

10427

Diagram 1264-2

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey . . . Hydrographic
Field No. AHP2-10-6-92
Registry No. . . . H-10427

LOCALITY

State Florida
General Locality . . . Choctawhatchee Bay
Sublocality Big Hammock Point
to White Point

1992

CHIEF OF PARTY
LT T.R. Waddington

LIBRARY & ARCHIVES

DATE October 6, 1993

10427

HYDROGRAPHIC TITLE SHEET

H-10427

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.

AHP2-10-6-92

State Florida

General locality Choctawhatchee Bay

Locality Big Hammock Point to White Point

Scale 1:10,000 Date of survey May 19 to October 27, 1992

Instructions dated March 9, 1992 Project No. OPR-J159-AHP

Vessel NOAA Launch 0518

Chief of party LT. Thomas R. Waddington, NOAA

Surveyed by David Elliott and Castle Parker

Soundings taken by echo sounder, ~~hand lead, pole~~ Innerspace Fatho #175

Graphic record scaled by Dave Elliott, Castle Parker, Jan Budlow, Tim Madsen

Graphic record checked by Dave Elliott

Evaluation by: R.N. Mihailov Automated plot by PHP Xynetics Plotter

Verification by R. N. Mihailov

Soundings in ~~xxxxxxx~~ meters and decimeters of MLLW xxxxxxx

REMARKS: Time in UTC. Revisions and marginal notes in black were generated during office processing. All separates are filed with the hydrographic data, as a result page numbering may be interrupted or non-sequential.

Handwritten: NOA/SURFV 12/18/93 55 ✓

Handwritten: SA 1-3-97
RWA 3/28/97

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10427
Field No. AHP2-10-6-92
Scale:1:10,000
Atlantic Hydrographic Party
Chief of Party: Lt. Thomas R. Waddington, NOAA
1992

A. PROJECT ✓

This survey was conducted in accordance with Hydrographic Project Instructions OPR-J259-AHP, Choctawhatchee Bay, Florida dated March 9, 1992; these were amended by Change No. 1 dated June 2, 1992, and Change No. 2 dated September 30, 1992.

This survey is designated as sheet "C" in the project instructions.

The purpose of project OPR-J259-AHP is to obtain modern hydrographic data to revise existing nautical charts of Choctawhatchee Bay, Florida. The water traffic in the bay includes commercial vessels using the intracoastal waterway (ICW), fishing vessels, and pleasure boats.

B. AREA SURVEYED ✓

The area surveyed for H-10427 is Big Hammock Point to White Point in Choctawhatchee Bay, Florida. The geographic limits are as follows:

North - Latitude	30° 27' ^{56"} 45"N
South - Latitude	30° 23' ^{18"} 18"N
East - Longitude	086° ^{21"} 21' 00"W
West - Longitude	086° 25' ^{30"} 30"W

This survey was conducted from May 19, 1992 (DN 140) to October 27, 1992 (DN 301).

C. SOUNDING VESSEL ✓

NOAA Launch 0518 (EDP No. 0518), a 21-foot MonArk, was used to collect all data on this survey. Due to engine cylinder damage which necessitated a major engine overhaul, Launch 0518 was not operational from early July thru early September. Except for this extended down period, no other problems were encountered with the launch.

D. AUTOMATED DATA ACQUISITION AND PROCESSING ✓

A list of all Hewlett-Packard HDAPS Programs used can be found in Appendix VI. *

Version 3.6 of the PC-DAS suite of programs was used for on-line data acquisition on the survey vessel. In addition to the HDAPS, the following non-HDAPS computer programs were used:

VELOCITY (IBM PC) ver. 1.11, 3/9/90
MTEN3 with enhancements (IBM PC), 6/88

E. SONAR EQUIPMENT

Not applicable. See Descriptive report for survey H-10292, AWOIS. item 8212 (pos # 1000-1163) for further discussion of side scan sonar usage.

F. SOUNDING EQUIPMENT

An Innerspace model 448 depth sounder, S/N 175, was used to collect all echo soundings on this survey.

A standard lead line calibrated in meters, S/N 0518, was used during this survey for comparison readings with the echo sounder. A 5-meter long, wooden sounding pole, constructed according to HSG. No. 69, was used to obtain all pole soundings.

No problems were encountered with any of the sounding equipment. Depths in the survey area range from 0.⁷/₄ to 10.⁸/₆ meters.

G. CORRECTIONS TO ECHO SOUNDINGS ✓

Corrections for the speed of sound through the water column were computed from data obtained with an Odom Hydrographic Systems Inc., Digibar Model DB1100 speed of sound probe, S/N 155. This instrument was calibrated by the manufacturer on January 27, 1992. A copy of this calibration may be found in the Survey Separates, section IV.

Program Velocity was used for computing the speed of sound correctors. Speed of sound corrections were applied to the final field sheet soundings using the HDAPS Reapply Depth Correctors function. Copies of the tables and support documentation are in the Survey Separates, section IV. *

* Filed with survey records.₂

The following speed of sound casts were taken on this survey:

Cast #	DN	DATE	Latitude	Longitude	Depth
1	140	5/19/92	30°26.0'N	086°22.0'W	6m
2	154	6/02/92	30°25.5'N	086°22.5'W	7m
3	161	6/09/92	30°26.0'N	086°24.0'W	7m
4	169	6/17/92	30°26.0'N	086°24.0'W	7m
5	176	6/24/92	30°26.0'N	086°24.0'W	7m
Casts 6-8 do not apply to this survey !					
9	267	9/23/92	30°26.0'N	086°25.6'W	9m
10	281	10/07/92	30°26.0'N	086°25.6'W	10m
11	289	10/15/92	30°26.0'N	086°26.0'W	9m
12	302	10/28/92	30°26.0'N	086°26.0'W	10m

The following table shows the ~~recommended~~ tables to be used for final processing at the Pacific Hydrographic Section:

Cast No.	Table No.	Use for Days
1	1	140-150 142
2	2	157 150-157
3	3	161-162
4	4	168
5	5	176 - NO HYDRO
9	9	266-272
10	10	282- 288 283
11	11	295-300 287-296
12	12	301 300-301

Tables used for field processing are shown on the Daily Header Abstract, included in the Survey Separates, section IV. *

Survey records were scanned by AHP employees in accordance with the Hydrographic Manual. With the digital reading taking precedence over the analog trace, significant peaks and deeps which occurred between selected soundings were inserted, and effects of sea and swell action were corrected, while scanning.

survey records were rescanned during office processing.

