

10452

10452

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. AHP2-10-1-93
Registry No. ... H-10452

LOCALITY

State Florida
General Locality Choctawhatchee Bay
Sublocality .. Tucker Bayou to La
..... Grange Bayou
..... 19 93
..... CHIEF OF PARTY
..... LT T.R. Waddington

LIBRARY & ARCHIVES

DATE February 28, 1994

HYDROGRAPHIC TITLE SHEET

H-10452

INSTRUCTIONS - The Hydrographic Sheer should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

AHP2-10-1-93

State Florida

General locality Choctawhatchee Bay

Locality Tucker Bayou to LaGrange Bayou

Scale 1:10,000 Date of survey Feb. 17, 1993 - Apr. 20, 1993

Instructions dated March 9, 1992 Project No. OPR-J259-AHP

Vessel NOAA Launch 0519

Chief of party LT Thomas R. Waddington, NOAA

Surveyed by R.W. Ramsey, C.E. Parker, V.P. Lanius

Soundings taken by echo sounder, hand lead, pole Innerspace Model 448

Graphic record scaled by R.W. Ramsey, C.E. Parker, V.P. Lanius

Graphic record checked by R.W. Ramsey, C.E. Parker, V.P. Lanius

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

~~Processed by~~

Verification by R.N. Mihailov

Soundings in meters and decimeters at ~~MHW~~ MLLW

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.

All depths listed in this report are referenced to mean lower low water unless otherwise noted.

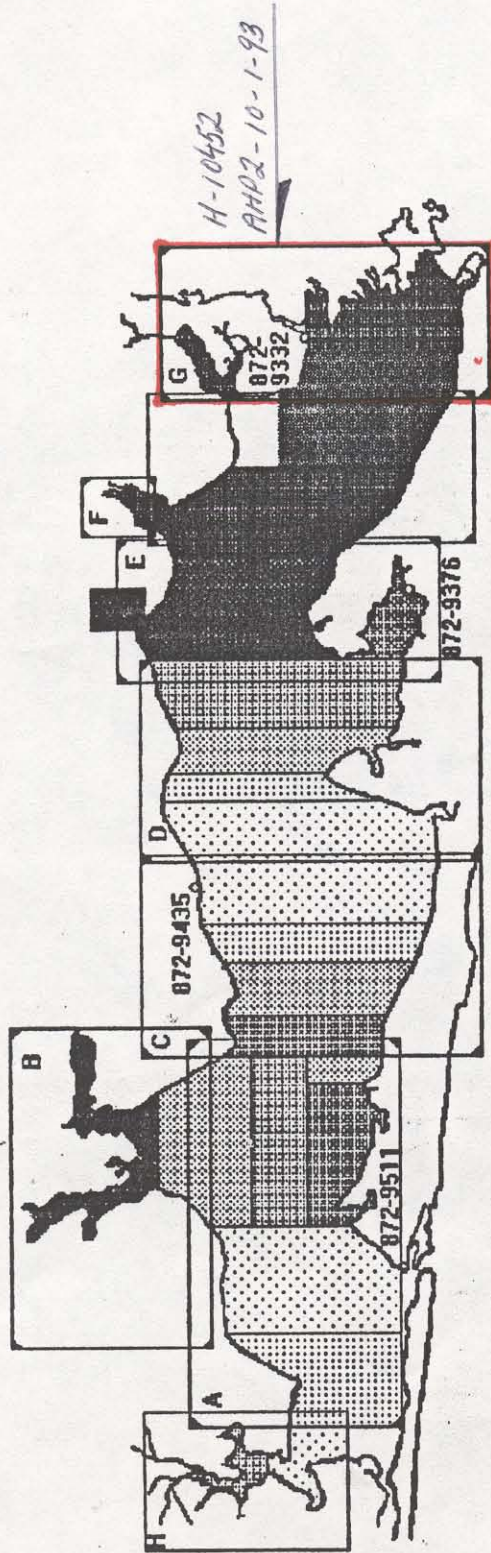
AWOIS/SURFV 3/7/94 35V

*SC-1-6-97
R.W.R. 3/16/94*

PROGRESS SKETCH

OPR-J259-AHP, CHOCTAWHATCHEE BAY FLORIDA

CHIEF OF PARTY: THOMAS WADDINGTON, LT. NOAA



MONTH	SQUARE NM SOUNDINGS	LINEAL NM SOUNDINGS	LINEAL NM ITEM DRAGS	LINEAL NM T/F&MISC	Control station	Tide station	SYMBOLS
JUN	11	184	22	398	1	1	[Symbol: Dotted pattern]
JUL	6	101	4	289	7	1	[Symbol: Horizontal lines]
AUG	10	173	0	229	1	0	[Symbol: Vertical lines]
SEP	6	121	25	345	0	1	[Symbol: Diagonal lines (top-left to bottom-right)]
OCT	6	105	10	236	2	0	[Symbol: Diagonal lines (bottom-left to top-right)]
NOV	8	141	0	300	0	0	[Symbol: Cross-hatch pattern]
DEC	6	103	10	250	1	1	[Symbol: Solid black fill]
JAN	6	106	50	400	1	0	[Symbol: Solid black fill]
FEB	6	108	39	400	1	1	[Symbol: Solid black fill]
MAR	11	207	6	425	0	0	[Symbol: Solid black fill]
APR	11	201	4	560	0	0	[Symbol: Solid black fill]
MAY							[Symbol: Solid black fill]

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10452
FIELD NO. AHP2-10-1-93
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 area is eastern Choctawhatchee Bay from Tucker Bayou to La Grange Bayou.

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 "G" as specified by the project instructions.

B. AREA SURVEYED See Evaluation Report, Section 1

The area surveyed for H-10452 covers La Grange Bayou and its tributaries, as well as the eastern section off Choctawhatchee Bay and its tributaries. The survey limits are as follows:

North - Latitude 30°28.5'N
South - Latitude 30°22.2'N
East - Longitude 086°06.2'W
West - Longitude 086°09.8'W

This survey was conducted from February 17, 1993 (DN 048) to April 20, 1993 (DN 110).

C. SURVEY VESSELS ✓

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

D. AUTOMATED DATA ACQUISITION AND PROCESSING ✓

Version 4.03 of the PC-DAS suite of programs was used for on-line data acquisition on the survey launch. A list of all HP-DPS programs and versions used for data processing can be found in Appendix VI*. In addition to the HDAPS, the NOS program Velocity (Ver. 2.0) and WordPerfect (Ver. 5.1) were also used during this survey.

E. SONAR EQUIPMENT Side Scan Sonar was not used on this survey.
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 ~~10~~ meters.
0.4 8.2

G. CORRECTIONS TO ECHO SOUNDINGS ✓

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
01	1	048 02/17/93	30°26'00"N	086°12'00"W	4.0/	5.2-Not used
02	2	056 02/25/93	30°26'00"N	086°12'00"W	5.0/	5.2-Not used
03	3	068 03/09/93	30°26'00"N	086°13'30"W	4.5/	5.8-Off sheet limits
04	4	081 03/22/93	30°25'30"N	086°09'00"W	8.0/	10.4
05	5	090 03/31/93	30°25'30"N	086°09'00"W	8.0/	10.4
06	6	097 04/07/93	30°25'30"N	086°09'00"W	8.0/	10.4-not used
07	7	111 04/21/93	30°25'40"N	086°09'00"W	8.0/	9.1-not used

* Filed with the hydrographic records.

Only velocity tables 3, 4, and 5 showed a correction other than zero. Table 3 should be used for days 67, 68, and 69, table 4 for days 81, 82, and 85, and table 5 for days 88 and 90, in the final processing of this survey at the Pacific hydrographic Section.

