

# 10410

Diagram No. 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. .... AHP2-10-5-92  
Registry No. .... H-10410

### LOCALITY

State ..... Florida  
General Locality ... Choctawhatchee Bay  
Sublocality ..... Rocky Bayou & Boggy Bayou

1992-93

CHIEF OF PARTY  
LT T.R. Waddington

### LIBRARY & ARCHIVES

DATE ..... November 29, 1993

# 10410

## HYDROGRAPHIC TITLE SHEET

H-10410

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.

AHP2-10-5-92

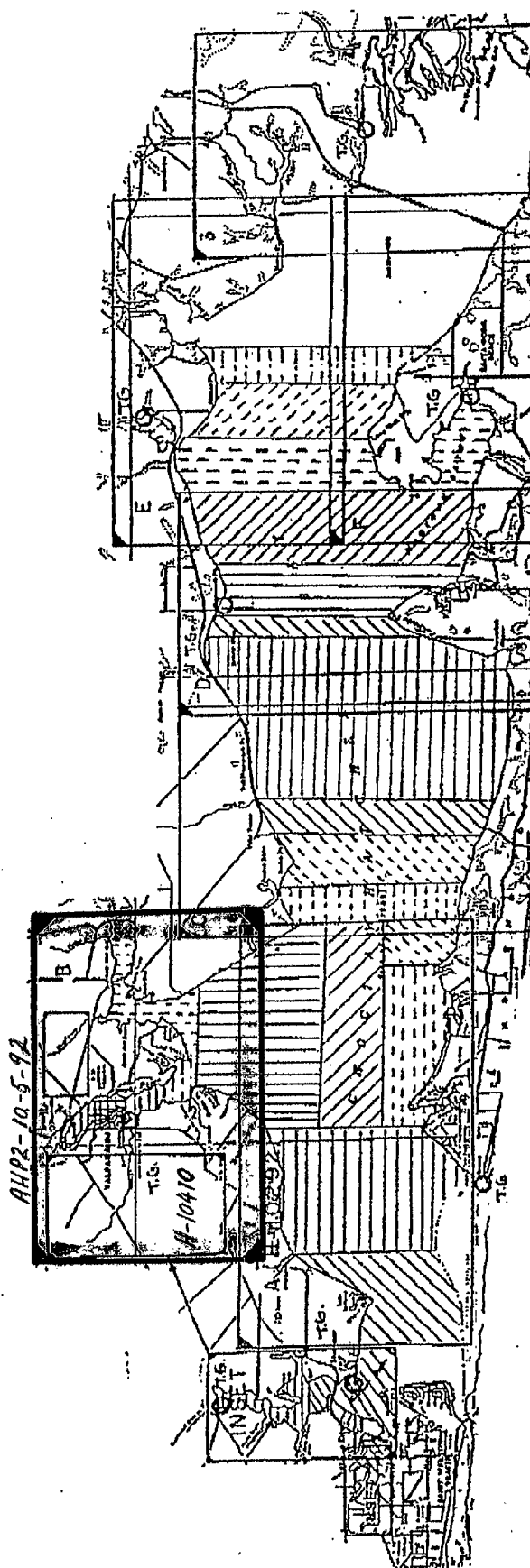
State FloridaGeneral locality Choctawhatchee BayLocality Rocky Bayou and Boggy BayouScale 1:10,000Date of survey Nov 3, 1992 - Jan 14, 1993Instructions dated March 9, 1992Project No. OPR-J259-AHPVessel NOAA Launch 0519Chief of party LT Thomas R. Waddington, NOAASurveyed by AHP2 PersonnelSoundings taken by echo sounder, hand lead, ~~and~~ Innerspace Model 448Graphic record scaled by R. Ramsey Jr., C. Parker, V. LaniusGraphic record checked by R. Ramsey Jr., C. Parker, V. LaniusVerification by: I. AlmacenAutomated plot by PHS Xynetics PlotterEvaluation by: I. AlmacenSoundings in meters at MLLW and decimeters

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

*ALW015/SURF ✓ 12/1/93 SJV*

*501-6-97*

*RWW 1/22/94*



PROGRESS SKETCH  
 OPR-J259-AHP  
 CHOCTAWHATCHEE BAY, FLORIDA  
 ATLANTIC HYDROGRAPHIC PARTY  
 CHIEF OF PARTY:  
 THOMAS WADDINGTON, LT/NOAA

MONTH	SQUARES IN SOUNDINGS	LINEL IN SOUNDINGS	LINEL IN ITEM BRACK	LINEL IN T/P & MISC.	DELETED FOR BOTTOM SAMPLES	CORREL STATIONS	TIDE STATIONS	SPECIAL
MAY	14	252	0	138	0	4	7	
JUN	11	184	22	398	216	2	1	
JUL	6	101	4	209	5	7	2	
AUG	10	173	0	229	73	1	0	
SEP	6	121	25	345	147	0	1	
OCT	6	105	10	236	185	2	0	
NOV	8	141	0	300	57	0	0	
DEC	6	103	10	250	83	1	1	
JAN	6	196	50	400	25	1	0	
FEB								
MAR								

DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SURVEY H-10410

FIELD NO. AHP2-10-5-92

SCALE: 1:10,000

1992

ATLANTIC HYDROGRAPHIC PARTY TWO

CHIEF OF PARTY: Lt. Thomas R. Waddington

A. PROJECT

This survey was conducted according to Hydrographic Project Instructions OPR-J259-AHP2, Choctawhatchee Bay, Florida, dated March 9, 1992. \*These are amended by Change No. 1, dated June 2, 1992 and Change No.2, dated September 30, 1992. This survey was to include an inset of the Garnier and Cinco Bayou area. It was later decided to make the inset a survey unto itself, registry number H-10451. This will be change number three. The official memorandum has not yet been received. \* *Change No.3, dated March 25, 1993.*

The purpose of project OPR-J259-AHP2 is to provide contemporary hydrography for the maintenance of existing charts. Prior surveys in this area were conducted in 1935 and 1939.

The sheet letter is "B" as specified by the project instructions.

B. AREA SURVEYED (See EVAL RPT., Sec. 1)

The area surveyed for H-10410 covers Rocky and Boggy Bayou's and their adjoining smaller bayous. The survey limits are as follows:

North - Latitude 30°31'21"N  
South - Latitude 30°28'42"N  
East - Longitude 086°25'00"W  
West - Longitude 086°30'12"W

This survey was conducted from November 3, 1992 (DN 308) to January 14, 1993 (DN 014).

C. SURVEY VESSELS

Vessel 0519 (EDP No. 0519) a 21-foot MonArk was the sounding vessel used to collect all survey data. There were no unusual vessel configurations nor problems encountered.