Lead line comparisons were taken daily to determine instrument error. No instrument error was observed. The lead line comparison log is included in the Survey Separates, section IV. The lead line was calibrated on May 18, 1992 with a steel tape. No corrections were necessary. A copy of the calibration form can be found in the Survey Separates, section IV. *

A static draft of 0.3 meters was applied to the final field sheet soundings using the HDAPS Reapply Depth Correctors function. The draft was measured by subtracting the difference from a punch mark on the side of launch 0518, 0.6 meters above the transducer, to the water surface.

* Filed with the survey records

Settlement and squat measurements for vessel 0518 were performed on May 14, 1992 using the level method. Settlement and squat correctors were applied to the final field sheet soundings using the HDAPS Reapply Depth Correctors function. Data from the settlement and squat test are included in the Survey Separates, section IV. ✕ Settlement and squat correctors were determined during office processing, and reapplied.

The final field sheet was plotted using predicted tides determined from Pensacola, Florida and correctors designated in section 5.9 of the Project Instructions. Wind conditions during this survey (i.e., speed and direction), had a far greater affect on the true water levels than did normal tidal action. This resulted in higher water levels on down-wind shores and lower water levels on up-wind shores. With the application of smooth tides, no unusual anomalies were evident.

Approved water levels were requested from the Product and Services Branch, N/OES231, in a letter dated November 10, 1992. A copy is included in Appendix V of this report. ✕

H. CONTROL STATIONS ✓

The horizontal control datum for this project is the North American Datum of 1983. A copy of the HDAPS Control Station Table is included in Appendix III of this report. ✕

Three horizontal control stations, GRASSY TEMP, and Choctawhatchee Bay Lights 47 and 49 (numbers 053, 021, and 056) listed in the control station table submitted with this survey, were established with GPS by AHP personnel. The horizontal control report for these and other positions also established were submitted to N/CG23322 in October 1992.

Three horizontal control stations, ALBERT, JIM, and CENTEL (numbers 001, 037, and 057) listed in the control station table submitted with this survey, were recovered as described in the horizontal control package provided by N/CG23.

The control network set up for hydrography on sheets "D", consisted of the following:

NW.....	Code No.4.....	Station No.037...:	Jim
N.....	Code No.1.....	Station No.053...:	Grassy Temp
Mid.....	Code No.2.....	Station No.021...:	CBL"49"
SW.....	Code No.3.....	Station No.001...:	Albert
S.....	Code No.4.....	Station No.057...:	CENTEL

Note: 1) "CBL" stands for "Choctawhatchee Bay Light".

✕ Filed with the survey records.

I. HYDROGRAPHIC POSITION CONTROL ✓

Survey Methods

The PC-DAS least squares positioning algorithm, using three to four ranges from the Motorola Mini-Ranger Falcon 484 system, was used for hydrographic position control during this survey.

The following Falcon Mini-Ranger equipment was used:

<u>VESNO</u>	<u>EQUIPMENT</u>	<u>S/N</u>	<u>CODE</u>
0518	RPU	D0017	
	* R/T	F3419	
	R/T	F3389	
	R/S	F3298	1
	R/S	C2075	2
	R/S	E2911	3
	R/S	E2959	4
	R/S	C2091	5

* R/T F3419 was replaced by F3389 after failure.
The second baseline correctors are on C-O #1.

Critical System Checks

When using three or four lines of position (LOP), a critical system check is being obtained each second by observing the error circle radius and residual values which are computed by the survey computer. For a 1:10,000 scale survey, the critical residual value is 5.0 meters and the critical error circle radius value is 15.0 meters. Position data exceeding these values were edited.

Mini-Ranger Falcon Calibrations

Baseline calibrations were performed on April 30, 1992 (DN 121), and July 8, 1992 (DN 190); baseline correctors were incorporated into the Comflex C-O table number One and applied directly to all on-line data. All records of these calibrations and the Daily Header Abstracts are included in the Survey Separates, section III. A closing baseline calibration was not performed since the survey was conducted in less than a six month period from the opening baseline.

J. SHORELINE ✓

Shoreline shown on the final field sheet was transferred by hand from TP-00337 and TP-00338. These shoreline manuscripts were originally compiled on NAD 1927 at 1:20,000 scale and then enlarged to 1:10,000 scale for use with this survey. These manuscripts were revised using 1991 NANCEI source data; in some instances within this survey area, these NANCEI-source revisions were accompanied by the note, "Spotty Source Data". The shoreline was transferred by hand onto the boat and final field sheets by computing conversion tick marks for NAD 27 to NAD 83, as per 3.1.1.1. of the project instructions.

Shoreline verification was accomplished during inshore hydrographic data acquisition and by visual inspection. Reference numbers were assigned on the ~~Boat~~^{Field} Sheet to all piers that appeared on the T-sheets. There were no major shoreline changes noted during this survey and all verified shoreline is shown in black ink on the Final Field Sheet. Charted shoreline should be superseded by shoreline from TP-00337 and TP-00338, ←CONCUR unless otherwise noted during this survey. The only shoreline changes noted are addressed below, or in the Evaluation Report, section 2.