Program Velocity was used for computing the speed of sound correctors. Copies of the tables and support documentation are in the Survey Separates, section IV.*

Lead line comparisons were taken daily to determine instrument error. No instrument error was observed during these comparisons. The lead line comparison log is in the Survey Separates. 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.*

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.*

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.

Approved water levels are requested from the Product and Services Branch, N/OES231, in a letter dated April 27, 1993. A copy is in Appendix V of this report.* Approved tide note is attached to this report.

H. CONTROL STATIONS ✓ See Evaluation Report, Section 2.

The horizontal control datum for this project is the North American Datum of 1983. Five horizontal control stations, Choctawhatchee Bay Light 47 (061), LaGrange Bayou Light 11 (060), LaGrange Bayou Light 22 (061), CENTEL GPS Base (064), and Baytowne Marina Cal Point (065) were used on this survey. These stations were established to 3rd-order standards with GPS by AHP personnel in July and October. The Horizontal Control Report and the

* Filed with the hydrographic records.

Horizontal Control Report Addendum for these positions were submitted to N/CG23322 in October and November 1992. These positions served as our GPS base station sites and also our launch performance checkpoint during work on this survey. Positions for these stations are shown in the Control Station list in ~~Appendix III~~ of this report.

I. HYDROGRAPHIC POSITION CONTROL ✓

Differential GPS (DGPS) was the method of positioning used for all hydrographic data acquired on this survey. Ashtech M-XII receivers (S/N 700283E1389 and 700157E1075) with antennas (S/N 700228C1572 and 700271A0064) were used for the reference station. An Ashtech Sensor (S/N 700417B1207) was used as the remote station on Launch 0519. Ashtech-supplied Maxon VHF radios provided the data-link between the base station receiver and the launch sensor. We set our primary GPS base station site at Centel GPS Base (064). Prior to using the Centel base station, we ran the Monitor test at this site to check its susceptibility to multi-path problems; this test indicated 98.5% availability at a 1:10,000 survey scale. Results of this test are included in the Survey Separates.*

Because of extensive and unresolved DGPS radio-link problems in the eastern portions of this survey, we had to set-up a short-term DGPS base station atop LaGrange Bayou Light 11, to complete the field work in this area. Since Light 11 is a remote site with no power available, we were unable to run the Monitor program for this station; however, because it is an elevated light in the middle of the Bay surrounded only by water, multi-path was not a major concern at this site. This was confirmed through phone conversations with both Operations Section (N/CG241) personnel and Ashtech, Inc. technical personnel. On-line data acquired from this site were consistently stable and all performance checks agreed well.

Daily DGPS performance checks, as required by the Field Procedures Manual, were accomplished by comparing the DGPS position of the vessel to our computed third-order positions of either the Baytowne Marina Cal Point, LaGrange Bayou Light 22, or Choctawhatchee Bay Light 47, all of which we established prior to survey start-up. To obtain a performance check, we would bring the launch alongside our checkpoint and note in the Daily Log the Easting, the Northing, the number of SVs, the HDOP, and the time of our observation. These values were then entered into a Lotus spreadsheet table which would compute our acceptable error margin (based on the HDOP) and also our observed difference between our known and observed position. The table of these comparisons is included in the Survey Separates.* All of our observed differences fell well within the allowable limit.

* Filed with the hydrographic records.

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. Sounding data that was run during periods of high HDOP was reviewed for accuracy and retained or rejected as necessary.

J. SHORELINE ✓ See Evaluation Report, Section 2.

Shoreline shown on the final field sheet was transferred by hand from TP-00339. This shoreline manuscript is compiled on NAD 1927 at a scale of 1:20,000. It was 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. Many of the tributaries flowing into the eastern end of Choctawhatchee Bay were not accessible because of shallow water. The unverified shoreline in these areas is shown in blue 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-00339. - CONCUR
* This covers the minor waterways in the vicinity of Nancyscut Island and was not shown on the smooth sheet.

Shoreline detail shown on TP-00339 was verified by visual inspection, and identified using reference numbers. Due to the minimal tide range of this area, times were not recorded for the reference numbers. The reference numbers are shown along with elevations on the boat sheet, but just the symbol and reference number is shown on the final field sheet.

The following changed or new features were identified during this survey. All positions and descriptions can be found in the D.P. Editor printout included with the survey data.

- ▶ Eight new piers were located, one in LaGrange Bayou, and seven in Mallet Bayou. Piers are shown in red on the smooth sheet.
- ▶ A Shoal awash, was located at the south side of the entrance to LaGrange Bayou at latitude 30°27'18"N, longitude 086°09'27"W. Shown as dashed black lines on the smooth sheet.
- ▶ The point on the north side of the entrance to LaGrange Bayou was found extending further east than shown on TP-00339, at latitude 30°27'20"N, longitude 086°09'29"W. Shown in red on the smooth sheet.
- ▶ Several minor areas of shoreline recession throughout LaGrange and Mallet Bayou's are shown in red on the final field sheet. Refer to the Evaluation Report Section 2.

- ▶ There was erosion evident along the north shore of the Intra-Coastal Waterway (I.C.W.) located in the southeastern corner of this survey area.
- ▶ An Indian shell mound archeological site was located by detached position on the southeastern shoreline of Bunker Cove. Not shown on smooth sheet.

Field notes are located on the Boat Sheet, the graphic records, and in the Daily Log Book.* Although photographs were taken on this survey, they were of poor quality, and of little value, and were not included as part of this survey.

K. CROSSLINES ✓

A total of 40 linear nautical miles of crosslines were acquired on H-10452 which equals 32% of the main scheme hydrography. Cross line soundings agree with the main scheme soundings within 0.2 meters.

L. JUNCTIONS ✓ See Evaluation Report, Section 5.

This survey junctions to the west with H-10453, a 1:10,000 scale survey from 1993.

Junction soundings between the present survey and H-10453 are in good agreement, with differences 0.2 meter or less. -concur

M. COMPARISON WITH PRIOR SURVEYS See Evaluation Report, Section 6

This survey was compared with prior surveys H-6449 and 6450, both 1:10,000 scale surveys from 1939. There were eight Awois items assigned to this survey. ^{Five} of the eight items, numbers 6897, 6898, ~~6900~~, ~~6901~~ and ~~6902~~, originated from the prior surveys H-6449. The item reports are in ~~Appendix~~ of this report. ** Originate From miscellaneous Sources.

Soundings from this survey were generally within 1 foot of the prior survey soundings, with the following exceptions:

- ▶ The Intra-coastal Waterway was found 4 to 6 feet deeper than on prior survey H-6450. Concur
- ▶ Most of the entrances of the tributaries flowing into the eastern end of Choctawhatchee Bay were found much shallower than on H-6450. Do not concur, Some of the tributaries were shallower, while others reflected good agreement. The shallower areas were not accessible by launch and contain no depth information.

* Filed with the hydrographic Records.

- ▶ A large irregular hole approximately 150m x 600m lying in a N/S orientation was located at latitude 30°25'36"N, longitude 086°09'08"W. Soundings in this area were as deep as 2⁷/₈ ft (8m) versus 6 feet seen on prior survey H-6450. This was probably the result of removing material for construction of the nearby U.S. 331 causeway. A note about dredging operations is on prior survey H-6450 in this area. - CONCUR
- ▶ The dredging pit seen on prior survey H-6449 west of U.S. 331 has filled to depths of 2-3 m (6-10 ft), where previously depths of 30-35 feet existed. Concur
- ▶ The channel leading through LaGrange Bayou to Four Mile Creek has shoaled, from prior survey soundings of 12-15 ft to presently surveyed soundings averaging 3.5²/₂m (11 ft). - CONCUR
10.5 Ft

Numerous notations appear on the prior surveys warning of piles, submerged logs, fallen trees, and foul areas, throughout the near-shore survey area. Most of these notations were found to be still applicable. A recommendation regarding these features is made in section R. of this report. See page 12, paragraph R.

