

H10460

NOAA FORM 76-36A

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

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. AHP2-10-6-93
Registry No. H-10460

LOCALITY

State Florida
General Locality Pensacola Bay
Sublocality East Bay River to East Bay

19 93

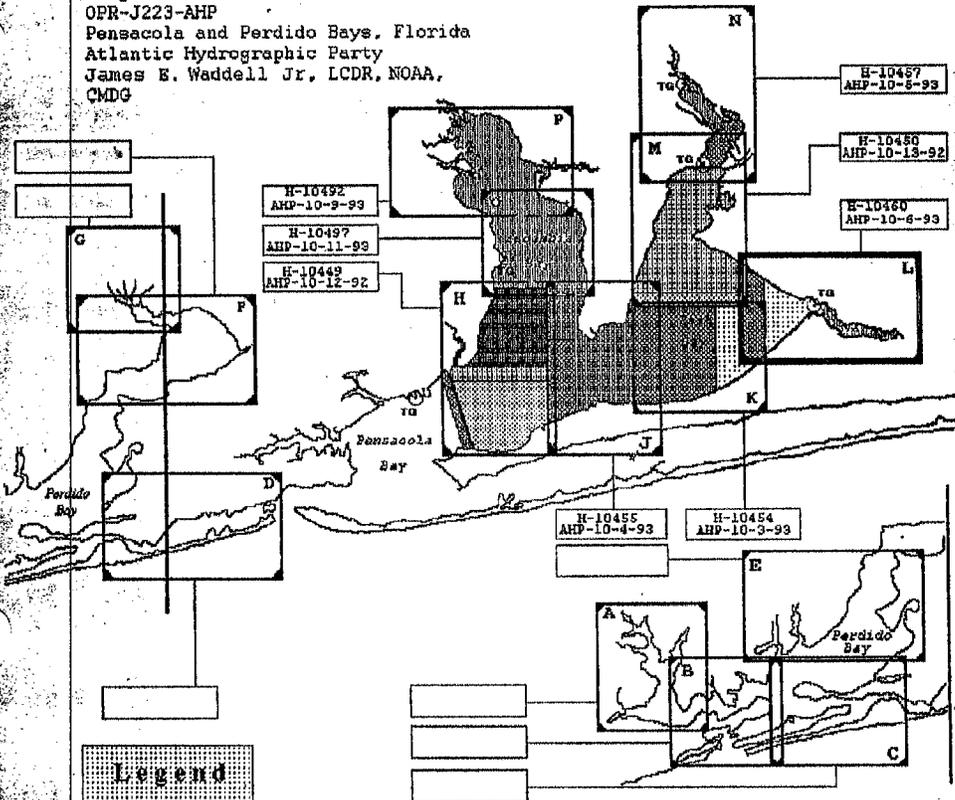
CHIEF OF PARTY
LCDR James E. Waddell, Jr., NOAA

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DATE APR 13 1995

NOAA FORM 77-28 (11-72)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION REGISTER NO. H-10460
HYDROGRAPHIC TITLE SHEET	
INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.	FIELD NO. AHP2-10-6-93
State <u>Florida</u> General locality <u>Pensacola Bay</u> Locality <u>East Bay River to East Bay</u> Scale <u>1:10,000</u> Date of survey <u>March 23, 1993-August 2, 1993</u> Instructions dated <u>September 25, 1992</u> Project No. <u>OPR-J223/AHP</u> Vessel <u>NOAA Launch 0770, 0517</u> Chief of party <u>LCDR JAMES E. WADDELL, JR, NOAA</u> Surveyed by <u>Atlantic Hydrographic Party</u> Soundings taken by <u>echo sounder, hand lead, pole Innerspace Model 448</u> Graphic record scaled by <u>GDH, RRR, VPL, JLB, CBM, RR</u> Graphic record checked by <u>GDH, RRR, VPL, JLB, CBM, RR</u> Evaluation by: <u>R. Davies</u> Automated plot by <u>PHS Xynetics Plotter</u> Processed by Verification by <u>R. Davies</u> Soundings in fathoms feet at <u>MLW</u> MLLW	
REMARKS: <u>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.</u> <u>All depths listed in this report are referenced to mean lower low water unless otherwise noted.</u> <div style="text-align: right;"> <u>Surv/ AWOIS check</u> <u>6/21/95 MCB</u> </div>	