▶A new pier was located at latitude $30^{\circ}23'50.2^3$ "N and longitude $086^{\circ}23'34.9$ "W (Position 2288, PS-6 "CW"). shown in red on SS

▶A new pier was located at latitude $30^{\circ}23'46.1$ "N and longitude $086^{\circ}23'28.1$ "W (Position 2289, PS-6 "CW"). shown in red on SS

▶A new pier was located at latitude $30^{\circ}23'25.6$ "N and longitude $086^{\circ}22'27.2$ "W (Position 2290, PS-7 "CE"). shown in red on SS

▶A new pile was located at latitude $30^{\circ}23'49.4$ "N and longitude $086^{\circ}21'46.1$ "W (Position 2291, PS-7 "CE").

▶A new pile was located at latitude $30^{\circ}23'48.1$ "N and longitude $086^{\circ}21'34.6$ "W (Position 2292, PS-7 "CE").

▶A new pile was located at latitude $30^{\circ}23'45.5$ "N and longitude $086^{\circ}21'46.9$ "W (Position 2293, PS-7 "CE").

Field notes are located on the field sheets, the graphic records, and in the Daily Log, included as part of this survey.*

K. CROSSLINES ✓

A total of 27.6 linear nautical miles of cross-lines were run on H-10427. This is equivalent to 10% of the main scheme hydrography. Main scheme and cross line sounding agreement is ≤ 0.3 meter, with occasional 0.4 meter variances noted; these are thought to be caused by discrepancies between actual and predicted tides as noted in section G of this report.

* Filed with the survey records.

L. JUNCTIONS ✓ See Evaluation Report section 5

This survey junctions with surveys H-10292 (Sheet A from OPR-J259) to the west, and with H-10428 (Sheet D from OPR-J259) to the east. These surveys are both 1:10,000 scale surveys from 1988-1992. The depths between this survey and surveys H-10292 and H-10428 agree well and contours are easily connected at the junctions.

M. COMPARISON WITH PRIOR SURVEYS ✓ See Evaluation report 6

The present survey was compared to the following prior survey:

<u>Survey NO.</u>	<u>Scale</u>	<u>Year</u>
H-5869	1:20,000	1935

None of the AWOIS items addressed as part of this survey originated from the prior survey.

The following was noted during comparison:

▶ Bottom samples acquired on this survey agreed well with the prior survey.

▶ In general, soundings acquired during H-10427 were found to be up to 0.3 meters shallower than those from the prior survey.

▶ As H-5869 was surveyed in feet and H-10427 was surveyed in meters there were no common depth curves for comparison; however, we did produce an HDAPS plot in feet for comparison purposes which indicated excellent depth curve agreement.

N. COMPARISON WITH THE CHART ✓ See Evaluation Report section 7.

Comparisons were made with the following largest scale charts covering the present survey area:

<u>Chart No.</u>	<u>Scale</u>	<u>Edition</u>	<u>Date</u>
11385SC	1:40,000	20th	November 23, 1991
11388	1:80,000	15th	January 4, 1991

Chart 11385SC was enlarged to 1:10,000 scale for use with this survey; ~~this chart enlargement is included with this survey.~~ In general, charted soundings were found to be 0.3 meter shallower than this survey. No Dangers to Navigation were reported for H-10427.

Nine AWOIS items, were assigned as part of this survey. AWOIS ITEM 4635 falls within the limits of survey H-10292, and will be addressed in the DR. AWOIS 4635, (submerged piles) was addressed on H-10292, Sheet "A". All item investigation information can be found on the Item Investigation Forms in ~~Appendix VI~~ of this report, on the Final Field Sheet and in the Daily Log. It is recommended that each of these documents be referenced when addressing any AWOIS feature.

There were two AWOIS items with a 500-meter search radius that were not completely resolved. AWOIS 8210 and AWOIS 8212 were only partially addressed during this survey, and will be further addressed when we have access to a side scan sonar in the near future. AWOIS 8210 was in an area of sensitive grass beds which could be seriously damaged by bottom chain drags. AWOIS 8212 was a submerged barge which should have been detected by our widely spaced chain drags conducted on DN 295. However, the source position for this feature is in question, so we have decided to address this item with a side scan search at a later date. Data for these items, as well as some other large search area items from Sheet A, will be submitted as a separate package at a later date. Data for these items was addressed on survey H-10292 and transferred to survey H-10427, and is portrayed on the smooth sheet,

The coordinates and descriptions of all positioned items can and on be found in the "DP/REMARKS" printouts, which are included with item investigation reports attached to this report. the survey data.* The following was noted during comparison:

►The northern portions of this survey fall within a charted, magenta-outlined prohibited area (Chart annotation: "Prohibited Area 334.700 - See Nota A"). Mr. Leland Wamsted, USPS District 15 Cooperative Charting Chairman, has pursued this matter extensively with the Air Force over the last few years and has resolved that the prohibited designation is no longer valid. A copy of a letter from the Air Force stating its position, and some other supporting documents are ~~included in Appendix VI~~ attached. Based upon this correspondence and our work in this area, we recommend that the outlined areas be re-designated as restricted, which implies that the navigation within those areas may be controlled at sometime. During the course of our field work, we observed pleasure and commercial boats routinely navigating these areas. CONCUR

►An outlined area on the southeast portion of this survey is annotated with the following cautionary remark, "CAUTION - Numerous piles exist within outlined area". Within this area, we located three visible piles which were positioned with hydrographic fixes (Positions 2291-93). Four visible piles were also positioned within this area during work on H-10428, just to the east. Because of the area encompassed by these remarks, we had no economic means of searching for potentially submerged piles. With no additional source data available indicating the number of piles which may have existed, we recommend that the piles identified during these surveys be charted and that the outlined area and cautionary note be retained. - CONCUR

* Filed with the survey records.

project
 ▶The ~~controlling~~ depth for the Intracoastal Waterway is charted at 12-feet; no depths shoaler than this were found within the channel limits, which extend across much of Choctawhatchee Bay. See Evaluation report section 7c.