D. AUTOMATED DATA ACQUISITION AND PROCESSING

The Hydrographic Data Acquisition and Processing System (HDAPS) was used to process all hydrographic data for this survey. Version 3.6 of the PC-DAS suite of programs was used for on-line data acquisition on the survey vessel. A listings of version numbers for the various HP-DPS programs used for all data processing is provided in Appendix VI. In addition to the HDAPS, the following non-HDAPS computer programs were used:

VELOCITY (IBM PC)	Ver. 1.11 (3/9/90)
NADCON (IBM PC)	Ver. 1.01
WORDPERFECT (IBM PC)	Ver. 5.1

E. SONAR EQUIPMENT

Not Applicable.

F. SOUNDING EQUIPMENT

An Innerspace model 448 depth sounder, S/N 186 was used to collect all echo soundings on this survey.

A standard lead line calibrated in meters, S/N 0519, 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 0.6 to 8.4<sup>2</sup> meters.

G. CORRECTIONS TO ECHO SOUNDINGS (See EVAL RPT., Sec. 1)

Corrections for the speed of sound through the water column are computed from data acquired with an Odom Hydrographic Systems Inc., Digibar Model DB1100 speed of sound probe, S/N 155. This instrument was calibrated by the manufacturer on February 2, 1992. A copy of the calibration data is in the Survey Separates, section IV.

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

```
=====
Cast Table DN    DATE      Latitude    Longitude    Depth
                  Actual/Extended
=====
13  13  316 11/11/92  30°30'00"N  086°27'00"W  5.0/ 6.5
*14  14  323 11/18/92  30°26'00"N  086°17'00"W  6.0/ 7.8
*16  16  357 12/22/92  30°26'15"N  086°16'42"W  7.0/ 9.1
*17  17  004 01/04/93  30°26'45"N  086°18'00"W  5.0/ 6.5
*18  18  012 01/12/93  30°26'00"N  086°18'00"W  6.0/ 7.8
=====
```

\* Plot outside survey limits.

Program Velocity was used for computing the speed of sound correctors. The corrector for all tables is zero for all depths on this survey. No velocity corrector application is necessary for final plotting of the smooth sheet at the Pacific Hydrographic Section. Copies of the tables and support documentation are in the Survey Separates, section IV. Velocity graphs could not be printed through the computer used for program Velocity.

Lead line comparisons were taken daily to determine instrument error. No instrument error was observed. \*The lead line comparison log is in the Survey Separates, section IV. The lead line was calibrated on May 5, 1992 with a steel tape. No corrections were necessary. \*A copy of the calibration form is in the Survey Separates, section IV.

A static draft of 0.3 meters is applied to the final field sheet soundings by the HDAPS Reapply Depth Correctors program. The draft was measured by subtracting the difference from a punch mark on the side of launch 0519, 0.6 meters above the transducer, to the water surface.

Settlement and squat measurements for vessel 0519 were taken on June 23, 1992 using the level method. Settlement and squat correctors are applied to the final field sheet soundings by the HDAPS Reapply Depth Correctors program. \*Data from the settlement and squat test is in the Survey Separates, section IV.

The final field sheet is plotted using predicted tides determined from Pensacola, Florida, with correctors designated in section 5.9 of the project instructions. Wind speed and direction during this survey had a far greater effect on the true water levels than did normal tidal action. This resulted in higher water levels during periods of southerly winds, and lower water levels during periods of northerly winds. Data was not affected by these wind driven water level anomalies.

\* Filed with the hydrographic data.

Approved water levels are requested from the Product and Services Branch, N/OES231, in a letter dated February 2, 1993. A copy is in Appendix V of this report.

#### H. CONTROL STATIONS (*See EVAL RPT, Sec. 2*)

The horizontal control datum for this project is the North American Datum of 1983. Two horizontal control stations, CENTEL GPS Base (064) and Baytowne Marina Cal Point (065), were used on this survey. These stations were established to third-order standards with GPS by AHP personnel in October 1992. The Horizontal Control Report for these positions was submitted to N/CG23322 in November 1992. These positions served as our DGPS reference site and our launch performance checkpoint during work on this survey. ✓

#### I. HYDROGRAPHIC POSITION CONTROL

Differential GPS is the method of positioning for all hydrographic data on this survey. An Ashtech model XII receiver, serial number 700157E1076 was used for the reference station on day 308. Serial number 700283E1389 was used for the reference station thereafter. An Ashtech Sensor, serial number 700417A1070 was used for the remote station on vessel 0519. Ashtech supplied Maxxon VHF radios using channel one (Frequency 170.200 Mhz) were used as the data link between reference and remote stations. This equipment met the 1:10,000 scale accuracy requirements for this survey. ✓

To confirm the reference site (station 064) as required by section 3.4.6.3 of the Field Procedures Manual, program Monitor was run over a weekend for 66 hours starting on November 9, 1992. The GPS availability at this site was determined to be 98.5% from this test. \* A copy of the outlier.sum file from the test, showing the statistics, as well as the Plot of Radial Error in Position, is in the Survey Separates, section III. ✓

Performance checks, as required by section 3.4.4 of the Field Procedures Manual, were accomplished by comparing the DGPS position of the vessel to the established calibration point (station 065). Performance checks were obtained daily. \* Abstracts of the performance checks are in the Survey Separates, section III. ✓

As directed by DGPS operating specifications in the Field Procedures Manual, hydrographic operations ceased, with some exceptions, whenever the horizontal dilution of precision (HDOP) values exceeded 3.8. This was calculated by the formula found in the Field Procedures Manual, using an ESE value of 4m, an EPE value of 15m, and an EDE value of 0.2m. The periods of poor satellite geometry causing high HDOP values were minimal on this survey. ✓

\* Filed with the hydrographic data.

Any data acquired during periods of lost lock or high HDOP values was reviewed, then edited or rejected as warranted. Vessel course during these periods was held by compass.

J. SHORELINE (See EVAL RPT., Sec. 2)

Shoreline shown on the final field sheet is transferred by hand from TP-00337. This shoreline manuscript is compiled on NAD 1927 at a scale of 1:20,000. It is enlarged to 1:10,000 scale for use with this survey. Shoreline verification was accomplished by comparison of the main scheme hydrography which junctions at shore, detached positions, or by visual inspections. Verified shoreline is shown in black ink on the final field sheet, and shoreline changes are shown in red ink. All new piers located during this survey are shown in red ink on the final field sheet. Charted shoreline should be superseded by shoreline from TP-00337. *concur*

Shoreline detail shown on TP-00337, was verified by visual inspection, and identified using reference numbers. These are shown along with elevations, on the boat sheet. Just the symbol is shown on the final field sheet.