It is suggested that the Boat Sheet be reviewed as well as the Final Field Sheet when making comparisons to both the priors and the chart.

N. COMPARISON WITH THE CHART ✓ See Evaluation Report, Section 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

In addition to the AWOIS items originating from the prior survey, items 6903, 6904, and 6905 were also addressed as part of this survey. The item reports are in ~~Appendix VI.~~ of this report.

Two dangers to navigation were identified on this survey. One revises the large foul area charted as numerous piles existing within the area, near latitude 30°24'18"N, longitude 086°08'²²/₂₂"W. The other addresses most of Jolly Bay as a foul area. Both are discussed on a copy of the Danger to Navigation letter included in ~~Appendix I.~~ of this report.

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

The following discrepancies were noted:

- ▶ The Access Channels charted in LaGrange Bayou, southeast of the main channel through LaGrange Bayou, are no longer maintained. The notation regarding these channels and the charted channel limits should be deleted from the chart. This information was supplied by Mr. Roger Bush, from the U.S. Army Corps of Engineers, Panama City, FL (phone 904-763-2881). - CONCUR
- ▶ The charted 16 foot sounding in Bunker Cove, at latitude $30^{\circ}23'17''N$, longitude $086^{\circ}06'19''W$, was found to be ~~1.2~~^{1.5} meters (3.9~~2~~⁵ ft). This was not considered a danger to navigation because of the isolated location of the charted 16 foot sounding inside the six foot depth curve. This sounding should be deleted from chart 11385. CONCUR, revise chart as shown on smooth sheet.
- ▶ The charted 17 foot sounding in Bunker Cove, at latitude $30^{\circ}23'24''N$, longitude $086^{\circ}06'16''W$, was found to be ~~1.7~~^{1.4} meters (5.5~~6~~⁵ ft). This was not considered a danger to navigation because of the isolated location of the charted 17 foot sounding inside the six foot depth curve. This sounding should be deleted from chart 11385. - CONCUR
- ▶ The charted 35 foot sounding west of U.S. 331 at latitude $30^{\circ}25'44''N$, longitude $086^{\circ}09'29''W$, was found to be 3.7 meters (12 ft). This was not considered a danger to navigation because of the location and surrounding shallower depths. - CONCUR
- ▶ The charted 5 foot at latitude $30^{\circ}25'36''N$, longitude $086^{\circ}09'08''W$, was found to be ~~8.2~~^{7.8} meters (26.8~~0~~^{25.6} ft). - CONCUR, see discussion on previous page.
- ▶ The ^{visible} pile charted at latitude $30^{\circ}23'56''N$, longitude $086^{\circ}07'28''W$, was visually observed but was not accessible because of shallow water. This ^{visible} pile should be retained as charted. - CONCUR, this pile originates from prior survey H-6450, and has been transferred to the smooth sheet.
- ▶ The ^{visible} pile charted at latitude $30^{\circ}24'11''N$, longitude $086^{\circ}07'31''W$, was neither observed nor accessible because of shallow water. A submerged pile should be charted at this location and the currently charted ^{visible} pile deleted. - CONCUR, this pile originates from prior survey H-6450 and has been transferred to the smooth sheet as submerged.
- ▶ The two ^{visible} piles charted at latitude $30^{\circ}25'15''N$, longitude $086^{\circ}08'22''W$, were not seen nor were they accessible because of shallow water. Submerged piles should be charted at this location and the currently charted ^{visible} piles deleted. - CONCUR

- ▶ The four^{visible} piles charted at latitude 30°25'29"N, longitude 086°08'06"W, were not observed during a visual search or while running hydrography. Because of the restricted nature of the area caused by shallow areas, a drag was not practical. These four^{visible} piles should be retained on the chart as submerged. - CONCUR ^{these} piles ^{originate} from prior survey H-6450 and have been transferred to the smooth sheet as submerged.
- ▶ The seven^{visible} piles charted at latitude 30°25'36"N, longitude 086°08'10"W, were not observed during a visual search or while running hydrography. Because of the restricted nature of the area caused by shallow areas, a drag was not practical. These seven^{visible} piles should be retained on the chart as submerged. - CONCUR
- ▶ The ~~five~~^{seven} charted^{visible} piles at 30°25'41"N latitude 086°08'06"W longitude, were not observed during a visual search or while running hydrography. Because of the restricted nature of the area caused by shallow and foul areas, a drag was not practical. These ~~five~~^{seven} ~~piles~~^{visible} should be retained on the chart as submerged. - CONCUR
- ▶ The twelve^{visible} piles charted at latitude 30°25'42"N, longitude 086°08'18"W, were included in a foul area delimited on this survey. - CONCUR
- ▶ As noted in the Danger to Navigation letter submitted as a result of this survey, Jolly Bay was found foul with submerged obstructions (piles and snags) throughout. A warning note stating "Jolly Bay is foul with numerous submerged obstructions" is recommended for charting in the area near Jolly Bay. NOTE ADDED TO SMOOTH SHEET.
- ▶ Nothing was found during a dive search conducted in the area where eight^{visible} piles are charted at latitude 30°27'21"N, longitude 086°09'36"W. The dive is described in the Daily Record Book, included with this survey. These ~~piles~~^{visible} should be removed from the chart. - CONCUR
- ▶ The foul area with numerous piles charted at latitude 30°27'30"N, longitude 086°09'30"W, was delimited by hydrography and detached positions on some of the more prominent piles in the area. This foul area is recommended for retention on the chart based on the limit line shown on the ~~Final~~^{Final} Field Sheet. Nothing was found during a dive search for the two most northeasterly piles in this area. The dive is described in the Daily Record Book, included with this survey. These piles should be removed from the chart. - CONCUR
- ▶ A dive search was conducted for the two^{visible} piles charted at latitude 30°27'17"N, longitude 086°09'27"W. One of the two was found submerged, the other was not found. The dive is described in the Daily Record Book. The hydrographer recommends deleting the charted ~~piles~~^{visible} and charting a submerged pile at latitude 30°27'17.6"N, longitude 086°09'27.2"W. - CONCUR

▶ Nothing was found during a dive search for the ^{visible} pile charted at latitude 30°27'48.2"N, longitude 086°08'47.2"W. The dive is described in the Daily Record Book. The hydrographer recommends deleting this pile from the chart. - CONCUR

▶ The three piles shown near the entrance to Ramsey ^{Branch} Bayou, were located by two detached positions. The westerly two piles are only two meters apart and should be charted by one pile symbol at latitude 30°28'13.8"N, longitude 086°08'06.0"W. The easterly pile was located by detached position at latitude 30°28'13.0"N, longitude 086°08'03.9"W. The currently charted pile should be revised to this position. *Delete the three charted piles and chart two piles at the locations as depicted on the smooth sheet.*

▶ The row of piles charted in Mallet Bayou at latitude 30°27'18"N, longitude 086°08'30"W, were included in a foul area delimited by hydrography. The hydrographer recommends charting a foul area at this location as shown on the Final Smooth Field Sheet. - CONCUR, *delete charted piles and chart the foul area as depicted on the smooth sheet.*

▶ The uncovering shoal charted at latitude 30°25'00"N, longitude 086°09'34"W, was developed with reduced lines spacing. A least depth of 2.0m (6.6 ft.) was found in this area. This uncovering shoal should be deleted from the chart, and representative soundings from this survey charted. - CONCUR

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 ✓ See Evaluation Report, Section 7d.