Progress Sketch
 OPR-J223-AHP
 Pensacola and Perdido Bays, Florida
 Atlantic Hydrographic Party
 James E. Waddell Jr., LCDR, NOAA,
 CMDG



MONTH	SQUARE NM SOUNDINGS	LINEAL NM SOUNDINGS	LINEAL NM ITEM DRAGS	LINEAL NM T/F&MISC	Bottom Smples	Control station	Tide station	SYMBOLS
NOV								
DEC	4	164.9	---	80/14	---	1	4	
JAN	10	210.9	---	80/27	---	---	---	
FEB	4	218.4	---	156/64	60	---	---	
MAR	9	357.4	---	272/67	---	---	---	
APR	4	238.8	---	320/100	25	---	---	
MAY	2	32.9	---	180/60	56	2	---	
JUN	1	17.7	4.4	150/60	6	---	---	
JUL	15.9	294.0	---	210/105	8	---	---	
AUG	26.4	474.9	---	330/132	67	---	---	
SEP	8.1	149.0	3.9	274/128	48	---	---	
OCT	0.1	2.0	---	64/20	23	---	---	

CPS
 11385
 11332

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10460
FIELD NO. AHP-10-6-93
SCALE: 1:10,000
1993

ATLANTIC HYDROGRAPHIC PARTY
CHIEF OF PARTY: LCDR James E. Waddell, Jr.

A. PROJECT ✓

This survey was conducted according to Hydrographic Project Instructions OPR-J223-AHP, Pensacola and Perdido Bays, Florida and Alabama, dated September 25, 1992. These were amended by Change No. 1, dated January 4, 1993 and Change No. 2, dated October 13, 1993. *Change No. 2 was issued after completion of this survey.*

The purpose of this project is to provide contemporary hydrography for the maintenance of existing charts. Prior surveys in this area were conducted in 1935. This survey is designated as sheet "L."

B. AREA SURVEYED ✓ *See Evaluation Report, Section I*

The survey area includes the eastern third of East Bay and the East Bay River to 086°52'00"W. The survey limits are as follows:

North - 30°29'10"N *Latitude*
South - 30°25'30"N *Latitude*
East - 086°51'59"W *Longitude*
West - 086°59'45"W *Longitude*

This survey was conducted from March 23, 1993 (DN 82) to August 2, 1993 (DN 214).

C. SURVEY VESSELS ✓

Vessel 0770 (EDP No. 0770) and vessel 0517 (EDP No. 0517), both 21-foot MonArks, were used to collect all survey data. There were no unusual vessel configurations. A problem was encountered with vessel 0770 receiving the differential reference station in the eastern most areas of this survey. Vessel 0517 was used to complete this portion of the survey. *In this area, East Bay River and Tom King Bayou hydrography was collected by "SFS" methods.*

D. AUTOMATED DATA ACQUISITION AND PROCESSING ✓

All hydrographic data for this survey were processed with the Hydrographic Data Acquisition and Processing System (HDAPS). Version 4.03 of the PC-DAS suite of programs was used for on-line data acquisition. Listings of program version numbers are appended. The following non-HDAPS computer programs were used:

VELOCITY (IBM PC)	Ver. 2.00 (3/9/90)
NADCON (IBM PC)	Ver. 1.01
WORDPERFECT (IBM PC)	Ver. 6.0

E. SONAR EQUIPMENT ✓

Not Applicable.

F. SOUNDING EQUIPMENT ✓

Echo soundings were taken with Innerspace model 448 depth sounders, serial number 241 on launch 0770 and serial number 187 on launch 0517. Launch 0770 was used on days 082-118, 137-141, and 203-214. Launch 0517 was used on days 126-131 and 158-193. Neither depth sounder would digitize depths less than 0.4 meter. (*Innerspace Model 448 - single beam fathometer*)

A standard lead line calibrated in meters, was used during this survey for comparison readings with the echo sounder. A 5-meter wooden sounding pole, constructed according to HSG. No. 69, was used to take any pole soundings.

Depths on this survey ranged from ^{0.2}zero to 4.7 meters.

G. CORRECTIONS TO SOUNDINGS ✓

Soundings were recorded in meters. The Innerspace 448 depth sounder is calibrated for an assumed speed of sound through water of 1500 meters/second. Corrections for the speed of sound through water were computed from data taken with an Odom Hydrographic Systems Digibar electronic speed of sound probes, serial numbers 154 and 155. Data quality assurance tests were performed before each cast. Program VELOCITY, version 2.00 was used to compute speed of sound corrections. Copies of the tables and velocity cast data are in the "Survey Separates." *

* Filed with the hydrographic data.