The following changed or new features were located during this survey:

WITHIN ROCKY BAYOU

- ▶ Shoreline changes were found on the northern end of the peninsula forming the west shore of Ward Cove. The extreme northern tip is extending further north than shown on TP-00337. The tip of the peninsula is now at latitude 30°29'55.0"N, longitude 086°26'54.7"W. This change is verified by positions 316, 317, and 318 and is shown on the Final Field Sheet in red ink. The spit of land shown on TP-00337 extending eastward from the tip of the peninsula no longer exists. This area is now covered with depths less than one foot, verified by positions 325 through 330. The area extends from shore, eastward to daybeacon four, at latitude 30°29'51.1"N, longitude 086°26'49.0"W. This area is shown on the Final Field Sheet as a foul area in black with the affected shoreline change in red. These changes are associated with AWOIS 4663.
- ▶ The pier shown on TP-00337 at latitude 30°29'48"N, longitude 86°26'49"W, is extended. The pier now extends northward to mooring piles located by positions 976 and 977.



- ▶ A minor shoreline change is noted along the north shore of Rocky Bayou at latitude 30°30'27"N, longitude 086°25'35"W. The shoreline in this area has receded northward slightly.
- ▶ A new pier is shown on the Final Field Sheet at latitude 30°30'<sup>01.05</sup>04"N, longitude 086°27'<sup>10.62</sup>10"W, position 956.
- ▶ Two new piers with covered boat slips are shown on the Final Field Sheet at latitude 30°30'<sup>04.63</sup>04"N, longitude 086°27'<sup>10.63</sup>10"W, position 957 and latitude 30°30'<sup>06.13</sup>06"N, longitude 086°27'<sup>11.57</sup>11"W, position 958.

#### WITHIN BOGGY BAYOU: ✓

- ▶ A shoreline change is noted inside Toms Bayou at latitude 30°30'08"N, longitude 086°29'54"W. A small point has receded southward at this location.
- ▶ One new pier is shown on the Final Field Sheet at latitude 30°30'<sup>44.69</sup>44"N, longitude 086°28'<sup>59.44</sup>59"W, position 773.
- ▶ Two new piers are shown on the Final Field Sheet at latitude 30°31'<sup>11.88</sup>11"N, longitude 086°29'<sup>40.29</sup>40"W, position 867, and latitude 30°31'<sup>10.55</sup>10"N, longitude 086°29'<sup>41.74</sup>41"W, position 868.
- ▶ A wharf is shown on the Final Field Sheet at latitude 30°31'<sup>13.23</sup>13"N, longitude 086°29'<sup>42.04</sup>42"W, position 869. This replaces the shoreline shown on TP-00337.
- ▶ A new pier is shown on the Final Field Sheet at latitude 30°30'<sup>32.07</sup>32"N, longitude 086°29'<sup>19.63</sup>19"W, position 984.

Field notes are on the Boat Sheet, the graphic records, and in the Daily Log Book.\* Photographs are also in the Daily Log Book.\*

A complete list of all detached positions, generated by the HDAPS Detached Position Editor program, is in the accordion file.

#### K. CROSSLINES ✓

A total of 18 linear nautical miles of crosslines were acquired on H-10410 which equals 40% of the main scheme hydrography. Cross line soundings agree with the main scheme soundings within 0.5 meters.

\* Filed with the hydrographic data.

L. JUNCTIONS (See EVAL RPT., Sec. 5)

This survey junctions to the south with H-10294, a 1:10,000 scale survey from 1989.

Junction soundings between the present survey and H-10294 are in good agreement, with differences 0.2 meter or less.

M. COMPARISON WITH PRIOR SURVEYS (See EVAL RPT., Sec. 6)

This survey was compared with prior survey H-5869, 1:20,000 scale, from 1935. One of the nine items, number 4665, investigated on this survey, originated from the prior survey. The item report is ~~in Appendix VI~~ <sup>included in</sup> of this report.

Soundings from this survey were generally within 1 foot of the prior survey soundings. No significant soundings requiring verification or disproval, were noted on the prior survey. An apparent compilation error originating from the prior survey near Sarah Ann Bayou, is discussed completely in Section N. of this report.

N. COMPARISON WITH THE CHART (See EVAL RPT., Sec. 7)

Comparison is made with the following charts of the area:

<u>Chart No.</u>	<u>Edition</u>	<u>Edition Date</u>
11385	20th	November 23, 1991
11388	15th	January 4, 1992

No dangers to navigation were identified on this survey.

Soundings from this survey are within 0.2m, with few exceptions, throughout the survey area, when compared with chart 11385.

Sarah Ann Bayou in the northwest portion of Rocky Bayou, currently shows a 2 foot sounding <sup>charted</sup> at the entrance and less than 6 feet of water throughout the bayou. This is in contrast to deeper water, to as much as 3.8<sup>8</sup> meters found by this survey in Sarah Ann Bayou. The shoalest depth observed on this survey in Sarah Ann Bayou was 4.3 feet (1.3m) at latitude 30°30'17"N, longitude 086°27'21"W. The 2 foot sounding originates from prior survey H-5869. This sounding is actually a 12 foot sounding on the prior survey; compiled wrongly as a 2 foot on the chart. While the paper copy of the prior survey used for comparison was somewhat unclear, the sounding was verified as a 12 foot from the negative of the

prior survey, by Mr. Steve Verry, N/CG241. The charting of this bayou should be revised using representative soundings from this survey. *Concur.*

The area charted with a "Shoal rep" notation at the entrance to Ward Cove has changed significantly. Most notable are two shoreline changes discussed completely in section J. of this report and four uncharted aids to navigation marking the entrance to Ward Cove, addressed in section P. of this report. The shoal is discussed as AWOIS 4663. ✓

The platform at latitude 30°29'26.171"N, 086°28'57.809"W, was found as currently charted, <sup>here</sup>uncovering 0.5<sup>3</sup>m at MLLW. <sup>MHW</sup> ✓

The fence charted near latitude 30°30'32"N, longitude 086°29'18"W, is actually rows of evenly spaced 4"x4" posts, forming a swim area. A platform uncovering 1m at MLLW was located by detached position at latitude 30°30'32.44"N, longitude 086°29'17.90"W, inside the swim area. Chart this area as shown on TP-00337. *Concur.* ✓

All other charted features are addressed as items, discussed on Item Investigation Reports ~~in Appendix VI.~~ <sup>included in</sup> of this report.

The overhead power cable crossing Rocky Bayou next to the SR 20 bridge is on the west side of the bridge, not the east side as charted.

#### O. ADEQUACY OF SURVEY ✓

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

#### P. AIDS TO NAVIGATION ✓

There are 14 non-floating aids to navigation within the survey area. There are no floating aids to navigation in the survey area.