There are ¹⁷~~16~~ non-floating aids to navigation within the survey area. One, LaGrange Bayou Light 24, had been hit by a barge, and was listing about 30° when the survey position was obtained. Chief Lewis, of the U.S.C.G. Aids to navigation Team, in Pensacola, Florida was advised by telephone (904-455-2354) of the lights condition.

LaGrange Bayou Light 22, U.S.C.G. 1993 Light List Number 30005, was located to third-order, Class I standards using GPS, for use as a calibration check point. The position for this aid is included on the NOAA form 76-40 submitted as part of this survey. A copy is in ~~Appendix II~~ of this report. LaGrange Bayou Light 14, U.S.C.G. 1993 Light List Number 29975, which is currently charted as "PA", was located using DGPS. The position for this aid is also included on the NOAA form 76-40. *The PA notation should be deleted. - CONCUR* } *Included in this report.*

Only Choctawhatchee Bay Light 1, U.S.C.G. 1993 Light List Number 29725 and Choctawhatchee River Light 1, U.S.C.G. 1993 Light List Number 29765, showed positions for them in the Light List. Both surveyed positions agreed well with the Light List positions.

All fixed aids to navigation adequately serve their intended purpose. *Concur*

There are 16 floating aids to navigation in the survey area. The following table shows the comparison between surveyed and charted positions:

```

=====
NAVAID      LL No.      Dist/Dir fr. Charted
=====
RN 2        29730      On Station
GC 3        29735      70m/NW
RN 4        29740      On Station
GC 5        29745      150m/E
GC 7        29750      100m/E
RN 8        29755      40m/SE
GC 11       29770      65m/ENE
RN 12       29775      On Station
GC 13       29780      60m/NW
GC 15       29785      30m/NNW
RN 16       29790      50m/E
RN 18       29800      80m/NW
GC 19       29805      100m/NW
RN 20       29810      On Station
GC 21       29815      60m/WNW
RN 22       29820      50m/WNW
=====

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Note: All Navaid names are preceded by "Choctawhatchee Bay Buoy".

All of the floating aids to navigation listed in the above table, still adequately serve their intended purpose, marking the Intra-coastal Waterway. *Concur*

The currently charted vertical clearance of 8 feet shown for the U.S. 331 north bridge at latitude 30°25'29"N, longitude 086°09'25"W, was found to be 11.8 feet (3.6m). This is a new bridge and the clearance was measured by lead line on March 29, 1993 (DN 088) at 1558 UTC. The field corrected clearance using predicted tides and mean high water range from the 1993 Tide Tables is also 11.8 feet (3.6m). Despite several attempts, we were unable to contact Chief Lewis, from the U.S.C.G. in Pensacola, Florida (phone 904-455-2354), to verify this bridge clearance. The southern clearance of the U.S. Highway 331 bridge falls within the limits of junction survey H-10453.

No other bridges, nor overhead cables, pipelines, submerged pipelines or cables, and ferry crossings existed within the limits of this survey.

Q. STATISTICS ✓

<u>Description</u>	<u>Quantity</u>
Total Number of Positions	2756
Total Linear Nautical Miles of Hydrography	146
Total Linear Nautical Miles of Cross Lines	40
Square Nautical Miles of Hydrography	9
Days of Production	20
Detached Positions	98
Bottom Samples	27
Tide Stations	5
Velocity Casts	7

R. MISCELLANEOUS ✓

There was a two knot tidal current evident at the entrance to LaGrange Bayou and a tidal current of two to three knots noted at the boat lane under the U.S. 331 bridge at latitude 30°25'29"N, longitude 086°09'25"W.

There were 27 bottom samples acquired on this survey. Submission of the samples to the Smithsonian Institution was not required 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, in the Survey Separates. *

No predicted tide anomalies were observed during this survey.

Numerous notations appear on the prior surveys warning of piles, submerged logs, fallen trees, and foul areas, throughout the near-shore survey area. Most of these notations were found to be still applicable. The hydrographer recommends a magenta warning note be added to the chart stating "Mariners are warned to beware of numerous deadheads, snags, and submerged obstructions in the near-shore areas of LaGrange Bayou and Choctawhatchee Bay east of the U.S. 331 bridge". - concur, note added to smooth sheet.

S. RECOMMENDATIONS ✓

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

* Filed with the hydrographic records.

T. REFERRAL TO REPORTS

Title

Transmittal Information

Descriptive Report to
Accompany Survey H-10453,
1993

Pacific Hydrographic Section
N/CG245
Seattle, WA,

Horizontal Control Report
for OPR-J259-AHP2
1993

Field Photogrammetry Section
N/CG23322
Norfolk, VA

Chart Sales Agent Report
for OPR-J259-AHP2, 1993

Chart Distribution Branch
(N/CG33)
Rockville, MD

User Evaluation Report
OPR-J259-AHP2

Atlantic Hydrographic Section
(N/CG244)
Norfolk, VA

Chart Inspection Report
OPR-J259-AHP2

Atlantic Hydrographic Section
(N/CG244)
Norfolk, VA

Coast Pilot Report

Pacific Hydrographic Section
N/CG245
Seattle, WA

Submitted by: Atlantic Hydrographic Party

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
- HYDROGRAPHIC PARTY
 - GEODETIC PARTY
 - PHOTO FIELD PARTY
 - COMPILATION ACTIVITY
 - FINAL REVIEWER
 - QUALITY CONTROL & REVIEW GRP.
 - COAST PILOT BRANCH
- (See reverse for responsible personnel)

REPORTING UNIT
(Field Party, Ship or Office)

LOCALITY

DATE

AHP

FLORIDA

CHOCTAWHATCHEE BAY

4/93

The following objects HAVE HAVE NOT been inspected from seaward to determine their value as landmarks.

DATUM

NAO 1983

METHOD AND DATE OF LOCATION
(See instructions on reverse side)

CHARTS
AFFECTED

J259

JOB NUMBER

H-10452

POSITION

DESCRIPTION
(Record reason for deletion of landmark or aid to navigation.
Show triangulation station names, where applicable, in parentheses)

LATITUDE

LONGITUDE

D.M. Meters

D.P. Meters

OFFICE

FIELD

CHARTS AFFECTED

LIGHT

(LAGRANGE BAYOU LIGHT 22, 1992)
U.S.C.G. L.L. # 30005

30 28

86 08

26.360

OFFICE

FIELD

CHARTS AFFECTED

LIGHT

LAGRANGE BAYOU LIGHT 14
U.S.C.G. L.L. # 29975

30 27

86 09

25.788

OFFICE

FIELD

CHARTS AFFECTED

11385

11385

GPS
3rd Order

DGPS
HYDROGRAPHIC
FIX

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	ROBERT W. RAMSEY
POSITIONS DETERMINED AND/OR VERIFIED	BRIAN A. LINK
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64.)

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

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

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

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

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)

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.

EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED

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

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

**PHOTOGAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

CONTROL STATIONS as of 25 Apr 1993