The following velocity casts were taken on this survey:

Cast No.	Deepest Depth (m)*	Applicable DN	Cast* Position	Day	
1	8.0/10.4	082-084	30°23'00"N 087°11'00"W	063	<i>This table was used for this survey.</i>
2	3.0/3.9	085-116	30°27'00"N 087°00'00"W	105	<i>(not used)</i>
3	3.3/4.3	117-150	30°28'00"N 087°00'00"W	127	<i>(not used)</i>
4	3.0/2.6	151-196	30°27'00"N 087°00'00"W	174	<i>(not used)</i>
5	7.0/9.1	197-214	30°34'00"N 087°00'00"W	217	<i>(not used)</i>

** Velocity casts 1-5 plot outside the survey limits.*

A zero sound velocity corrector for all depths on this survey was determined from the above casts. Because no HDAPS velocity tables are necessary for field processing of data on the HDAPS system, none were generated in the field for this survey. PHS has requested in a recent Preprocessing Examination report that these zero-corrector tables be generated by AHP. PHS agreed by telephone on June 14, 1994, to generate this survey's tables. This was determined to be more efficient because the data is no longer on the field processing computer. *Table #1 was used throughout the survey. All five cast were identical, corrector of zero for depths found on this survey.* Weather permitting, lead line comparisons were conducted each day of hydrography to determine an instrument corrector. No instrument error was detected from these comparisons. The lead line comparison form is included in the "Survey Separates." ~~**~~

A static draft of 0.3 meter was applied to the on-line data. The drafts for launches 0770 and 0517 were measured by subtracting the difference from a punch mark on the side of each launch, 0.6 meter above the transducer, to the water surface.

Settlement and squat measurements were performed on March 16, 1993 (DN 075), in the Blackwater River using launch 0770. Measurements for launch 0517 were made on May 15, 1992 (DN 136), at Shalimar, Florida. The level method was used for both vessels. Settlement and squat correctors and the static draft corrector were applied on-line through the offset tables. Copies of the field data, the graphs of the settlement and squat correctors vs. RPM, and the offset tables are included in the "Survey Separates." ~~**~~

The Pensacola, Florida tide station (872-9840) served as control for datum determination. This station is also the reference station for the predicted tides which were applied to the final field sheet. This survey required a +1 hr 00 min. time corrector and a x1.26 range ratio for East Bay

~~**~~ Filed with the hydrographic data

and a +0 hr 45 min. time corrector and a x1.26 range ratio for the East Bay River, to be applied to the predicted tides. Approved tides were requested from the Sea and Lake Levels Branch, N/OES231, in a letter dated January 31, 1994. A copy of the letter is appended to this report. * Tide Note dated March 9, 1994 is attached.

H. CONTROL STATIONS ✓ See Evaluation Report, section 2

The horizontal control datum for this project is the North American Datum of 1983. One station, TRIS 1992, was used to control this survey. A copy of the Control Station List is appended to this report.

The Atlantic Hydrographic Party used the Global Positioning System (GPS) to establish horizontal control for this project. The horizontal control report titled "GPS Traverse, Pensacola and Escambia Bays, Florida" was written and submitted by AHP in October 1992 for OPR-J223 to N/CG23322.

I. HYDROGRAPHIC POSITION CONTROL ✓

Differential GPS was used as 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. The reference station receiver failed on DN 197. It was replaced the same day with Ashtech model XII receiver serial number 700354A2601. An Ashtech sensor, serial number 700417A1126 was used as the remote station on vessel 0770 until it failed on DN 118. It was replaced on DN 137 with Ashtech sensor serial number 700417B1039. An Ashtech sensor serial number 700417A1065 was used as the remote station on vessel 0517. Maxon VHF radios, using frequency 170.200 MHz, were used as the datalink between reference and remote stations. This equipment met the accuracy requirements for a 1:10,000 scale hydrographic survey.

Program MONITOR was run for 24 hours on November 12, 1992 to test the reference site for multi-path. The GPS availability at this site was determined to be better than 99% from this test. A copy of the "Plot of Radial Error in Position" and the "Outlier.sum File" are included in the "Survey Separates." *

Performance checks, as required by section 3.4.4 of the Field Procedures Manual, were conducted daily by resting the launches alongside Blackwater Channel Light 30 or calibration station PITT 1992. The raw record and the abstract of these checks are included in the "Survey Separates." * AHP located these stations with GPS to third-order, class I standards. The data was included in the Horizontal Control Report.