Four of the non-floating aids are not published in the U.S. Coast Guard Light List, Vol. 4, 1992. They are in Ward Cove, located at:

<u>PN</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Description</u>
19	30°29'55. <sup>18</sup> <sub>2</sub> "N	86°26'52. <sup>36</sup> <sub>3</sub> "W	Ward Cove Daybeacon 1
20	30°29'53. <sup>50</sup> <sub>5</sub> "N	86°26'52. <sup>06</sup> <sub>1</sub> "W	Ward Cove Daybeacon 2
21	30°29'51. <sup>84</sup> <sub>8</sub> "N	86°26'48. <sup>24</sup> <sub>2</sub> "W	Ward Cove Daybeacon 3
22	30°29'51. <sup>08</sup> <sub>1</sub> "N	86°26'49. <sup>80</sup> <sub>0</sub> "W	Ward Cove Daybeacon 4

These aids are privately maintained by Bluewater Bay Marina and were established to mark the channel into the marina. *12/1/93*

All fixed aids to navigation adequately serve their intended purpose.

The following table shows the comparison between survey, light list and charted positions:

NAVAID	* USCGLL#	LLPOS	Survey Position	Distance/Bearing fr. Charted Pos.
RBE Lt 1	<sup>30250</sup> <del>30080</del>	30°29.0' 86°27.2'	<sup>55</sup> 30°29'02.5"N <sup>75</sup> 86°27'08.7"W	10m SE (PN 1)
BB Lt 3	<sup>30260</sup> <del>30090</del>	(None)	<sup>30</sup> 30°28'45.3"N <sup>50</sup> 86°28'28.0"W	10m NE (PN 2)
BB Dbn 4	<sup>30265</sup> <del>30095</del>	(None)	<sup>44</sup> 30°28'44.4"N <sup>60</sup> 86°28'20.7"W	On Station (PN 3)
BB Dbn 5	<sup>30270</sup> <del>30100</del>	(None)	<sup>29</sup> 30°28'53.3"N <sup>60</sup> 86°28'32.6"W	75m E (PN 4)
WB Dbn 1	<sup>30295</sup> <del>30125</del>	(None)	<sup>51</sup> 30°29'03.5"N <sup>10</sup> 86°28'54.1"W	55m E (PN 5)
WB Dbn 2	<sup>30300</sup> <del>30130</del>	(None)	<sup>42</sup> 30°29'01.4"N <sup>75</sup> 86°28'59.7"W	65m NE (PN 6)
BB Dbn 6	<sup>30275</sup> <del>30105</del>	(None)	<sup>13</sup> 30°29'32.1"N <sup>22</sup> 86°28'43.7"W	75m NNE (PN 7)
BB Dbn 7	<sup>30280</sup> <del>30110</del>	(None)	<sup>63</sup> 30°29'32.6"N <sup>53</sup> 86°28'53.8"W	On Station (PN 8)
BB Dbn 8	<sup>30285</sup> <del>30115</del>	(None)	<sup>77</sup> 30°30'07.8"N <sup>04</sup> 86°28'58.0"W	130m NNE (PN 9)
BB Lt 9	<sup>30290</sup> <del>30120</del>	(None)	<sup>10</sup> 30°30'16.1"N <sup>80</sup> 86°29'04.9"W	40m SE (PN 10)

RBE-Rocky Bayou Entrance  
BB-Boggy Bayou  
WB=Weekley Bayou

\* USCGLL# from 1993 LIGHT LIST (Vol. IV)

The overhead power cable crossing Rocky Bayou next to the SR 20 bridge is on the west side of the bridge, not the east side as shown on TP-00337. The bridge measured a vertical clearance of 22.3 feet (6.8m) at <sup>MHW</sup>MLLW versus 20 feet charted. The overhead cable measured a vertical clearance of 63 feet (19.2m) versus 40 feet charted. *CONCUR.* <sup>62.5</sup>

*See EVAL  
RPT, Secs. 4, 7  
& 9.*

The overhead power cable crossing Tom's Bayou next to the SR397 bridge are on the west side of the bridge, not the east side as shown on TP-00337. The cable is shown correctly on chart 11385. The bridge measured 11.5 feet (3.5m) at <sup>MHW</sup>MLLW. This agrees with the charted 11 feet, when MHW is accounted for. The cable measured 41.0 feet (12.5m) at <sup>MHW</sup>MLLW versus 38 feet charted. *CONCUR.* <sup>40.5</sup>

*See EVAL  
RPT, Secs. 4, 7  
& 9*

As a check, vertical clearances were obtained using an optical range finder and are not considered highly accurate. The currently charted clearances should be retained. *CONCUR.*

There are two charted submerged cable crossing areas accurately charted within the limits of this survey. One is east of Valparaiso, the other crosses the mouth of both Rocky and Boggy Bayous.

#### Q. STATISTICS ✓

<u>Description</u>	<u>Quantity</u>
Total Number of Positions	988
Total Lineal Nautical Miles of Hydrography	45
Total Lineal Nautical Miles of Cross Lines	18
Square Nautical Miles of Hydrography	7.5
Days of Production	10
Detached Positions	66
Bottom Samples	14
Tide Stations	5
Velocity Casts	5

#### R. MISCELLANEOUS ✓

No significant current conditions were observed while conducting this survey.

There were 14 bottom samples acquired on this survey. They were not submitted to the Smithsonian Institution as directed in section 6.7 of the project instructions. Bottom sample positions are plotted on the overlay and are listed on the Oceanographic Log Sheet-M, NOAA Form 75-44, the Survey Separates.\*

\* Filed with the hydrographic data.

No predicted tide anomalies were observed during this survey. The tide gauge installed in Boggy Bayou, station number 872-9501, was removed before completion of field work. This was approved by Mr. Mike Gibson of N/OES231 in Rockville, MD. Problems with other gauges in the survey area necessitated the early removal.

~~Weekly~~  
Weekly Bayou is a posted limited access area, with all shoreline on U.S. Government property.

Because of a shortage of DGPS base units to adequately cover the area being surveyed for OPR-J259, one primary site was used, selected to facilitate use by multiple survey vessels. As a result this survey was conducted at extreme ranges from the VHF radio data link. This was the cause of most "Lost Lock" periods encountered. This resulted in noticeable amounts of data acquisition time lost as well as increases in data processing time. Research by personnel from this field unit into more cost effective means of extending range capability have concluded that incorporation of "VHF Repeater Sites" would be the most cost effective resolution of this problem.

#### S. RECOMMENDATIONS ✓

Specific recommendations are made in section J., N., and P. of this report. No inadequacies, additional work, nor further investigations were identified after field work was completed.