No	Type	Latitude	Longitude	H	Cart	Freq	Vel	Code	MM/DD/YY	Station Name
001	F	030:23:40.692	086:23:19.545	2	250	0.0	0.0	C	00/00/88	ALBERT
002		030:31:09.003	086:29:32.298	2	250	0.0	0.0		00/00/88	ANDERSON
003	F	030:24:28.023	086:29:16.327	1	250	0.0	0.0		00/00/87	BACON
004		030:25:28.023	086:36:00.545	0	250	0.0	0.0		00/00/87	BARN
005		030:27:10.273	086:34:38.679	0	250	0.0	0.0		00/00/87	BEV
006		030:25:32.166	086:33:20.046	5	250	0.0	0.0		00/00/87	BLACK POINT LT 2
007		030:29:22.697	086:26:48.230	2	250	0.0	0.0		00/00/88	BLUE
008		030:29:57.235	086:26:34.601	0	250	0.0	0.0		00/00/88	BLUEWATER BAY RADIO TOWER
009		030:29:20.889	086:25:22.040	0	250	0.0	0.0		00/00/88	BLUEWATER BAY TANK
010		030:27:38.681	086:28:23.675	0	250	0.0	0.0		00/00/88	BOGGY BAYOU ENTRANCE LIGHT
011		030:28:45.011	086:28:28.689	0	250	0.0	0.0		00/00/88	BOGGY BAYOU LIGHT 3
012		030:30:16.389	086:29:04.860	0	250	0.0	0.0		00/00/88	BOGGY BAYOU LIGHT 9
013		030:29:42.528	086:28:45.043	2	250	0.0	0.0		00/00/88	BORTHWICK
014		030:30:17.668	086:27:17.274	2	250	0.0	0.0		00/00/88	BUSTLE
015		030:29:34.965	086:28:41.958	2	250	0.0	0.0		00/00/88	BYRNE
016		030:23:38.902	086:31:00.977	17	250	0.0	0.0		00/00/82	CENTER
017		030:23:38.944	086:31:01.000	19	250	0.0	0.0		00/00/88	CENTER ECC
018		030:22:51.141	086:30:37.534	10	250	0.0	0.0		00/00/88	CHOCTAWHATCHEE BAY ENT LIGHT 3
019		030:22:51.380	086:30:26.614	10	250	0.0	0.0		00/00/88	CHOCTAWHATCHEE BAY ENT LIGHT 4
020		030:24:16.467	086:31:10.874	5	250	0.0	0.0		00/00/87	CHOCTAWHATCHEE BAY ENT LT 15
021	F	030:25:42.645	086:18:47.114	3	250	0.0	0.0	2	00/00/88	CHOCTAWHATCHEE BAY LIGHT 49
022	F	030:25:26.589	086:26:08.924	0	250	0.0	0.0		00/00/88	CHOCTAWHATCHEE BAY LIGHT 51
023	F	030:25:35.370	086:29:21.062	5	250	0.0	0.0	A	00/00/88	CHOCTAWHATCHEE BAY LIGHT 53
024		030:27:28.889	086:36:04.960	0	250	0.0	0.0		00/00/87	CHULA
025		030:28:21.157	086:18:15.740	3	250	0.0	0.0		00/00/88	CLIFF
026	F	030:25:02.748	086:29:18.198	1	250	0.0	0.0	7	00/00/87	COBS
027		030:24:22.478	086:29:09.593	1	250	0.0	0.0		00/00/87	COLD
028		030:30:27.212	086:27:12.316	1	250	0.0	0.0		00/00/88	COON
029		030:25:43.141	086:36:44.967	0	250	0.0	0.0		00/00/87	CROCKET
030		030:30:15.971	086:27:21.697	2	250	0.0	0.0		00/00/88	CUDDY
031		030:28:51.912	086:29:11.347	2	250	0.0	0.0		00/00/88	DRONE
032		030:25:23.190	086:18:47.717	1	250	0.0	0.0		00/00/88	FOUR MILE POINT
033		030:28:23.592	086:18:20.521	0	250	0.0	0.0		00/00/88	HAMMOCK POINT RANGE MARKER
034		030:26:30.849	086:35:27.240	0	250	0.0	0.0		00/00/87	HAPPY
056	F	030:26:13.200	086:14:31.516	5	250	0.0	0.0	5	07/03/92	CHOCTAWHATCHEE BAY LIGHT 47,92
057	F	030:22:39.298	086:18:28.900	91	250	0.0	0.0	4	07/22/92	CENTEL(CENTEL MICROWAVE TRW)
058		030:22:36.086	086:10:48.267	75	239	0.0	0.0		03/01/91	BOWMAN(EGLIN AFB BOWMAN TWR)
059		030:25:53.599	086:12:32.159	3	239	0.0	0.0		10/10/92	LA GRANGE BAYOU LIGHT 1,1992
060		030:27:16.322	086:09:56.287	3	239	0.0	0.0		10/10/92	LA GRANGE BAYOU LIGHT 11,1992
061		030:28:11.639	086:08:26.360	3	239	0.0	0.0		10/10/92	LA GRANGE BAYOU LIGHT 22,1992
062		030:29:54.882	086:12:19.173	1	239	0.0	0.0		10/10/92	ALAQ
063		030:23:56.864	086:13:42.634	1	239	0.0	0.0		10/10/92	872-93768
064		030:22:38.852	086:18:29.347	0	250	0.0	0.0		10/28/92	CENTEL GPS BASE,1992
065		030:23:21.277	086:19:39.768	0	239	0.0	0.0		10/28/92	BAYTOWNE MARINA DEL POINT,1992



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Atlantic Hydrographic Party
439 West York Street
Norfolk, Virginia 23510-1114

5 April 1993

Director
DMAHTC
Attn: MCNM
6500 Brookes Lane
Washington, D.C. 20315-0030

Dear Sir:

While conducting hydrographic survey operations in Choctawhatchee Bay, Florida, the Atlantic Hydrographic Party discovered 2 dangers to navigation. They have been reported to the Eighth Coast Guard District. A copy of the correspondence describing the dangers is enclosed.

Sincerely,

Thomas R. Waddington
Lieutenant, NOAA
Chief, Atlantic Hydrographic Party





U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Atlantic Hydrographic Party
439 West York Street
Norfolk, Virginia 23510-1114

5 April 1993

Commander
Eighth Coast Guard District
Hale Boggs Federal Building
500 Camp Street
New Orleans, LA 70130-3396

**ADVANCE
INFORMATION**

Dear Sir:

Two dangers to navigation were found while conducting a basic hydrographic survey (Registry No. H-10452) in Choctawhatchee Bay, Florida. The following information is provided for publication in Local Notice to Mariners:

Chart affected: 11385 20th Ed Nov. 23/91 1:40,000 NAD83

- A. The area noted "Numerous piles exist within outlined area" near 30-24-18N, 086-08-00W was found to be incorrectly delineated. This area should appear as shown on the attached chartlet from 30-25-06N, 086-09-03W to 30-23-42N, 086-07-45W.
- B. Jolly Bay, east of 086-08-18W, is foul with numerous submerged obstructions.

A copy of the chart showing the areas in which the dangers exist is attached.

This is advance information subject to office review. Questions concerning this message should be directed to myself at (904) 267-1713 or to the Chief, Pacific Hydrographic Section at (206) 526-6835.

Sincerely,

Thomas R. Waddington
Lieutenant, NOAA
Chief, Atlantic Hydrographic Party

Enclosure

cc: DMAHTC
N/CG221
AMC



AWOIS NO:6897

Item Description: Submerged Dangerous Wreck

Source: H6449/39

AWOIS Position: Lat - 30/27/52.70N Lon - 086/09/14.78W

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

Affects Chart: 11385

INVESTIGATION

Date(s)/DN(s): 03/08/93 (DN:067)

Position Numbers: 659

Launch Number: 0519

Investigation Used: DI

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: Dive search found remains of old wooden barge that has been predominantly covered over. This wreck is deteriorating, and poses little danger to normal vessel traffic due to the surrounding water depth. This wreck lies in a N/S orientatation and is approximately 10m wide by 20m long.

CHARTING RECOMMENDATION

The hydrographer recommends the charted dangerous submerged wreck be revised to the recommended position listed below. *Concur, remove charted submerged wreck and chart submerged wreck at survey position as shown on smooth sheet*

Recommended Position: Lat - 30/27/53.3N Lon - 086/09/17.7W

Recommended Least Depth: Least Depth 0.3m at MLLW (^{Actual} ~~Predicted~~ Tides)

COMPILATION NOTES

Chart

Applied As

*charted as
dangerous ~~canoe~~ (i) Wk.*

AWOIS NO:6898

Item Description: Visible Wreck

Source: ~~H6449/39~~
UNKNOWN

AWOIS Position: Lat - 30/28/17.10N Lon - 086/08/13.78W

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

Affects Chart: 11385

INVESTIGATION

Date(s)/DN(s): 3/01/93 (DN:060)

Position Numbers: 491 (656)

Launch Number: 0519

Investigation Used: VS, DI(DN067)

Water Visibility: To Bottom >2m

Position Determined By: DGPS

Investigation Summary: The wreckage was located visually on DN 060 near the AWOIS position and positioned by fix 491. A dive investigation was then conducted on DN 067 to determine if any wreckage existed at the reported position. Divers found no evidence of wreckage at the reported position about a 100m radius. The baring wreck (.5m) positioned at fix 491 was found to be steel rib ruins and associated debris in a 20m radius from this position.