▶Bottom samples obtained on this survey agree well with the charted characteristics.

▶A new bridge across Choctawhatchee Bay is being constructed between White Point and Piney Point (located outside the survey area) and is being portrayed on H-10292. Holidays that appear on this survey are construction equipment locations used for construction of this bridge.

▶There are no common depth curves for comparison as this survey was acquired in meters and the present charts are produced with soundings in feet; however, we did produce a color HDAPS depth plot in feet for comparison purposes which indicated excellent depth curve agreement.

O. ADEQUACY OF SURVEY ✓

This survey is a complete basic hydrographic survey and is adequate to supersede all prior surveys within the common area.

P. AIDS TO NAVIGATION ✓

There were no floating aids to navigation located within the limits of hydrography. All of the following references made to the USCG Light List (USCGLL) were made from Vol. IV, 1992 Ed. A charted buoy at latitude 30/24.6, longitude 86/21.3, was removed and not replaced. See

There was one non-floating aid to navigation charted at the western edge of this survey and was positioned on H-10292, Sheet A. A comparison of the charted position is shown in the following table: DR for Survey H-10428 section P.

NAVAID	USCG LL Number	Distance and Direction from Charted Location
R "50"	30070 30160 - new number for 1993	On Charted Station

There were no overhead cables, overhead pipelines, or ferry routes within the limits of this survey.

This non-floating aid to navigation falls within the limits of survey H-10292

Q. STATISTICS ✓

<u>Description</u>	<u>Quantities</u>
Total Positions	2295
Total Nautical Miles of Hydrography	274.6
Sq. Nautical Miles of Hydrography	13.0
Total Nautical Miles of Chain Drag	5.5
Days of Production	20
Detached Positions	11
Bottom Samples	48
Tide Stations	5
Current Stations	0
Velocity Casts	9

R. MISCELLANEOUS ✓

Bottom samples were taken as directed in Section 6.7 of the project instructions. Bottom sample positions and descriptions are plotted on the overlays submitted with this survey, and are listed on the Oceanographic Log Sheet-M, NOAA Form 75-44, which is included in the Survey Separates, section II. *

It should be noted that the sounding vessel used for this survey is limited by draft to approximately 0.5 meters on the keel line and is therefore limited in its ability to acquire sounding data in areas shallower than 0.5 meters.

S. RECOMMENDATIONS ✓

Specific recommendations concerning this survey are made in sections J, N and P of this report.

* filed with the hydro records.

T. REFERRAL TO REPORTS ✓

<u>Titles</u>	<u>Transmittal Information</u>
Horizontal Control Report for OPR-J259-AHP	Field Photogrammetry Section Norfolk, VA, N/CG233
Descriptive Report to Accompany Survey H-10292	Pacific Hydrographic Section N/CG 245, Seattle, WA
Descriptive Report to Accompany Survey H-10428	Pacific Hydrographic Section N/CG 245, Seattle, WA
Chart Sales Agent Report for OPR-J259-AHP2	Chart Distribution Branch (N/CG33) Rockville, MD
User Evaluation Report OPR-J259-AHP2	Pacific Hydrographic Section (N/CG245) Seattle, WA
Chart Inspection Report OPR-J259-AHP2	Pacific Hydrographic Section (N/CG245) Seattle, WA
Coast Pilot Report	Pacific Hydrographic Section (N/CG245) Seattle, WA

Submitted By: ATLANTIC HYDROGRAPHIC PARTY II .

AWOIS NO: 4638

Item Description: Obstruction (fish haven)

Source: CL802-69--COE, fish haven marked by buoy
LNM2/80--8th CGD: Buoy discontinued
CL377/80 Discontinued

AWOIS Position: Lat - 30/26/52.71 Lon - 086/24/39.81

Required Investigation: BD,DI,SD - 200 meter radius

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s): 9/23/92 (267), 10/26/92 (300)

Position Numbers: 1314

Launch Number: 0518

Investigation Used: DI

Water Visibility: 3-4m

Position Determined By: Falcon Multiple Range

Investigation Summary: The reported feature was located by echo sounder at the charted location and a detached position was taken directly over the feature with no offset. A dive conducted on DN 300 revealed car frames, steel drums, assorted appliances and scrap metal scattered throughout the area, none of which projected more than 1.5m off the bottom. A conclusive diver least depth was not possible due to the amount of similar-type debris along the bottom. Several lead line least depths were taken on prominent objects, and the shoalest of these was recorded. Time and tides were not available for these objects, therefore least depths cannot be determined.

CHARTING RECOMMENDATION

The hydrographer recommends retaining the currently charted fish haven as discontinued at the following location. -concur, see ^{Obstr} Evaluation report section 7a.

Recommended Position: Lat - 30/26/51.59 Lon - 086/24/38.32

Recommended Least Depth:

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 4633

Item Description: Sounding

Source: LNM28/60--8thCGD; shoaling report.

AWOIS Position: Lat - 30/26/35.71 Lon - 086/25/09.81

Required Investigation: Verify or Disprove Shoal

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s):10/27/92 (301)

Position Numbers: 2270-2287

Launch Number: 0518

Investigation Used: SD

Water Visibility: 3-4m

Position Determined By: Falcon Multiple Range

Investigation Summary: The reported feature was developed with fifty-meter line spacing south of White Point in the vicinity of Choctawhatchee Bay light number 50. Shoaling was clearly evident during this development and the charted depth curves accurately portray the shallow soundings in this area.

CHARTING RECOMMENDATION

The hydrographer recommends retaining the currently charted shoaling remark at the following location and applying the survey soundings: *Do not concur, chart area as shown on survey, and delete note.*

Recommended Position: Lat - 30/26/35.71 Lon - 086/25/09.81

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 4634

Item Description: Obstruction (3 daybeacons) *subm piling*

Source: Unknown--originating 1950, as 3 daybeacons
CL909/61--OPR; revised to submerged.