As directed by DGPS operating specifications in the Field Procedures Manual, section 3.4.2., hydrographic operations ceased 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

* Filed with the hydrographic data.

geometry causing high HDOP values were minimal on this survey. Operations were suspended during these periods, until the HDOP returned to an allowable value. *Data was analyzed during Office processing and found to be consistent with surrounding information.*

An occasional problem was encountered when a good position plotted questionably on the raw track plot. This problem is attributable to the survey computer's inability to immediately compute an accurate position after an extended period of questionable DGPS data. These positions were edited or rejected as warranted. *Data was analyzed during office processing and found to be consistent with surrounding information.*

J. SHORELINE See *Final Report, section 2*

Shoreline shown on the final field sheet was transferred by hand from Cartographic Revision Survey (CRS) 148731 and survey BP-149096. These documents consolidate recent photogrammetric data with TP-00549 and TP-00541. These manuscripts were compiled using NAD 1927 at 1:20,000 scale and enlarged to 1:10,000.

Shoreline verification was conducted using mainscheme hydrography that junctioned at shore and by visual inspection. Verified shoreline is shown in black ink on the final field sheet. Existing shoreline features which agreed with the shoreline manuscripts were given reference numbers and are shown in black ink on the final field sheet. Shoreline features not shown on the manuscript, were located by detached positions and are shown in red on the final field sheet *and the smooth sheet.*

There were several notes on the revision survey stating "can not locate piers." These areas were investigated and the results are shown below.

The pier that could not be located at $30^{\circ}26'17''N$, $086^{\circ}57'28''W$, is now a pier in ruins. Detached position number 1008 was taken on day 118. *Ruins bare 1.1 meters at MHW.*

The pier that could not be located at $30^{\circ}26'15''N$, $086^{\circ}57'32''W$, is now a pier in ruins. Detached position number 1009 was taken on day 118. *Ruins bare 1.1 meters at MHW.*

The pier that could not be located at $30^{\circ}26'44''N$, $086^{\circ}56'54''W$, no longer exists. A visual search was performed between the two existing piers from shore to 150 meters offshore, for the pier, pier ruins or submerged ruins. The water in the search area was very shallow and clear and nothing was found. *(Pos# 1296)*

The pier that could not be located at $30^{\circ}26'45''N$, $086^{\circ}53'57''W$, is now a pier in ruins. Detached position number 2255 was taken on day 160. *Ruins uncover 0.9 meters at MHW.*

The pier that could not be located at $30^{\circ}26'45''N$, $086^{\circ}54'29''W$, is now a pier in ruins. Detached position number 2257 was taken on day 160. *Ruins uncover 0.9 meters at MHW.*

The pier that could not be located at $30^{\circ}25'51''N$, $086^{\circ}57'57''W$, is shown on the revision survey as ruins. This feature is a small wooden groin rather than a pier or ruins. Detached position number 2703 was taken on day 211. *Groin uncovers 0.3 meters at MHW.*

Features not shown on the revision survey are listed below.

<u>DN</u>	<u>POSITION NO.</u>	<u>SURVEYED POSITION</u>	<u>DESCRIPTION</u>
118	1005	30°26'54.381"N ✓ 086°56'35.864"W	pier (Red)
118	1007	30°26'24.210"N ✓ 086°57'23.592"W	ruins (1') at MHW
160	2256	30°26'45.605"N ✓ 086°54'04.828"W	ruins (0')
181	2387	30°26'35.667"N ✓ 086°52'47.343"W	pier (Red)
181	2389	30°26'32.776"N ✓ 086°52'51.763"W	pier (Red)

Recommendation: The hydrographer recommends that details seaward of the HWL from this survey be used to supersede ~~CRS-148731~~ ^{BP} and BP-149096 in their common areas. *concur*

* Field notes are located on the graphic records. No sounding volumes or notebooks were used. A complete list of all detached positions by day, generated through the HDAPS Detached Position Editor, is included in the fan folder. This list notes the feature or item number, position, and elevation.

K. CROSSLINES ✓

A total of 11.8 linear nautical miles of crosslines were run. This equals 8.8% of the main scheme hydrography. Cross line soundings agree with the main scheme soundings within 0.3 meters.