*See EVAL RPT, Sec. 9*

#### T. REFERRAL TO REPORTS ✓

<u>Title</u>	<u>Transmittal Information</u>
Descriptive Report to Accompany Survey H-10294, 1989	Pacific Hydrographic Section N/CG245 Seattle, WA, (1991)
Horizontal Control Report for OPR-J259-AHP2	Field Photogrammetry Section Norfolk, VA (N/CG23322)(1992)
Chart Sales Agent Report for OPR-J259-AHP2	Chart Distribution Branch (N/CG33) Rockville, MD (1992)
User Evaluation Report OPR-J259-AHP2	Atlantic Hydrographic Section (N/CG244) Norfolk, VA (1992)

Title

Chart Inspection Report  
OPR-J259-AHP2

Coast Pilot Report

Transmittal Information

Atlantic Hydrographic Section  
(N/CG244)  
Norfolk, VA (1992)

Pacific Hydrographic Section  
N/CG245  
Seattle, WA (1992)

Submitted by: Atlantic Hydrographic Party

AWOIS NO: 4660

Item Description: Ruins

Source: CL255/61--COE , CL1600/79--USPS, TP-00337(77-78/79)

AWOIS Position: Lat - 30/29/01.71N Lon - 086/28/50.81W

Required Investigation: VS, BD, DI, SD --100m radius

Charts Affected: 11385

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#### INVESTIGATION

Date(s)/DN(s): 11/19/92 (324)

Position Numbers: 533

Launch Number: 0519

Investigation Used: Diver circle search Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 100 meter radius dive circle search was conducted, centered around the reported position, with overlap from the search for AWOIS No. 4661. Nothing was found.

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#### CHARTING RECOMMENDATION

Delete the ruins from the chart. *Concur,*

Recommended Position:

Recommended Least Depth:

\*\*\*\*\*

#### COMPILATION NOTES

Chart

Applied As



AWOIS NO: 4661

Item Description: Piling

Source: CL255/61--COE , TP-00337(77-78/79), H10294/89

AWOIS Position: Lat - 30/29/01.71N Lon - 086/28/48.81W

Required Investigation: VS, BD, DI, SD -- 100m radius

Charts Affected: 11385

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#### INVESTIGATION

Date(s)/DN(s): 11/19/92 (324)

Position Numbers: 532

Launch Number: 0519

Investigation Used: Diver circle search Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A 100 meter radius diver circle search was conducted centered around the reported position. This covered bottom areas from shore to the entrance channel to ~~Weekly~~ Bayou. Nothing was found. *Weekley*

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#### CHARTING RECOMMENDATION

Delete the currently charted "Piling" notation and the two pile symbols. *Concur.*

Recommended Position:

Recommended Least Depth:

\*\*\*\*\*

#### COMPILATION NOTES

Chart

Applied As

AWOIS NO:4662

Item Description: Obstruction (Mooring Buoy)

Source: Unknown

AWOIS Position: Lat - 30/29/05.71N Lon - 086/28/23.81W

Required Investigation: VS

Charts Affected: 11385

---

#### INVESTIGATION

Date(s)/DN(s): 11/19/92 (324)

Position Numbers: 531

Launch Number: 0519

Investigation Used: VS, DI

Water Visibility: 1.2m

Position Determined By: DGPS

Investigation Summary: No evidence of the mooring buoy was seen visually. A 100 meter radius dive circle search was conducted on the reported position and nothing was found.

---

#### CHARTING RECOMMENDATION

Delete the charted mooring buoy symbol. *Concur.*

Recommended Position:

Recommended Least Depth:

\*\*\*\*\*

#### COMPILATION NOTES

Chart

Applied As

AWOIS NO:4663

Item Description: Shoal Reported

Source:CL976/84--USPS

AWOIS Position: Lat - 30°29'51.71N Lon - 086°26'51.81W

Required Investigation: ES

Charts Affected: 11385

-----

#### INVESTIGATION

Date(s)/DN(s):11/16/92 (321)

Position Numbers: 306-330

Launch Number: 0519

Investigation Used:ES, VS

Water Visibility:good

Position Determined By: DGPS

Investigation Summary: The entrance channel to Ward Cove is now marked by daybeacons, and was found to have a centerline controlling depth of <sup>2.8</sup>1.8 meters at latitude 30°29'51<sup>2.8</sup>"N longitude 086°26'48<sup>2.8</sup>"W. A shoal sounding of 1.1<sup>4.4</sup> meters was located at 30°29'50<sup>4.4</sup>"N longitude 086°26'54<sup>2.53</sup>"W.

The shoreline on the northern end of the peninsula forming the west shore of Ward Cove now extends further north than charted. The tip of the peninsula is now at latitude 30°29'55.0"N, longitude 086°26'54.7"W. The spit of land<sup>shown</sup> shown on the chart extending eastward from the tip of the peninsula no longer exists. This area is now covered with depths less than one foot. The area extends from shore, eastward to daybeacon four, at latitude 30°29'51.1"N, latitude 086°26'49.0"W.

-----

#### CHARTING RECOMMENDATION

This shoreline should be charted as shown on H-10410. Chart representative soundings and the daybeacons located on H-10410. The shoal reported notation should be deleted. *Concur.*

Recommended Position:

Recommended Least Depth:

\*\*\*\*\*

#### COMPILATION NOTES

Chart

Applied As

AWOIS NO: 4664

Item Description: Submerged Piles

Source: CL398/48--CPR, CL1600/79--USPS

AWOIS Position: Lat - 30/30/05.71n Lon - 086/29/14.31w

Required Investigation: VS, BD, DI, SD --100m

Charts Affected: 11385

-----

#### INVESTIGATION

Date(s)/DN(s): 11/19/92 (324)

Position Numbers: 534, 535

Launch Number: 0519

Investigation Used: Dive circle search Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A 100 meter radius dive search snagged on a broken off pile, rising approximately 8" off the bottom. A leadline least depth of 0.9 meter was obtained this item. No further snags or contacts were encountered.

-----

#### CHARTING RECOMMENDATION

Delete the presently charted "Subm piles" notation and symbol, and chart "Subm pile" notation and symbol at the recommended position below. *Do not concur. Delete charted notation & symbol and chart a 0.9 m. obstr (subm pile).*

Recommended Position: lat. 30°30'05.62"N, lon. 086°29'15.92"<sup>3</sup>W

Recommended Least Depth: 0.9 meters at MLLW (<sup>actual tides</sup>~~Predicted Tides~~)

\*\*\*\*\*

#### COMPILATION NOTES

Chart

Applied As

AWOIS NO: 4665

Item Description: Submerged Wreck

Source: H5869/35, CL1600/79--USPS

AWOIS Position: Lat - 30/30/08.71N Lon - 086/30/05.32W

Required Investigation: VS, BD, DI, SD -- 50m radius

Charts Affected: 11385

---

#### INVESTIGATION

Date(s)/DN(s):11/19/92 (324)

Position Numbers: 538

Launch Number: 0519

Investigation Used: VS, DI

Water Visibility:

Position Determined By: DGPS

Investigation Summary: An 80 meter radius dive circle search was conducted from the reported position. A snag was encountered on the only remaining wreckage of one small metal rib. This metal rib was removed from the water by the divers. No wreckage remains.