CHARTING RECOMMENDATION

The hydrographer recommends that a Visible Wreck be charted at the recommended position below and that the currently charted visible Wreck be removed. - *CANCEL*

Recommended Position: Lat - 30/28/22.8N Lon - 086/08/12.9W

Recommended Least Depth: bares 0.5m at ⁴ MLLW (Predicted Tides) ^{MHW Approved}

COMPILATION NOTES

Chart

Applied As

approved

AWOIS NO:6900

Item Description: Seven Visible Piles

Source: UNKNOWN

AWOIS Position: Lat - 30/25/45.71N Lon - 086/08/06.78W

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

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s): 3/26/93 (DN:085)

Position Numbers: 1496-1501

Launch Number: 0519

Investigation Used: VS, ES

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: Numerous visible piles were noted in the vicinity of this item. On DN 085, a foul limit line was run to delimit the extent of these piles. A Danger to Navigation letter was sent which included this item in establishing Jolly Bay as foul with numerous piles and submerged obstructions.

CHARTING RECOMMENDATION

The hydrographer recommends retaining the seven piles as an adequate representation of the foul nature of the item area. A "Foul Area" notation should also be charted in Jolly Bay. Do not *concur, delete piles* and chart foul with piles limit lines.

Recommended Position: Jolly Bay east of longitude 086°08'18W for the foul limit notation.

Recommended Least Depth: Awash MLLW (^{Approved}~~Predicted~~ Tides)

COMPILATION NOTES

Chart

Applied As

approved

AWOIS NO:6901

Item Description: 3 foot sounding

Source: UNKNOWN

AWOIS Position: Lat - 30/24/19.71N Lon - 086/07/29.78W

Required Investigation: ES, determine controlling depth

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s): 3/31/93 (DN:090)

Position Numbers: 1802-1810

Launch Number: 0519

Investigation Used: ES

Water Visibility: N/A

Position Determined By: DGPS

Investigation Summary: Several sounding lines were run in the natural channel leading into the Cypress River, currently charted as "3 FT". The least depth found in this natural channel was 1.3m (4.3 ft) at latitude 30°24'19"N, longitude 087°07'36"W. The row of piles charted on the north side of the entrance to Cypress River were not found. A visual search in the shallow water, several sounding line passes, and a range line run from latitude 30°24'18"N, longitude 086°07'42"W, to latitude 30°24'22"N, longitude 086°07'20"W, found no evidence of the row of piles. A drag in this area was not practical because of the shallow water and the area foul with piles on the south side of the river entrance.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted notation of 3 foot be removed and that the least depth sounding found be charted at the recommended position below. The northerly row of piles at the entrance to Cypress River should be deleted. - Do not concur, chart 4 foot (1.2m) at location as shown on Smooth Sheet, chart southern row of piles at the entrance to Cypress River as shown on Smooth Sheet. Retain charted piles to the north and revise to submerged.
Recommended Position: Lat - 30/24/19N Lon - 086/07/36W

Recommended Least Depth: 1.3²m at MLLW (^{ACTUAL}~~Predicted~~ Tides)

COMPILATION NOTES

Chart

Applied As

444

AWOIS NO:6902

Item Description: Three visible piles

Source: UNKNOWN

AWOIS Position: Lat - 30/23/39.71N Lon - 086/07/06.78W

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

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s): 4/12/93(DN 102)

Position Numbers: 2244

Launch Number: 0519

Investigation Used: VS

Water Visibility: btm

Position Determined By: DGPS

Investigation Summary: A visible pile was noted at the reported position and was located by fix ~~2244~~ 2244. A visual and echo sounder search was conducted in the vicinity for the additional reported piles. Nothing was found. A drag was not possible because of shallow water.

CHARTING RECOMMENDATION

The hydrographer recommends that the presently charted three Piles be removed from the chart, and that a single pile be charted at the survey position. - CONCUR

Recommended Position: Lat - 30/^{23 37.7}~~24~~/27.1N Lon - 086/07/^{06.8}~~29.6~~W

Recommended Least Depth: bares ^{1.8}~~0.8~~m at ^{MHW}~~MLLW~~ (ACTUAL Predicted Tides)

COMPILATION NOTES

Chart

Applied As

*deleted 2 piles retain one as
chart on H sheet*

AWOIS NO:6903

Item Description: Visible Wreck PA

Source: LNM11/82(3/17/82)--8TH CGD

AWOIS Position: Lat - 30/22/42.00N Lon - 086/06/46.78W

Required Investigation: VS, SD -- 100m radius

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s): 4/19/93 (DN 109)

Position Numbers: 2675

Launch Number: 0519

Investigation Used: VS, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: No visual evidence of this reported grounded barge was seen in the item area. Several sounding lines were run in this area as well, also with negative results. Nothing was found during a diver search which covered a 100 meter radius from the item position.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted ^{Visible} Wreck PA be removed from the chart. - *Concur*

Recommended Position: Lat - Lon -

Recommended Least Depth:

COMPILATION NOTES

Chart

Applied As

Prev. Removed From Chart

AWOIS NO:6904

Item Description: Visible Marker

Source: UNKNOWN

AWOIS Position: Lat - 30/23/43.71N Lon - 086/08/20.78W

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

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s): 4/19/93 (DN 109)

Position Numbers: 2654

Launch Number: 0519

Investigation Used: VS

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A three pile marker in this vicinity was found visually and positioned (Fix 2654) along the southern portion of the large area which was foul with piles. These piles were established in the 1940s by the Air Force and were used for bombing training. This foul area was originally reported by the USPS and is depicted incorrectly on Chart 11385; this area has been correctly redefined by this survey and is described in the Danger to Navigation letter found in the Appendices. According to the local U.S.C.G. Aids to Navigation Team (904-455-2354) this marker has always marked the southeastern portion of this foul area; a similar structure also marks the northeastern corner of this foul area. According to the Coast Guard, no other markers have existed in this area. Although no chart history is available for this marker, we suspect that it was charted based upon the incorrectly scaled limits for foul area.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted marker be removed, and that a marker be charted at the survey position.

Do not concur, retain marker at charted position and change to submerged pile.

Recommended Position: Lat - 30/23/^{45.0}~~31.8~~N Lon - 086/^{08 22.0}~~07/49.2~~W