L. JUNCTIONS ✓ See Evaluation Report, Section 5

This survey junctions with H-10454 to the southwest, and H-10450 to the northwest; both are 1:10,000 scale surveys from 1993.

All junction soundings agree to within 0.4 meter or less. *with the application of smooth tables soundings agree to within 0.2 meters or less.*

A 200-meter sounding overlap between vessels 0517 and 0770 was obtained near 30°27'21"N, 086°55'54"W. The difference in the sounding comparison between vessels was 0.3 meter or less.

* Filed with the hydrographic data

M. COMPARISON WITH PRIOR SURVEYS See Eureka Report, section G

This survey was compared with prior survey H-5834a, a 1:20,000 scale survey from 1935.

The AWOIS item investigated on this survey did not originate from the prior survey.

Prior survey agreement with this survey is good. The current soundings agree within 2 ft. (0.6 meter) of prior survey soundings.

There are only minor shoreline changes noted from the prior survey. These changes are in the eastern end of East Bay on the north shore. The most significant change is the addition of private piers, most of which are shown on the T-map.

All non-sounding features seen on the prior survey are addressed in section O.

N. ITEM INVESTIGATION REPORTS

<u>AWOIS NO.</u>	<u>SECTION</u>	<u>STATUS</u>	<u>RECOMMENDATION</u>
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8339	N1	Disproved	Delete Stakes rep notation from chart Chart see next page
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N1. **AWOIS NO: 8339**

Item Description: Numerous stakes exist within the general area indicated on chart 11385SC.

Source: CL1976/76--USPS,5/31/76

AWOIS Position: 030/28/30.00N 086/59/00.00W ✓

Required Investigation: VS, ES, ##

INVESTIGATION

Date(s)/DN(s): July-22,23,26,28,29-1993 / 203,204,207,209,210

Position Numbers: 1348-1995, 2600-2697

Launch Number: 0770

Investigation Used: VS, ES

Dive Report No:

Position Determined By: DGPS

Investigation Summary: No indications of stakes were identified during main scheme hydrography or by visual inspection of the area. A development was conducted over an area 900 meters by 2000 meters at 10 meter line spacing on the days listed above. The hydrographer was granted permission from N/CG241, to perform the hydrographic development in lieu of a bottom drag for disproval, as a time saving measure. Nothing was found. A plot of the development is appended.

CHARTING RECOMMENDATION

The Hydrographer recommends the reported stakes be removed from the chart. *Do Not Cancel ←*
 See Fumc Report, section 7. *Chart as submerged stakes subm ED*

O. COMPARISON WITH THE CHART *Also see Fumc Report, section 7*

Comparison was made with the following charts of the area:

<u>Chart No.</u>	<u>Edition</u>	<u>Edition Date</u>
11385	20th	Nov 23/91

There were seventeen dangers to navigation located within the survey area. A danger to navigation letter was forwarded to the U. S. Coast Guard. A list of the dangers and their positions, along with a chart section and a copy of the survey showing the dangers, was forwarded with the letter. A copy of the letter is appended. *One additional danger was found in office processing, see attach report.*

Differences between the charted and surveyed soundings ranged from 0.3 feet (0.1 meter) to 2.3 feet (0.7 meter), with the surveyed soundings being deeper.

An uncharted shoal at 30°27'23"N, 086°59'04"W, was discovered while running main scheme hydrography. The area was developed with 25-meter line spacing on day 137 (pos. 1091-1102). The shoalest depth found was 7.2 feet (2.2 meters)*. A bottom sample taken on the shoal, on day 211 (pos. 2700), consisted of broken shell. * *Pos # 2700, lat 30/27/23.48N, long. 86/59/04.03W.*

A 6-foot charted sounding at 30°26'01"N, 086°58'58"W, was developed with 25-meter line spacing on day 137 (pos. 1103-1130). The shoalest sounding depth was ~~6.6~~ 6.6 feet (2.0² meters)*. A bottom sample taken on the shoal, on day 211 (pos. 2701), consisted of broken shell. * *Pos # 2701, lat. 30/26/01.62N, long. 86/58/58.95W.*