AWOIS Position: Lat - 30/26/35.71 Lon - 086/24/22.81

Required Investigation: BD, DI, SD, ## - 100 meter radius

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s): 10/21/92 (295), 10/26/92 (300)

Position Numbers: 2247-2262

Launch Number: 0518

Investigation Used: BD, DI

Water Visibility: 2m

Position Determined By: Falcon Multiple Range

Investigation Summary: On DN 295 a 100m radius chain drag was conducted at the charted position with 60 feet of tow and 100 feet of chain; no snags or contacts were encountered. On DN 300, 50-75m radius diver circle searches were also conducted about the scaled charted positions of each of the three beacons; again, no snags or contacts were encountered. These two investigations covered the area well and no indications of any obstructions were identified. Given the age of this report, it is likely that these piles have been removed or have rotted away.

CHARTING RECOMMENDATION

The hydrographer recommends removing the three currently charted submerged pilings from the following location. -CONCUR

Recommended Position: Lat - 30/26/35.71 Lon - 086/24/22.81

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 4637

Item Description: Obstruction (daybeacon) *subm pile*

Source: CL398/48--CPR; daybeacon revised to pile.
CL1130/80--CES11385, OPR-J217- revised to submerged.

AWOIS Position: Lat - 30/26/52.71 Lon - 086/24/31.81

Required Investigation: BD,DI,SD. 200 meter radius

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s):10/21/92 (295)

Position Numbers: 2263-2267

Launch Number: 0518

Investigation Used: BD, DI

Water Visibility: 2-3m

Position Determined By: Falcon Multiple Range

Investigation Summary: The reported feature was discovered at the charted location during a chain drag and a detached position was taken directly over the feature with no offset. A dive was conducted on the chain revealing a broken pile one tenth of a meter off the bottom. A lead-line least depth was then obtained on this pile.

CHARTING RECOMMENDATION

The hydrographer recommends ^{revising} ~~retaining~~ the currently charted submerged pile at the following location:-- ~~CONCUR~~

Recommended Position: Lat - 30/26/52.⁶⁰~~59~~ Lon - 086/24/31.³~~22~~
position Number 2267

Recommended Least Depth: ⁶6.8 meters.

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 6885

Item Description: Obstruction (submerged piling)

Source: LNM27/79--8thCGD submerged piling PA.

AWOIS Position: Lat - 30/25/00.71 Lon - 086/21/59.80

Required Investigation: BD, DI, SD - 300 meter radius

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s):10/26/92 (300)

Position Numbers: 2268

Launch Number: 0518

Investigation Used: DI

Water Visibility: 3-4m

Position Determined By: Falcon Multiple Range

Investigation Summary: The reported feature was discovered at the charted location during a 100-meter radius circle search diving investigation. A broken pile was discovered approximately 1.0 meters off the bottom near the center of the search site. Though the pile was originally reported to only 1 to 2 feet submerged, it appears to have been broken off and is now approximately 5 meters (16 feet) below the surface. A leadline least depth was obtained on the high point of this pile.

CHARTING RECOMMENDATION

The hydrographer recommends revising the currently charted submerged pile ~~at the~~ following location: - CONCUR

PA₁ to a subm pile at the following location:

Recommended Position: Lat - 30/25/00.6⁶ Lon - 086/21/59.9⁹

Recommended Least Depth: ^{4.8}~~5.0~~ meters ^{15'}

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 6886

Item Description: Obstruction (marker)

Source: Unknown Source--Daybeacon, scaled from chart, revised to marker in 1982.

AWOIS Position: Lat - 30/27/04.71 Lon - 086/23/46.81

Required Investigation: BD,DI,VS - 200 meter radius

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s): 9/23/92 (267)

Position Numbers: 1313

Launch Number: 0518

Investigation Used: VS

Water Visibility: 2 m

Position Determined By: Falcon Multiple Range

Investigation Summary: The reported feature was discovered ~~at the charted location~~ and a detached position was taken alongside with no offset. The feature is a single pile and bares ~~approximately 2.1 meters~~ *approximately 2.1 meters* ~~two meters~~. No evidence of any marker exists. *at MHW*

CHARTING RECOMMENDATION

The hydrographer recommends revising the currently charted marker to a pile at the following location. *Concur, delete marker and chart pile at survey location*

Recommended Position: Lat - 30/27/04.5⁵ Lon - 086/23/47.6¹

Recommended Least Depth: Bares ~~2m~~ *2.1 meter* at MHW

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 8210

Item Description: Obstruction (concrete pile)

Source: CL616/91--Chart inspection report
LNM32/91-Add submerged pile.

AWOIS Position: Lat - 30/24/09.00 Lon - 086/23/18.00

Required Investigation: BD, DI, SD - 500 meter radius

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s):10/26/92 (300)

Position Numbers: 2269

Launch Number: 0518

Investigation Used: DI

Water Visibility: 2m

Position Determined By: Falcon Multiple Range

Investigation Summary: A 100 meter diver circle search was conducted at the charted location and no contacts or snags were encountered. Due to the presence of sensitive grass beds in this area, we decided against conducting a potentially damaging bottom chain drag. This item will be further addressed in the future, along with several 500m radius items, when we have access to a side scan sonar.

CHARTING RECOMMENDATION

The hydrographer recommends retaining the currently charted submerged pile at the following location. This item was investigated as part of survey H-10292. See AWOIS item 8210 on next page.

Recommended Position: Lat - 30/24/09.00 Lon - 086/23/18.00

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 8210 (+transferred from survey H-10292)

Item Description: Obstruction - Submerged Pile, PA.

Source: CL616/91. Reported by Captain Warren Sweeney.