Recommended Least Depth:

COMPILATION NOTES

Rev. to subm. Pile

AWOIS NO:6905

Item Description: Visible pile

Source: UNKNOWN

AWOIS Position: Lat - 30/23/10.71N Lon - 086/08/03.78W

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

Charts Affected: 11385

INVESTIGATION

Date(s)/DN(s): 4/19/93 (DN 109)

Position Numbers: 2674

Launch Number: 0519

Investigation Used: VS, DI

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: The pile was searched for visually and not found. Several sounding lines run along this area of the ICW channel also showed no evidence of a pile. A diver search was conducted as well that covered a 100 meter radius from the charted position. Nothing was found.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pile be removed from the chart. - Concur

Recommended Position: Lat -

Lon-

Recommended Least Depth:

COMPILATION NOTES

deleted pile

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY

OPR-J259/93

AHP-10-1-93

H-10452

1993

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
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: July 13, 1993

MARINE CENTER: Pacific

OPR: J259

HYDROGRAPHIC SHEET: H-10452

LOCALITY: Choctawhatchee Bay, Florida, Tucker Bayou to Lagrange Bayou

TIME PERIOD: February 17 - April 20, 1993

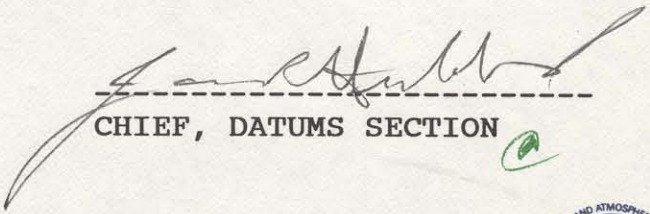
TIDE STATION USED: 872-9376 Santa Rosa, Hogtown Bayou, Fl.
Lat. $30^{\circ} 23.9'N$ Lon. $86^{\circ} 13.7'W$
PLANE OF REFERENCE (MEAN LOWER LOW WATER): = 1.09 feet
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: = 0.6 foot

TIDE STATION USED: 872-9333 Lagrange Bayou, Fl.
Lat. $30^{\circ} 28.1'N$ Lon. $86^{\circ} 08.3'W$
PLANE OF REFERENCE (MEAN LOWER LOW WATER): = 1.58 feet
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: = 0.6 foot

REMARKS: RECOMMENDED ZONING

1. In Lagrange Bayou, use times and heights direct on Lagrange Bayou (872-9333). When data is not available for Lagrange Bayou, apply a -24 minute time correction and a X1.16 range ratio on Hogtown Bayou (872-9376).
2. Outside of Lagrange Bayou, heights are direct, and apply a +24 minute time correction to Hogtown Bayou (872-9376).

NOTE: Hourly heights are tabulated on Central Standard Time.



CHIEF, DATUMS SECTION



GEOGRAPHIC NAMES

Name on Survey	A ON CHART NO. 11385 SC										
	B ON PREVIOUS SURVEY NO.	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			
BEAR CREEK	X										1
BELLS LEG	X										2
BLACK CREEK	X										3
BUNKER COVE	X										4
CHOCTAWHATCHEE BAY	X										5
CHOCTAWHATCHEE RIVER	X										6
CYPRESS RIVER	X										7
DUCK LAKE	X										8
FLORIDA (title)	X										9
FOURMILE CREEK	X										10
FLUFFY LANDING	X										11
GARDNER CANAL	X										12
INDIAN ISLAND	X										13
INDIAN RIVER	X										14
INTRACOASTAL WATERWAY	X										15
JOLLY BAY	X										16
LA GRANGE BAYOU	X										17
LITTLES BAYOU	X										18
MALLET BAYOU	X										19
MCQUAGE BAYOU	X										20
MITCHELL RIVER	X										21
NANCYS CUTOFF	X										22
NANCYS CUT ISLAND	X										23
PEACH CREEK	X										24
POINT WASHINGTON	X										25

GEOGRAPHIC NAMES

H-10452

Name on Survey	ON CHART NO. 11385 SC										
	ON PREVIOUS SURVEY NO.										
	ON U.S. QUADRANGLE MAPS			FROM LOCAL INFORMATION			ON LOCAL MAPS			P.O. GUIDE OR MAP	
	GRAND McNALLY ATLAS					U.S. LIGHT LIST					
	A	B	C	D	E	F	G	H	K		

RAMSEY BRANCH											1
RUSHING CUTOFF	X										2
SOUTH MOUTH	X										3
TUCKER BAYOU	X										4
WHEELER POINT	X										5
WILLIAMS LAKE	X										6
											7
											8
											9
											10
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Approved:

Charles E. Harrington
Chief Geographer - NCG2x5

OCT - 6 1993

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		2
DESCRIPTION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/SOURCE DOCUMENTS
ACCORDION FILES					
ENVELOPES					
VOLUMES	1				
CAHIERS	1				
BOXES					

SHORELINE DATA	
SHORELINE MAPS (List):	TP-00339
PHOTOBATHYMETRIC MAPS (List):	
NOTES TO THE HYDROGRAPHER (List):	
SPECIAL REPORTS (List):	
NAUTICAL CHARTS (List):	11385SC

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			2681
POSITIONS REVISED			
SOUNDINGS REVISED			
CONTROL STATIONS REVISED			
	TIME-HOURS		
	VERIFICATION	EVALUATION	TOTALS
PRE-PROCESSING EXAMINATION			
VERIFICATION OF CONTROL			
VERIFICATION OF POSITIONS	26		26
VERIFICATION OF SOUNDINGS	81		81
VERIFICATION OF JUNCTIONS			
APPLICATION OF PHOTOBATHYMETRY			
SHORELINE APPLICATION/VERIFICATION			
COMPILATION OF SMOOTH SHEET	50		50
COMPARISON WITH PRIOR SURVEYS AND CHARTS		3	3
EVALUATION OF SIDE SCAN SONAR RECORDS			
EVALUATION OF WIRE DRAGS AND SWEEPS			
EVALUATION REPORT		42	42
GEOGRAPHIC NAMES			
OTHER*			
*USE OTHER SIDE OF FORM FOR REMARKS	TOTALS	157	45
			202

Pre-processing Examination by	Beginning Date	Ending Date
Verification of Field Data by R.N. Mihailov	Time (Hours) 107.0	Ending Date 11/3/93
Verification Check by J. Green	Time (Hours) 2.0	Ending Date 11/2/93
Evaluation and Analysis by R.N. Mihailov	Time (Hours) 45.0	Ending Date 11/30/93
Inspection by B.A. Olmstead	Time (Hours) 54.0	Ending Date 2/15/94

EVALUATION REPORT

H-10452

1. INTRODUCTION

Survey H-10452 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

This survey was conducted in Florida, on the eastern portion of Choctawhatchee Bay, including La Grange Bayou and its tributaries. This survey also covers a portion of the Intracoastal Waterway. The survey area is bounded by latitude 30/22/12N to the south, latitude 30/28/35N to the north, longitude 86/06/10W to the east and longitude 86/09/50W to the west. The shoreline consists of sand, marsh and private piers. Additionally, numerous deadheads, snags and submerged obstructions are known to exist in the near-shore areas of La Grange Bayou and Choctawhatchee Bay east of the U.S. 331 bridge. The bottom is generally made up of mud mixed with sand. Depths range from 0.3 meters along the shoreline to 9.8 meters in Mitchell River.

Predicted tides for Pensacola, Florida, gage 872-9840, were used for the reduction of soundings during field processing. Approved hourly heights zoned from Santa Rosa (Hogtown Bayou), Florida, gage 872-9376 and LaGrange Bayou, Florida, gage 872-9333 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. NAD83 is used as the horizontal datum for plotting and position computation. The offset values and sound velocity correctors are adequate. 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. A horizontal dilution of precision (HDOP) not to exceed 3.75 was computed for survey operations. The quality of several positions exceeds limits in terms of horizontal dilution of precision (HDOP). 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.

Positions of horizontal control stations used during this survey 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 an NAD 27 adjustment tick 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: 0.73 seconds (21.94 meters)
 Longitude: -0.213 seconds (-5.689 meters)