---

#### CHARTING RECOMMENDATION

Delete the subm wreck symbol from the chart. *Concur.*

Recommended Position:

Recommended Least Depth:

\*\*\*\*\*

#### COMPILATION NOTES

Chart

Applied As

AWOIS NO: 4666

Item Description: Submerged pile

Source: CL1600/79--USPS

AWOIS Position: Lat - 30/30/13.71n Lon - 086/29/47.32w

Required Investigation: VS, BD, DI, SD -- 100m radius

Charts Affected: 11385

---

#### INVESTIGATION

Date(s)/DN(s): 11/19/92 (324)

Position Numbers: 536, 537

Launch Number: 0519

Investigation Used: VS, DI circle search Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: Visible ruins were position within the required search area, position 537. A 100 meter radius dive circle search was conducted from the reported position as well; nothing else was found.

---

#### CHARTING RECOMMENDATION

Delete the presently charted submerged pile symbol and notation.  
Chart ruins symbol at the recommended position. *Concur,*

Recommended Position: Lat - 30/30/14.06<sup>7</sup>N Lon - 086/29/46.35W

Recommended Least Depth: Bares 1.5m at <sup>MHW</sup> ~~MLLW~~ <sup>actual tides</sup> (~~Predicted Tides~~)

\*\*\*\*\*

#### COMPILATION NOTES

Chart

Applied As

AWOIS NO: 4667

Item Description: Piles PA

Source: CL1600/79--USPS, TP-00337(77-78/79)

AWOIS Position: Lat - 30/31/15.70N Lon - 086/29/55.82W

Required Investigation: VS, BD, DI, SD--100m radius

Charts Affected: 11385

-----

#### INVESTIGATION

Date(s)/DN(s): 11/19/92(324)

Position Numbers: 539

Launch Number: 0519

Investigation Used: VS

Water Visibility: N/A

Position Determined By: DGPS

Investigation Summary: Because of shoal water, this area was not accessible by boat. Three piles were observed 99 meters and 05° ahead of the vessels grounded position (number 539). An optical range finder was used to determine the distance.

-----

#### CHARTING RECOMMENDATION

Delete currently charted piles PA. Chart piles at the recommended position below. *Cancur. The hydrographer's recommended position is the position of the boat and not the position of the feature.*

Recommended Position: Lat - 30/31/16.43<sup>19.64</sup>N Lon - 086/29/53.64<sup>32</sup>W  
(offset position of piles)

Recommended Least Depth: uncovers 0.4<sup>5</sup>m at MLLW (actual tides) (~~Predicted Tides~~)

\*\*\*\*\*

#### COMPILATION NOTES

Chart

Applied As

AWOIS NO: 4668

Item Description: Piles PA

Source:CL1600/79--USPS, TP-00337(77-78/79)

AWOIS Position: Lat - 30/31/15.70N Lon - 086/29/48.82W

Required Investigation: VS, BD, DI, SD -- 100m

Charts Affected: 11385

-----

#### INVESTIGATION

Date(s)/DN(s): 11/19/92(324)

Position Numbers: 540

Launch Number: 0519

Investigation Used: VS

Water Visibility:N/A

Position Determined By: DGPS

Investigation Summary: The reported position was not accessible by boat because of shallow water. There were numerous stakes, and small piles observed and positioned with an offset of 50m at 300° from the vessels grounded position. The range was measured using an optical range finder.

-----

#### CHARTING RECOMMENDATION

Delete currently charted piles PA. Chart Piles at the recommended position below. *Concur. The hydrographers' recommended position is the position of the boat and not the position of the feature.*

Recommended Position: Lat - 30/31/<sup>15.45</sup>~~14.63~~N Lon - 086/29/<sup>46.61</sup>~~44.99~~W  
(offset position of piles)

Recommended Least Depth: uncovers 0.6m at MLLW (Predicted Tides)

\*\*\*\*\*

#### COMPILATION NOTES

Chart

Applied As



Control Station List  
OPR-J259-AHP  
H-10410

064	30°22'38.852"N	086°18'29.347"W	CENTEL GPS Base
065	30°23'21.277"N	086°19'39.768"W	Baytowne Marina Cal Pt.

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION									
NONFLOATING AIDS OR LANDMARKS FOR CHARTS										ORIGINATING ACTIVITY									
REPORTING UNIT (Field Party, Ship or Office)					LOCALITY					DATE					<input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)				
TO BE CHARTED <input checked="" type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED <input type="checkbox"/>					AHP-2 STATE FL DATE 1/23/93					CHARTING NAME J-259					CHARTS AFFECTED 11385				
JOB NUMBER AHP-10-5-92					SURVEY NUMBER H-10410					DATUM 1983					METHOD AND DATE OF LOCATION (See instructions on reverse side)				
DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)					POSITION LATITUDE N LONGITUDE W D.M. Meters D.P. Meters					OFFICE FIELD									
Ward Cove Daybeacon "1"					30-29 55.18					086-26 52.30					F-L-D.G.P.S. 11-3-92				
Ward Cove Daybeacon "2"					30-29 53.50					086-26 52.05					F-L-D.G.P.S. 11-3-92				
Ward Cove Daybeacon "3"					30-29 51.84					086-26 48.23					F-L-D.G.P.S. 11-3-92				
Ward Cove Daybeacon "4"					30-29 51.08					086-26 48.95					F-L-D.G.S. 11-3-92				
SEE L-1525(93)																			

RESPONSIBLE PERSONNEL		ORIGINATOR
TYPE OF ACTION	NAME	
OBJECTS INSPECTED FROM SEAWARD	ROBERT W. RAMSEY	<input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	ROBERT W. RAMSEY	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'		
(Consult Photogrammetric Instructions No. 64, FIELD (Cont'd).)		
<b>OFFICE</b> <b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	<b>B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.</b> EXAMPLE: P-8-V 8-12-75 74L(C)2982	
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	<b>II. TRIANGULATION STATION RECOVERED</b> When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 <b>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75	
<b>**FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.</b>		
<b>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</b>		

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY

OPR-J259/92

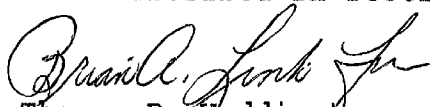
AHP-10-5-92

H-10410

1992-93

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  
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  
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: June 2, 1993

MARINE CENTER: Pacific

OPR: J259

HYDROGRAPHIC SHEET: H-10410

LOCALITY: Choctawhatchee Bay, Florida, Boggy and Rocky Bayous

TIME PERIOD: November 3, 1992 - January 15, 1993

TIDE STATION USED: 872-9435 Big Hammock Point, Fl.  
Lat.  $30^{\circ} 27.9'N$  Lon.  $86^{\circ} 21.1'W$

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

REMARKS: RECOMMENDED ZONING

Apply a -12 minute time correction to Big Hammock Point, Fl.  
(872-9435).