AWOIS Position: Lat - 30/24/09.00N Lon - 086/23/18.00W

Required Investigation: 500m radius--BD, DI, SD

Charts Affected: 11385

INVESTIGATION

Date(s) DN(s):

Position Numbers:

Launch Number: 0519

Investigation Used:

Water Visibility:

Position Determined By: DGPS

Investigation Summary: Although this item fell within the limits of H-10427 (Sheet C), we have included the investigation along with the rest of the large search area Sheet A items. Due to shallow depths in the area of this item, a full sidescan search could not be conducted. Also, because of the presence of sensitive grass beds, we elected not to chain drag in this area. However, Captain Warren Sweeney, (904/678-9216) the original source for this item, indicated that this concrete pile was physically removed by three shrimp boats almost two years ago so that shrimping could resume in this area. He now shrimp trawls frequently in this area.

CHARTING RECOMMENDATION

The hydrographer recommends that this submerged pile be removed from the chart.- CONCUR

*****COMPILATION NOTES*****

Chart

Applied As

AWOIS NO: 8212

Item Description: Unknown (Submerged Wreck PA)

Source: CL616/91--Chart inspection report.
LNM32/91-Add dangerous wreck.

AWOIS Position: Lat - 30/25/36.00 Lon - 086/21/51.00

Required Investigation: BD,DI,SD - 500 meter radius

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s):10/21/92 (295)

Position Numbers: 2149-2246

Launch Number: 0518

Investigation Used: BD

Water Visibility: 2m

Position Determined By: Falcon Multiple Range

Investigation Summary: A chain drag was conducted at the charted location with 60 feet of tow and 100 feet of chain. No contacts or snags were encountered during the sweep at 50 meter line spacing. After we had conducted this search, some questions arose as to the accuracy of the source position, which had been computed from a local fisherman's recorded Loran rates. This item will be further addressed in the future, along with several 500m radius items, when we have access to a side scan sonar. By this time, we may also have a more definitive position for this item.

CHARTING RECOMMENDATION *See following page*
AWOIS item 8212

The hydrographer recommends retaining the currently charted submerged wreck at the following location.

Recommended Position: Lat - 30/25/36.00 Lon - 086/21/51.00

Recommended Least Depth: N/A

COMPILATION NOTES

Chart

Applied As

AWOIS NO: 8212 (transferred from survey H-10292)

Item Description: Sunken Barge - Submerged Wreck, PA.

Source: CL616/91. Reported by Captain Warren Sweeney.

AWOIS Position: Lat - 30/25/36.00N Lon - 086/21/51.00W

Required Investigation: 500m radius--BD, DI, SD

Charts Affected: 11385

INVESTIGATION

Date(s) DN(s): 12/16/92, 12/17/92 (351-352)

Position Numbers: 1000 - 1170⁴² Launch Number: 0519

Investigation Used: SS (200% coverage) Water Visibility:

Position Determined By: DGPS

Investigation Summary: As with AWOIS 8210, this item fell within the limits of H-10427 (Sheet C), but we have included the investigation along with the rest of the large search area Sheet A items. During the 2nd 100% coverage of a 200% side scan sonar search, we identified a possible boat-like contact. On 12/27/92 (DN 362) we conducted a dive investigation and identified an old wooden barge which was mostly buried in the silt bottom and which rose less than 0.3 meters above the surrounding bottom. The only features which could be positively identified were two large cleats which were entangled with lots of shrimp net. Because of its insignificant rise above the bottom, we did not obtain a lead line least depth on this wreckage.

Due to PC-DAS problems which occurred after we had deployed our dive buoy, we were unable to obtain a DP on the day of the dive. However on DN 352 we had a position (Position 1163) directly over the barge, which we also used when deploying our dive buoy. This is the position which we have recommended for charting purposes.

CHARTING RECOMMENDATION

The hydrographer recommends that the submerged wreck, PA, be revised to a dangerous submerged wreck at the following position: CONCUR, chart + submerged wreck at survey location. with least depth of 6.8 meters

Recommended Position: Lat - 30/25/25.6 Lon - 86/21/48.8 (WK 6⁸)

Recommended Least Depth:

SSV
10/18/93

*****COMPILATION NOTES*****

Chart

Applied As

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY

OPR-J259/92

AHP-10-6-92

H-10427

1992

This basic hydrographic survey was conducted in accordance with the project instructions for OPR-J259-AHP, the hydrographic manual, the hydrographic survey guidelines, and the field procedures manual. The survey data and reports were completed under frequent supervision. All boat sheets and final field sheets were reviewed in their entirety and all supporting records were also checked.

This survey is a complete basic hydrographic survey for the area described in Section B of this report.

Thomas R. Waddington

Thomas R. Waddington

Lieutenant, NOAA

Chief, Atlantic Hydrographic Party

ORIGINAL



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Office of Ocean and Earth Sciences
Rockville, Maryland 20852

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: December 23, 1992

MARINE CENTER: Pacific

OPR: J259

HYDROGRAPHIC SHEET: H-10427

LOCALITY: Choctawhatchee Bay, Florida, Big Hammock Pt. to White Pt.

TIME PERIOD: May 19 - October 27, 1992

TIDE STATION USED: 872-9435 Big Hammock Point, Fl.
Lat. 30° 27.9'N Lon. 86° 21.1'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): = 2.17 feet
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: = 0.5 foot

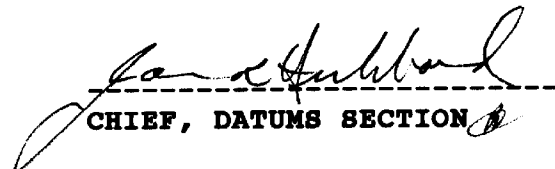
TIDE STATION USED: 872-9376 Hogtown Bayou, Fl.
Lat. 30° 23.9'N Lon. 86° 13.7'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): = 1.07 feet
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: = 0.6 foot

REMARKS: RECOMMENDED ZONING

1. In Choctawhatchee Bay, from Big Hammock Pt. to White Pt., times and heights are direct on Big Hammock Point, Fl. (872-9435), when the data is available.
2. When Big Hammock Pt. data is not available, use Hogtown Bayou, Fl. (872-9376), and apply a X0.88 range ratio to heights with times direct.