The year of establishment of control stations shown on the smooth sheet originates with the previously referenced horizontal control report and the hydrographer's signal list.

The following shoreline map, updated by 1991 NANCEI source data, was compiled on NAD 27 and applies to this survey.

	<u>Photo Date</u>	<u>Class</u>	<u>Scale</u>
TP-00339	Jan 1977 Jan/Feb.1978	III	1:20,000

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	30/27/19.8	86/08/16.24
Pier	30/27/26.3	86/08/16.27
Pier	30/27/28.2	86/08/14.83
Pier	30/27/28.9	86/08/02.20
Pier	30/27/29.1	86/08/06.16
Pier	30/27/29.9	86/09/14.63
Pier	30/27/29.4	86/08/04.04
Pier	30/27/29.8	86/08/05.43

The following features were transferred from the field sheet to the smooth sheet in dashed red without supporting positional information. These features are adequate to supersede the common photogrammetrically delineated shoreline.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
HWL	30/22/30.0	86/06/15.00
HWL	30/22/45.0	86/06/46.00
HWL	30/25/35.0	86/07/00.00
HWL	30/27/16.0	86/08/27.00
HWL	30/27/21.0	86/09/05.00
HWL	30/27/21.0	86/08/54.00
HWL	30/27/22.0	86/09/30.00
HWL	30/27/30.0	86/08/05.00
HWL	30/27/35.0	86/09/08.00
HWL	30/27/44.0	86/08/58.00
HWL	30/27/50.0	86/08/37.00
HWL	30/28/02.0	86/08/13.00
HWL	30/28/14.0	86/08/10.00

3. HYDROGRAPHY

Except as note 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 on the smooth sheet. However, the hydrographer was unable to develop the near shore areas, several minor waterways and define the zero depth curve. The range of tide within the area was too small and the inshore portions of this survey 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 1992 and 1993 Editions.

5. JUNCTIONS

Survey H-10452 junctions with the following survey.

<u>Survey</u>	<u>Year</u>	<u>Scale</u>	<u>Area</u>
H-10453	1993	1:10,000	West

The junction with survey H-10453 is complete.

6. COMPARISON WITH PRIOR SURVEYS

H-6449 (1939), 1:10,000

H-6450 (1939), 1:10,000

Prior surveys H-6449 and H-6450 cover the entire survey area of the present survey. Generally, soundings agree within 0.5 meters between the prior survey and the present survey, the prior survey being shoaler. Shoreline changes are primarily due to man made activity. Minor accretion and erosion of the mean high water line are evident throughout the Choctawhatchee Bay area. Changes are primarily due to wind and water driven processes associated with the frequent storm activity in the last fifty four years.

Survey H-10452 is adequate to supersede the prior surveys within the common area with the following exceptions.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
pile	30/23/56	86/07/29
subm pile	30/24/12	86/07/31
subm piles	30/25/30	86/08/07
subm piles	30/28/15	86/08/06

7. COMPARISON WITH CHART

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

a. Hydrography

The charted hydrography on the 20th edition of chart 11385 originates with prior surveys H-6449, H-6450 and miscellaneous sources.

Three charted features were not found or investigated adequately for disapproval. These features, listed below, should be retained at the presently charted positions and depicted as shown below.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
pier	30/23/42	86/06/59
ruins	30/23/42	86/07/02
subm pile (AWOIS 6904)	30/23/45	86/08/22

Except as noted, survey H-10452 is adequate to supersede charted hydrography within the common area.

b. AWOIS

There are eight (8) AWOIS items investigated during this survey. AWOIS item 6897 originates with prior survey H-6449. The remaining AWOIS items originate with miscellaneous sources. Discussion and disposition of each of these items are included in the hydrographer's report.

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, except for a 5 foot (1.6 meter) depth located at latitude 30/22/40.93N, longitude 86/06/40.63W. This depth is on the southern boundary of the ICW leading into Tucker Bayou but does not extend into the channel. It is recommended this area be periodically monitored for future shoaling.

The note 3FT, charted in the vicinity of latitude 30/24/23N, longitude 86/07/32W should be revised. Chart according to this survey with a note "4FT" (1.2m). This is AWOIS item 6901.

d. Aids to Navigation

There are sixteen floating aids to navigation located within the survey area. These aids were adequately located and serve their intended purpose. However, present positional data for several buoys differs from the charted and are listed as follows:

<u>Light List Name</u>	<u>LL#</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
Choctawhatchee Bay Buoy 3	29735	30/22/55.98	86/07/22.87
Choctawhatchee Bay Buoy 5	29745	30/22/59.69	86/07/32.94
Choctawhatchee Bay Buoy 7	29750	30/23/04.87	86/07/46.91
Choctawhatchee Bay Buoy 8	29755	30/23/11.71	86/07/59.84
Choctawhatchee Bay Buoy 11	29770	30/23/14.53	86/08/12.85

Choctawhatchee Bay Buoy 13	29780	30/23/19.60	86/08/27.66
Choctawhatchee Bay Buoy 15	29785	30/23/24.04	86/08/40.45
Choctawhatchee Bay Buoy 16	29790	30/23/32.01	86/08/51.30
Choctawhatchee Bay Buoy 18	2800	30/23/39.41	86/09/10.12
Choctawhatchee Bay Buoy 19	29805	30/23/36.75	86/09/12.19
Choctawhatchee Bay Buoy 21	29815	30/23/42.59	86/09/26.62
Choctawhatchee Bay Buoy 22	29820	30/23/52.38	86/09/39.80

There are seventeen fixed aids to navigation located during this survey. All fixed aids to navigation were located by the hydrographer and agree with the charted positions, except for the following:

<u>Light List Name</u>	<u>LL#</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
LaGrange Bayou Light 14	29975	30/27/19.10	86/09/25.79
LaGrange Bayou Light 22	30005	30/27/19.10	86/09/26.36
Choctawhatchee Bay Light 9	29760	30/23/09.50	86/08/00.25
Choctawhatchee Bay Light 23	29825	30/23/49.44	86/09/43.49

Except where noted above, and in section P of the hydrographer's report, all aids were found to be in good condition and adequately serve their intended purpose.

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

The hydrographer reported two foul areas as dangers to navigation to the USGS and DMAHTC. Copies of these reports are attached to this report. No additional dangers were found during office processing.

8. COMPLIANCE WITH INSTRUCTIONS

Survey H-10452 adequately complies with the Project Instructions.

9. ADDITIONAL FIELD WORK

This is a good hydrographic survey. Additional field work on a low priority basis is recommended to investigate those features not found or disproven during this survey as noted in sections 6 and 7 of this report.

R.N. Mihailov

R.N. Mihailov
Cartographer

APPROVAL SHEET
H-10452

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.

Bruce A. Olmstead
for Dennis J. Hill Date: 2/15/94
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.

Douglas G. Hennick
Douglas G. Hennick Date: 2/16/94
Commander Douglas G. Hennick, NOAA
Chief, Pacific Hydrographic Section

Final Approval

Approved:

J. Austin Yeager
J. Austin Yeager Date: 3/15/94
Rear Admiral, NOAA
Director, Coast and Geodetic Survey