NOTE: Hourly heights are tabulated on Central Standard Time.

  
CHIEF, DATUMS SECTION



## GEOGRAPHIC NAMES

H-10410

Name on Survey	A ON CHART NO. 11385 SC B ON PREVIOUS SURVEY NO. H-5869 C ON U.S. QUADRANGLE MAPS D FROM LOCAL INFORMATION E ON LOCAL MAPS F P.O. GUIDE OR MAP G RAND McNALLY ATLAS H U.S. LIGHT LIST K									
	A	B	C	D	E	F	G	H	K	
BOGGY BAYOU	X	X							1	
BOGGY POINT	X	X							2	
BOLTON BRANCH	X								3	
CHOCTAWHATCHEE BAY	X	X							4	
FLORIDA (title)	X	X							5	
JOHN BAYOU	X								6	
NELSON POINT	X								7	
NICEVILLE	X								8	
ROCKY BAYOU	X	X							9	
ROCKY CREEK	X								10	
SARA ANN BAYOU	X								11	
SHIRK BAYOU	X	X							12	
SHIRK POINT	X	X							13	
TOMS BAYOU	X	X							14	
VALPARAISO	X								15	
WARD COVE	X	X							16	
WEEKLEY BAYOU	X	X							17	
									18	
									19	
									20	
									21	
									22	
									23	
									24	
									25	

Approved:

*Charles E. Harrington*  
Chief Geographer - N/CG2x5

MAY - 5 1993

NOAA FORM 77-27(H) (9-83)		U.S. DEPARTMENT OF COMMERCE		REGISTRY NUMBER. H-10410	
<b>HYDROGRAPHIC SURVEY STATISTICS</b>					
RECORDS ACCOMPANYING SURVEY: To be completed when survey is processed.					
RECORD DESCRIPTION		AMOUNT		RECORD DESCRIPTION	
SMOOTH SHEET		1		SMOOTH OVERLAYS: POS., ARC, EXCESS	
DESCRIPTIVE REPORT		1		FIELD SHEETS AND OTHER OVERLAYS	
DESCRIP- TION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR- GRAMS	PRINTOUTS	ABSTRACTS/ SOURCE DOCUMENTS
ACCORDION FILES	1				
ENVELOPES					
VOLUMES	1				
CAHIERS					
BOXES					
SHORELINE DATA					
SHORELINE MAPS (List):					
PHOTOBATHYMETRIC MAPS (List):					
NOTES TO THE HYDROGRAPHER (List):					
SPECIAL REPORTS (List):					
NAUTICAL CHARTS (List):					
OFFICE PROCESSING ACTIVITIES <i>The following statistics will be submitted with the cartographer's report on the survey</i>					
PROCESSING ACTIVITY				AMOUNTS	
				VERIFICATION	EVALUATION
POSITIONS ON SHEET					
POSITIONS REVISED					
SOUNDINGS REVISED					
CONTROL STATIONS REVISED					
				TIME-HOURS	
				VERIFICATION	EVALUATION
PRE-PROCESSING EXAMINATION					
VERIFICATION OF CONTROL					
VERIFICATION OF POSITIONS				62.5	62.5
VERIFICATION OF SOUNDINGS				82.0	82.0
VERIFICATION OF JUNCTIONS					
APPLICATION OF PHOTOBATHYMETRY					
SHORELINE APPLICATION/VERIFICATION					
COMPILATION OF SMOOTH SHEET				30.5	30.5
COMPARISON WITH PRIOR SURVEYS AND CHARTS					10.0
EVALUATION OF SIDE SCAN SONAR RECORDS					
EVALUATION OF WIRE DRAGS AND SWEEPS					
EVALUATION REPORT					28.0
GEOGRAPHIC NAMES					
OTHER*					
*USE OTHER SIDE OF FORM FOR REMARKS				TOTALS	213
Pre-processing Examination by LT John Griffin				Beginning Date 3/1/93	Ending Date 3/18/93
Verification of Field Data by I. Almacen				Time (Hours) 175.0	Ending Date 9/20/93
Verification Check by				Time (Hours)	Ending Date
Evaluation and Analysis by I. Almacen				Time (Hours) 38.0	Ending Date 10/26/93
Inspection by D. Hall				Time (Hours) 3	Ending Date 11/15/93

## EVALUATION REPORT H-10410

### 1. INTRODUCTION

Survey H-10410 is a basic hydrographic survey accomplished by the Atlantic Hydrographic Party 2 under the following Project Instructions.

OPR-J259-AHP2, dated March 9, 1992

CHANGE NO. 1, dated June 2, 1992

CHANGE NO. 2, dated September 30, 1992

CHANGE NO. 3, dated March 25, 1993

This survey was conducted in Florida, along the northern coast of Chactawhatchee Bay. It covers the area of Rocky Bayou and Boggy Bayou including its adjoining smaller bayous. The survey area extends from latitude 30/28/45.00N up to the ends of the bayous. The foreshore areas consists of shallow and muddy beaches. The bottom is generally made up of mud mixed with sand. Depths range from 0.5 to 8.2 meters.

Predicted tides for Pensacola, Florida, gage 872-9840, were used for the reduction of soundings during field processing. Approved hourly heights zoned from Big Hammock, Florida, gage 872-9435, 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. NAD 83 is used as the horizontal datum for plotting and position computation. The offset values are adequate. Sound velocity table 13 and 18 were updated to provide correctors for deeper soundings not covered by the correction tables generated in the field. An accompanying computer printout contains the parameters and the correctors.

A digital file has been generated for this survey as required by the specifications contained in 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 a complete depiction of the survey data.

### 2. CONTROL AND SHORELINE

Sections H and I of the hydrographer's report and the 1992 Horizontal Control Reports for OPR-J259-AHP, contain adequate discussions of horizontal control and hydrographic positioning.

Differential GPS(DGPS) was used to control this survey. GPS stations Centel GPS Base, 1992 and Baytowne Marina Cal Point, 1992, were established to Third-Order accuracy. These control stations served as DGPS reference site and calibration point respectively. A GPS availability of 98.5% was determined at the reference site.

Positions of horizontal control stations used during this survey are field values based on NAD 83. The smooth sheet and accompanying overlays are annotated with NAD 27 adjustment ticks based on values determined with the 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: 0.711 seconds (21.897 meters)  
Longitude: -0.183 seconds (-4.868 meters)

The year of establishment of control stations shown on the smooth sheet originates with the previously referenced horizontal control reports.

A horizontal dilution of precision (HDOP) not to exceed 3.75 was computed for survey operations. There are (63) cases during the survey where the maximum allowable DGPS horizontal dilution of precision (HDOP) limits have been exceeded particularly in areas close to shore. A review of the data, however, shows that the positioning of soundings located by these fixes were consistent with the surrounding information and are considered acceptable. None of these survey positions are used to locate dangers to navigation. Daily DGPS performance checks were conducted in the field and found adequate.