NOTE: Hourly heights are tabulated on Central Standard Time.


CHIEF, DATUMS SECTION



GEOGRAPHIC NAMES

Name on Survey	ON CHART NO. 11385 Chart 11388 CON U.S. QUADRANGLE MAPS FROM LOCAL INFORMATION ON LOCAL MAPS P.O. GUIDE OR MAP RAND McNALLY U.S. LIGHT LIST										
	A	B	C	D	E	F	G	H	I	J	K
BIG HAMMOCK POINT	X			X	X	X					1
CHOCTAWHATCHEE BAY	X	X		X	X	X					2
FLORIDA (TITLE)	X	X		X	X	X					3
STAKE POINT	X	X		X	X	X					4
VILLA TASSO	X	X		X	X	X					5
WHITE POINT	X	X		X	X	X					6
											7
											8
											9
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											25

Approved:

Charles E. Harrington
Chief Geographer - N/C62x5

MAR 22 1993

HYDROGRAPHIC SURVEY STATISTICS

H-10427

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT
SMOOTH SHEET		1	SMOOTH OVERLAYS: POS., ARC, EXCESS		3
DESCRIPTIVE REPORT		1	FIELD SHEETS AND OTHER OVERLAYS		4
DESCRIP-TION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/SOURCE DOCUMENTS
ACCORDION FILES	1				
ENVELOPES					
VOLUMES	1				
CAHIERS					
BOXES				1	

SHORELINE DATA

SHORELINE MAPS (List):	TP-00337, TP-03338
PHOTOBATHYMETRIC MAPS (List):	N/A
NOTES TO THE HYDROGRAPHER (List):	N/A
SPECIAL REPORTS (List):	N/A
NAUTICAL CHARTS (List):	11385

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	VERIFICATION	EVALUATION	TOTALS	
POSITIONS ON SHEET			1261	
POSITIONS REVISED			1	
SOUNDINGS REVISED				
CONTROL STATIONS REVISED				
	TIME-HOURS			
	VERIFICATION	EVALUATION	TOTALS	
PRE-PROCESSING EXAMINATION				
VERIFICATION OF CONTROL				
VERIFICATION OF POSITIONS	33		33	
VERIFICATION OF SOUNDINGS	53		53	
VERIFICATION OF JUNCTIONS				
APPLICATION OF PHOTOBATHYMETRY				
SHORELINE APPLICATION/VERIFICATION				
COMPILATION OF SMOOTH SHEET	39		39	
COMPARISON WITH PRIOR SURVEYS AND CHARTS		5	5	
EVALUATION OF SIDE SCAN SONAR RECORDS				
EVALUATION OF WIRE DRAGS AND SWEEPS				
EVALUATION REPORT		40	40	
GEOGRAPHIC NAMES				
OTHER:				
USE OTHER SIDE OF FORM FOR REMARKS	TOTALS	125	45	170

Pre-processing Examination by J. Griffin	Beginning Date 10/27/92	Ending Date 12/30/92
Verification of Field Data by R.N. Mihailov	Time (Hours) 125	Ending Date 9/2/93
Verification Check by	Time (Hours)	Ending Date
Evaluation and Analysis by R.N. Mihailov	Time (Hours) 45	Ending Date 9/10/93
Inspection by D. Hill	Time (Hours) 4	Ending Date 9/24/93

EVALUATION REPORT

H-10427

1. INTRODUCTION

Survey H-10427 is a basic hydrographic survey accomplished by the Atlantic Hydrographic Party 2, under the following Project Instructions.

OPR-J259-AHP, dated March 9, 1992
CHANGE NO. 1, dated June 2, 1992
CHANGE NO. 2, dated September 30, 1992

This survey was conducted in Florida and covers the central portion of Choctawhatchee Bay, from Big Hammock Point to White Point. The surveyed area is bounded by latitude 30/27/56N to the north, latitude 30/23/12N to the south, longitude 86/25/24W to the west and longitude 86/20/59W to the east. The shoreline consists of sand, marsh and private piers. The bottom consists of soft mud and dark sand. Depths range from 0.4 meters along the shoreline to 10.6 meters in Choctawhatchee Bay.

Predicted tides for Pensacola, Florida were used for the reduction of soundings during field processing. Approved hourly heights zoned from Big Hammock, Florida, gage 872-9435, and Hogtown Bayou, Florida, gage number 872-9376 were used during office processing.

The field sheet parameters have been revised to center the hydrography on the smooth sheet and to change the projection to polyconic. The velocity, TRA and electronic control correctors are adequate. An accompanying computer printout contains the parameters and the correctors.

A digital file has been generated for this survey that includes categories of information required to comply with Hydrographic Survey Guideline No. 52, Standard Digital Data Exchange Format, April 15, 1986. Certain descriptive information, however, may not be in the digital record due to the restrictions of the presently available cartographic codes. The user should refer to the smooth sheet for complete information.

2. CONTROL AND SHORELINE

Sections H and I of the hydrographer's report contain adequate discussions of horizontal control and hydrographic positioning.

Additional detailed information on horizontal control is found in the Horizontal Control Report for OPR-J259-AHP, dated October 12, 1992.

Positions of horizontal control stations used during hydrography are field values based on NAD 83. These values were used during office processing for the computation of positions. The smooth sheet and accompanying overlays are annotated with NAD 27 adjustment ticks based on values determined with NGS program NADCON. Geographic positions based on NAD 27 may be plotted on the smooth sheet utilizing the NAD 83 projection by applying the following corrections.

