scan sonar with negative results. Considering the poor quality of the side scan sonar records, the investigation for this item is not considered adequate to verify or disprove the existence of this item. Subsequent information provided by the COE recommends removal of this wreck based on after dredging surveys conducted by the COE. A copy of the COE recommendation is appended to the Descriptive Report. It is recommended that the charted dangerous submerged obstruction, PA with a danger curve be deleted from the chart.

4) AWOIS Item #7868, a charted dangerous sunken wreck, PA with a danger curve, in Latitude 30°17'24.72"N, Longitude 87°17'53.90"W, originates with LNM29/86. The field



unit investigated this item using side scan sonar with negative results. Considering the poor quality of the side scan sonar records, the investigation for this item is not considered adequate to verify or disprove the existence of this item. Subsequent information provided by the COE recommends removal this wreck based on after dredging surveys conducted by the COE. A copy of the COE recommendation is appended to the Descriptive Report. It is recommended that the charted dangerous sunken wreck, PA with a danger curve be removed from the chart.

5) The charted soundings in the Discontinued Disposal Area in the vicinity of Latitude 30°17'30"N, Longitude 87°18'45"W, should be revised to reflect present survey depths in the common area. The charted notation "Depths from survey of 1981" should also be revised to reflect the present survey dates.

6) The charted soundings in the Dump Site in the vicinity of Latitude 30°16'30"N, Longitude 87°18'30"W, should be revised to reflect the present survey in the common area. The charted notation "Depths from surveys of 1940-82" should also be revised to reflect the present survey dates.

7) During field operations, eleven (11) significant contacts were investigated by divers. The results of these dive investigations are adequately discussed in section N. of the Descriptive Report.

The present survey is adequate to supersede the charted hydrography in the common area.

b. Controlling Depths

There are no conflicts between the present survey depths and the charted tabulation for Caucus Channel.

c. Danger to Navigation

The hydrographer identified one danger to navigation and submitted information for inclusion in Local Notice to Mariners to the Commander (oan), Eighth Coast Guard District, New Orleans Louisiana. Copies of the letter were sent to the Defense Mapping Agency, Hydrographic/Topographic Center, and N/CG221, Chart Information Section. During office processing, it was determined that the least depth reported in this letter needed to be revised. An amendment to the hydrographer's letter has been forwarded to the previously mentioned offices. A copy of the original danger to navigation report and the revised danger to navigation report are appended to the



Descriptive Report.

d. Aids to Navigation

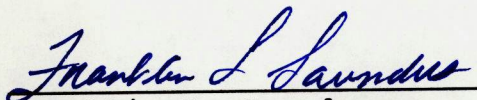
The field unit located one floating aid to navigation within the limits of this survey. This aid appears adequate to serve its intended purpose.

8. COMPLIANCE WITH INSTRUCTIONS

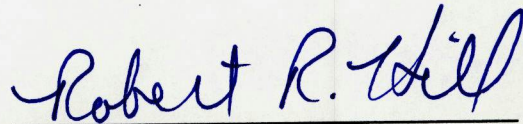
This survey adequately complies with the Project Instructions except where noted in this report.

9. ADDITIONAL WORK

This is an adequate side scan sonar survey, additional work is recommended in sections 6. and 7. of this report.



Franklin L. Saunders  
Cartographic Technician  
Verification of Field Data



Robert R. Hill Jr.  
Senior Cartographic  
Technician  
Verification Check/  
Evaluation and Analysis



APPROVAL SHEET  
H-10387

Initial Approvals:

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. The digital data have been completed and all revisions and additions made to the smooth sheet during survey processing have been entered in the magnetic tape record for this survey. Final control, position, and sounding printouts of the survey have been made. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.

Robert G. Roberson

Date: 29 JUNE 1993

Robert G. Roberson  
Chief, Processing Team A  
Atlantic Hydrographic Section

I have reviewed the smooth sheet, accompanying data, and reports. This survey and accompanying digital data meet or exceed NOS requirements and standards for products in support of nautical charting except where noted in the Evaluation Report.

Nicholas E. Perugini

Date: 6/29/93

Nicholas E. Perugini, LCDR, NOAA  
Chief, Atlantic Hydrographic Section

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Final Approval:

Approved: J. Austin Yeager

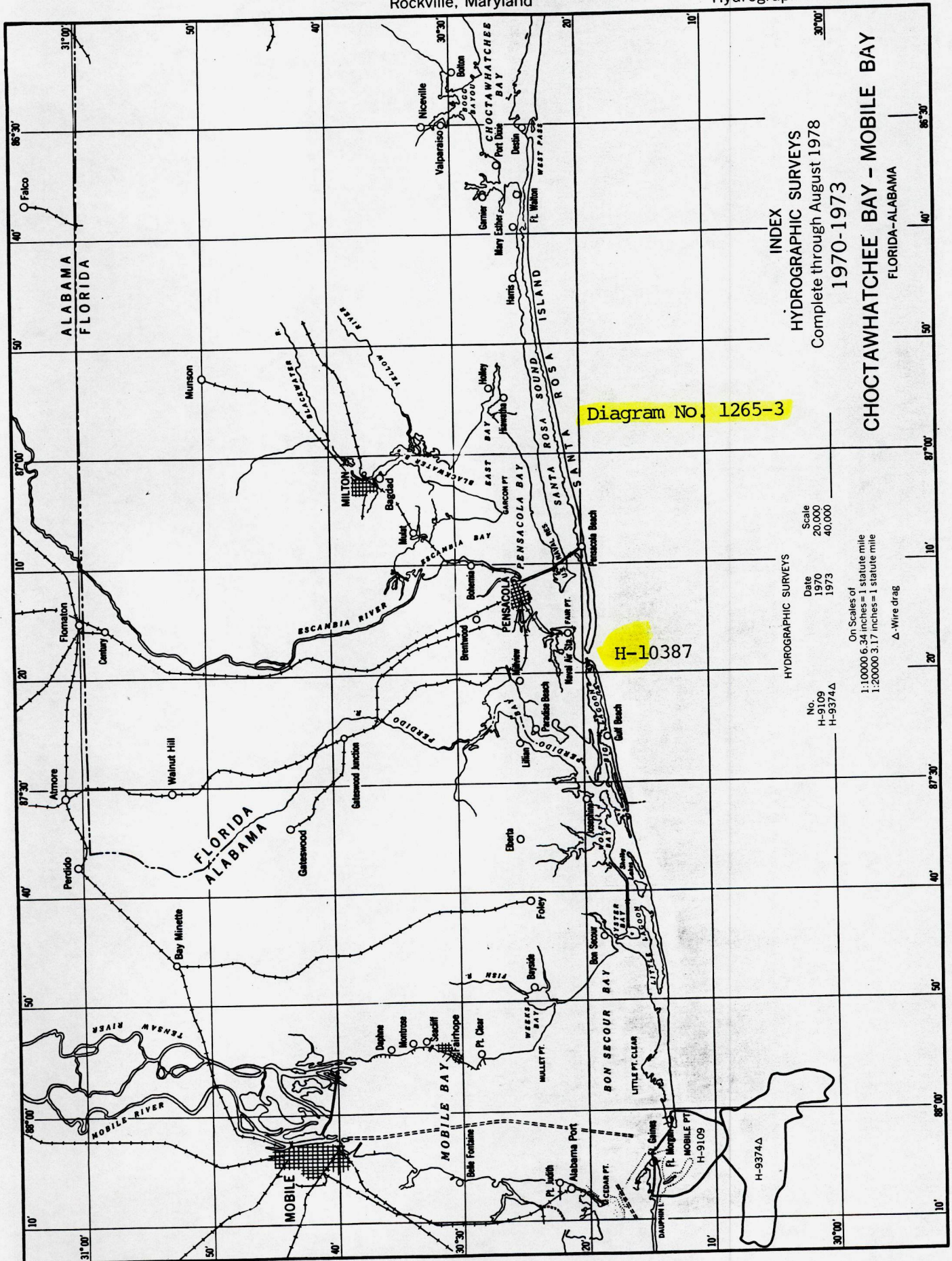
Date: 12-6-94

J. Austin Yeager  
Rear Admiral, NOAA  
Director, Coast and Geodetic  
Survey



DEPARTMENT OF COMMERCE  
 National Oceanic and Atmospheric Administration  
 National Ocean Survey  
 Rockville, Maryland

Hydrographic Index No. 85 F



INDEX  
 HYDROGRAPHIC SURVEYS  
 Complete through August 1978  
 1970-1973

CHOCTAWHATCHEE BAY - MOBILE BAY  
 FLORIDA-ALABAMA

HYDROGRAPHIC SURVEYS  
 No. H-9109  
 H-9374Δ

Date 1970  
 1973

Scale 20,000  
 40,000

On Scales of  
 1:10000 6.34 inches = 1 statute mile  
 1:20000 3.17 inches = 1 statute mile

Δ - Wire drag



MARINE CHART BRANCH  
**RECORD OF APPLICATION TO CHARTS**

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10387

**INSTRUCTIONS**

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
11384	10-15-93	<i>Jimmy Schumacher</i>	Full <del>Part Before</del> After Marine Center Approval Signed Via <i>Initial Approval Signed</i> Drawing No. <i>32</i> <i>App'd in full</i>
<del>11383</del>	<del>2-2-94</del>	<del><i>Dan Slack</i></del>	Full <del>Part Before</del> After Marine Center Approval Signed Via Drawing No. <i>41</i> <i>PT'LT THRU 11384</i>
411	2-10-94	<i>Jimmy Schumacher</i>	Full Part Before <del>(After)</del> Marine Center Approval Signed Via Drawing No. <i>65</i> <i>EXAM NC -3E AREA</i>
11378A	4/4/94	<i>L. Arkenau</i>	Full <del>Part Before</del> After Marine Center Approval Signed Via Drawing No. <i>27</i> , <i>THRU CHT 11383</i>
11382	5/2/94	<i>Dan Slack</i>	Full <del>Part Before</del> After Marine Center Approval Signed Via Drawing No. <i>43</i> , <i>THRU CHT. 11383</i>
11360	5/11/94	<i>Dan Slack</i>	Full <del>Part Before</del> After Marine Center Approval Signed Via Drawing No. <i>48</i> , <i>THRU CHT. 11382</i>
11006	7/24/95	<i>Lou Arkenau</i> <i>WJ Tigler</i>	Full Part Before <del>(After)</del> Marine Center Approval Signed Via Drawing No. <i>39</i> <i>in full thru 11360</i>
			Full Part Before After Marine Center Approval Signed Via Drawing No.
			Full Part Before After Marine Center Approval Signed Via Drawing No.
			Full Part Before After Marine Center Approval Signed Via Drawing No.
			Full Part Before After Marine Center Approval Signed Via Drawing No.