The following shoreline map applies to this survey.

	<u>Photo Date</u>	<u>Class</u>	<u>Scale</u>
TP-00337	Jan/Apr 1977 Feb. 1978	III	1:20,000

Some significant changes were found along the northern point of the peninsula forming the western shore of Ward Cove. The point of land extending eastward from the tip of the peninsula and depicted on the shoreline manuscript was not found in this survey. These changes in the shoreline configuration of the area are shown in red on the smooth sheet.

New shoreline features were located during this survey and are shown in solid red line on the smooth sheet. The following revisions are supported with positional information and are considered adequate to supersede the photogrammetrically delineated shoreline within the common area.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
Pier (extended)	30/29/48.00	86/26/49.00
Pier	30/30/01.05	86/27/10.62
Pier	30/30/04.63	86/27/10.63
Pier	30/30/06.13	86/27/11.57
Pier	30/30/32.07	86/29/19.63
Pier	30/30/44.69	86/28/59.44
Pier	30/31/10.55	86/29/41.74
Pier	30/31/11.00	86/29/40.29
Fuel dock	30/31/13.23	86/29/42.64

The following shoreline changes depicted on the smooth sheet with a dashed red line, were transferred from the final field sheet without supporting positional information. These revisions are approximate but are considered adequate to supersede the prior photogrammetrically delineated shoreline within the common area.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
MHWL	30/30/08.0	86/29/54.0
MHWL	30/30/27.0	86/25/35.0

### 3. HYDROGRAPHY

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.

The hydrographer was unable to develop the near shore portions of the bayous and define the zero depth curves during this survey. The inshore areas are too shallow for approach by boat.

### 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 1991 Edition, except as follows.

The two (2) piles (AWOIS items 4667 & 4668) located along the north end of Boggy Bayou were not properly plotted on the field sheet. The piles were depicted over the fix positions of the boat (fixes 539 and 540) which were not the correct positions of the features. The actual positions of the piles, as noted in the field records, were offsets from these two offshore fixes.

The two (2) overhead power cables located across Rocky Bayou and Toms Bayou were verified in the field with regards to their vertical clearances. However, these clearances were referenced to MLLW instead of MHW and no fixes were taken to determine the location of the overhead cables.

### 5. JUNCTIONS

Survey H-10410 junction with the following survey.

<u>Survey</u>	<u>Year</u>	<u>Scale</u>	<u>Area</u>
H-10294	1989	1:10,000	South

The junction with survey H-10294 is complete and the comparison is satisfactory. However, some soundings were transferred from survey H-10294 to delineate depth curves and show shoaler information within the adjoining area.

### 6. COMPARISON WITH PRIOR SURVEYS

H-5869(1935), 1:20,000

Survey H-5869 provides the basic coverage of the entire area of this survey. Comparison with this 1935 prior survey is considered satisfactory. The present soundings were generally within 0.3 meter (1 foot) of the prior soundings.

The charted piles originating from this prior survey and located along the eastern extremities of Rocky Bayou were investigated during this survey. A pile was found at the site at latitude

30/30/15.45N, longitude 86/25/08.38W. It is recommended that the charted piles be deleted and the newly located pile be charted as depicted on the smooth sheet.

Survey H-10410 is adequate to supersede the prior survey for the area of common coverage.

## 7. COMPARISON WITH CHART

Chart 11385, 20th edition, dated Nov. 23, 1991; scale 1:40,000

Chart 11388, 15th edition, dated Jan. 4, 1992; scale 1:80,000

### a. Hydrography

The charted hydrography on the 20th edition of chart 11385 and the 15th edition of chart 11388 originates mostly with prior survey H-5869 and the rest from miscellaneous sources which requires no further discussion.

The existence of the charted overhead power cables mentioned in section 4 of this report was verified during this survey. Both of the overhead cables were found on the west side of the bridges and not along the east sides as depicted on the shoreline map TP-00337. The overhead cable lines were depicted in dashed red lines on the smooth sheet as shown on the field sheet.

The cable area charted at latitude 30/30/40.0N, longitude 86/29/10.0W, was confirmed by a note on the field sheet. This feature should be retained as charted.

Survey H-10410 is adequate to supersede charted hydrography within the common area, except for the submerged cable area noted above.

### b. AWOIS

There are nine (9) AWOIS items on this survey area originating with miscellaneous sources. Discussions concerning the results of item investigation are included in the hydrographer's report.

### c. Controlling Depths

There are no charted channels with controlling depths located within the area covered by this survey.

### d. Aids to Navigation

On this survey, the charted navigational aids around the area were found to have been moved to new locations.

There are fourteen (14) aids to navigation located during this survey. These aids were found to be in good condition and adequately serve their intended purpose.

Four (4) of these fixed aids are located around Ward Cove. These aids are privately maintained and were established to mark the channel leading to Bluewater Bay marina.

Daybeacon "4" as depicted on survey H-10294 is about 39 meters northwest of the present survey location. The position of this aid on survey H-10410 agrees with what was presently charted.

Charted landmarks originating from shoreline map TP-00337 are shown on the smooth sheet but have not been verified from seaward during this survey.

See section P of the hydrographer's report for additional information concerning the above mentioned aids to navigation.

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

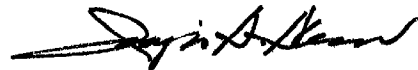
There are no dangers reported during this survey

8. COMPLIANCE WITH INSTRUCTIONS

Survey H-10410 adequately complies with the Project Instructions.

9. ADDITIONAL FIELD WORK

This is an adequate hydrographic survey. However, additional field work is required on a non-priority basis to adequately determine the locations of the two (2) overhead power cables mentioned in section 4 of this report.




Isagani A. Almacen  
Cartographer

APPROVAL SHEET  
H-10410

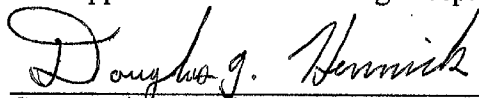
Initial Approvals:

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 disproof 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.

  
Dennis J. Hill  
Chief, Hydrographic Processing Unit  
Pacific Hydrographic Section

Date: 11/15/93

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.

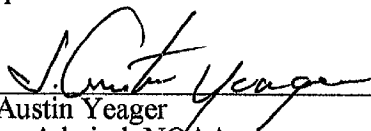
  
Commander Douglas G. Hennick, NOAA  
Chief, Pacific Hydrographic Section

Date: 11/15/93

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Final Approval

Approved:

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

Date: 12/20/93

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10410

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.

SUPERSEDES C&GS FORM 8352 WHICH MAY BE USED

## Hydrographic Index No. 84 E