Latitude: 0.717 seconds (22.072 meters)
Longitude: -0.190 seconds (-5.081 meters)

The year of establishment of control stations shown on the smooth sheet originates with the above mentioned horizontal control reports and the hydrographer's signal list.

The quality of several positions exceeds limits in terms of error circle radius and residual or have angles of intersection less than 30 degrees or more than 150 degrees. A review of the data, however, indicates that none of these fixes are used to position dangers to navigation. The features or soundings located by these fixes are consistent with the surrounding information. These fixes are considered acceptable.

The following shorelines maps, updated by 1991 NANCEI support data, were compiled on NAD 27 and apply to this survey.

	<u>Photo Date</u>	<u>Scale</u>
TP-00337	Feb., Mar. 1989	1:20,000
TP-00338	Feb., Mar. 1989	1:20,000

Shoreline drawn on the smooth sheet originates from 1:10,000 scale photographic enlargements of the shoreline map.

The following shoreline changes are depicted in solid red on the smooth sheet. These changes are supported by adequate positional information.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
Pier	30/23/50.2	86/23/34.9
Pier	30/23/46.1	86/23/28.1
Pier	30/23/25.6	86/22/27.2
Pier	30/27/26.2	86/21/06.0
Pier	30/27/55.0	86/21/10.0

3. HYDROGRAPHY

Except as noted below and elsewhere in this report, hydrography is adequate to:

- a. delineate the bottom configuration, determine least depths, and draw the standard depth curves;
- b. reveal there are no significant discrepancies or anomalies requiring further investigation; and
- c. show the survey was properly controlled and soundings are correctly plotted.

Standard depth curves were adequately drawn and developed with the exception of the zero curve. This was due to the shallowness of some areas and the small range of tide.

Holidays exist in the vicinity of latitude 30/25/45N, longitude 86/25/00W, due to the temporary placement of construction equipment for a new bridge between White Point and Piney Point.

4. CONDITION OF SURVEY

The hydrographic records and reports received for processing are adequate and conform to the requirements of the Hydrographic Manual, 4th Edition, revised through Change No. 3, the Hydrographic Survey Guidelines, and the Field Procedures Manual, March 1992 Edition.

5. JUNCTIONS

Survey H-10427 junctions with the following surveys.

<u>Survey</u>	<u>Year</u>	<u>Scale</u>	<u>Area</u>
H-10292	1991	1:10,000	West
H-10428	1992	1:10,000	East

The junction with survey H-10292 could not be accomplished because this survey is still in office processing. The junctions with this survey will be addressed in the Evaluation Report for survey H-10292.

The junction with survey H-10428 is complete.

6. COMPARISON WITH PRIOR SURVEYS

H-5869 (1935) 1:20,000

Prior survey H-5869 covers the entire survey area of the present survey. Generally, soundings agree within 1 meter between the prior survey and the present survey, the present survey being shoaler.

Survey H-10427 is adequate to supersede this prior survey within the common area.

7. COMPARISON WITH CHART

<u>Chart</u>	<u>Edition</u>	<u>Date</u>	<u>Scale</u>	<u>Datum</u>
11385SC	20th edition	November 23, 1991	1:40,000	NAD83

a. Hydrography

Charted hydrography originates with prior surveys H-5869 and miscellaneous sources.

A charted obstruction discontinued fish haven at latitude 30/26/51.6N, longitude 86/24/38.3W (AWOIS item 4638), was confirmed during this survey. It should be retained as presently charted.

Survey H-10427 is adequate to supersede charted hydrography within the common area, except as noted above.

b. AWOIS

All AWOIS items within the survey area originate with miscellaneous sources. Refer to the hydrographer's report for discussion and disposition of these features.

c. Controlling Depths

The Intracoastal Waterway (ICW) is located within the survey area and has a project depth of 12 feet (3.6 meters). Survey depths in this region of the ICW are deeper than the charted project depth. The survey depths found range from 6.8 meters (22.3 feet) to 10.4 meters (34 feet).

d. Aids to Navigation

There are no aids to navigation located in the survey area.

There are no landmarks within the area of this survey.

e. Geographic Names

Names appearing on the smooth sheet and in the survey title have been approved by the Chief Geographer.

f. Dangers to Navigation

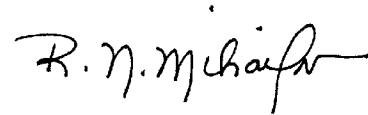
No reports of dangers to navigation were generated during the survey or office processing.

8. COMPLIANCE WITH INSTRUCTIONS

Survey H-10427 adequately complies with the Project Instructions except where noted in this report.

9. ADDITIONAL FIELD WORK

This is a good hydrographic survey. Additional work on a low priority basis is recommended to develop the holidays mentioned in section 3 of this report.

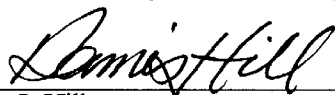


R. N. Mihailov
Cartographer

APPROVAL SHEET
H-10427

Initial Approvals:

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



Date: 9-24-93

Dennis J. Hill
Chief, Hydrographic Processing Unit
Pacific 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.

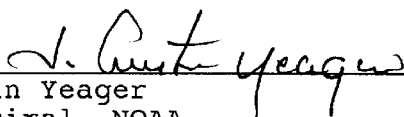


Date: 9/24/93

Commander Douglas G. Hennick, NOAA
Chief, Pacific Hydrographic Section

Final Approval

Approved:



Date: 3/25/94

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

MARINE CHART BRANCH
RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10427

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
11385	12/6/93	<i>Don Black</i>	Full Part Before After Marine Center Approval Signed Via Drawing No. <u>22</u> <i>CRIT. APPLICATION.</i>
11385	2-28-94	<i>Ralph Bevan</i>	<input checked="" type="checkbox"/> Full Part Before After Marine Center Approval Signed Via Drawing No. <u>22</u> <i>Applied in full</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.
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