A charted 5-foot sounding at 30°26'25"N, 086°58'08"W, was developed with 25-meter line spacing on day 137 (pos. 1131-1156), using launch 0770, and day 190 (pos. 2540-2560), using launch 0517. The shoalest depth found was 5.9 feet (1.8 meters)*. A bottom sample taken on the shoal on day 190 (pos. 2561), consisted of broken shell. * *Pos # 1149/01, lat. 30/26/25.65N, long. 86/58/08.64W.*

An uncharted shoal at 30°27'32"N, 086°57'45"W, was discovered while running main scheme hydrography. The area was developed with 25-meter line spacing on day 137 (pos. 1157, 1158), and day 138 (pos. 1159-1168). The shoalest depth found was 6.9 feet (2.1 meters). A bottom sample taken on the shoal on day 190 (pos. 2562), consisted of broken shell. *Pos # 1161/02, lat. 30/27/32.64N, long. 86/57/45.88W.

An uncharted shoal at 30°27'17"N, 086°57'45"W, was discovered while running main scheme hydrography. The area was developed with 25-meter line spacing on day 138 (pos. 1169-1180). The shoalest depth found was 7.3 feet (2.3 meters). A bottom sample taken on the shoal on day 190 (pos. 2563), consisted of broken shell. *Pos # 1173/02, lat. 30/27/18.07N, long. 86/57/44.47W.

Uncharted 6-foot and 5.5-foot soundings in the vicinity of 30°27'00"N, 086°57'39"W, were developed with 25-meter line spacing on day 138 (pos. 1181-1226). The shoalest depth found was 6.6 feet (2.0 meters). A bottom sample taken in the area, on day 190 (pos. 2564), consisted of broken shell. *Pos # 1203/02, lat. 30/26/56.74N, long. 86/57/38.40W.

A charted 6-foot sounding at 30°27'27"N, 086°57'30", was developed with 25-meter line spacing on day 140 (pos. 1227-1240). The shoalest depth found was 7.3 feet (2.3 meters), Pos # 1233/02, lat. 30/27/26.85N, long. 86/57/31.06W.

An uncharted shoal at 30°27'10"N, 086°56'57"W, was discovered while running main scheme hydrography. The area was developed with 25-meter line spacing on day 140 (pos. 1241-1254). The shoalest depth found was 7.2 feet (2.2 meters), Pos # 1253/02, lat. 30/27/11.05N, long. 86/56/53.72W.

A charted 6-foot sounding at 30°27'27"N, 086°56'27"W, was developed with 25-meter line spacing on day 140 (pos. 1255-1283), using launch 0770, day 141 (pos. 1294-1326), using launch 0770, and day 190 (pos. 2497-2530), using launch 0517. The shoalest depth found was 5.9 feet (1.8 meters). Two bottom samples taken in the area on day 211 (pos. 2698 and 2699) consisted of broken shell. *Pos # 2527/05, lat. 30/27/29.57N, long. 86/56/27.39W. and pos # 2497/02, lat. 30/27/28.62N, long. 86/56/16.21W.

An uncharted shoal at 30°27'23"N, 086°59'12"W, was discovered while running main scheme hydrography. The area was developed with 25-meter line spacing on day 141 (pos. 1286-1293). The shoalest sounding found was 9.5 feet (2.9 meters), Pos # 1097/01, lat. 30/27/23.59N, long. 86/59/64.84W.

An uncharted shoal at 30°27'28"N, 086°56'00"W, was discovered during main scheme hydrography. The area was developed with 25-meter line spacing on day 141 (pos. 1327-1340). The shoalest sounding found was 6.6 feet (2.0 meters), Pos # 2233/06, lat. 30/27/26.50N, long. 86/55/58.15W.

A charted 6-foot sounding at 30°28'08"N, 086°58'36"W, was developed with 25-meter line spacing on day 137 (pos. 1056-1090). The shoalest sounding found was 6.6 feet (2.0 meters), Pos # 1074/03, lat. 30/28/07.75N, long. 86/58/32.83W.

Recommendation: Depths found on this survey should supersede charted depths.

COMW

The following is a list of uncharted features located within the survey area: ✓

<u>DN/POS.</u>	<u>SURVEYED POSITION</u>	<u>DESCRIPTION</u>
118/1010	30°26'18.50"N 086°58'14.90"W	pile (2 ⁶) at MHW
118/1011	30°26'21.89"N 086°58'10.41"W	pile (3 ¹) at MHW
118/1012	30°26'25.93"N 086°58'03.76"W	pile (2 ⁶) at MHW
118/1013	30°26'28.36"N 086°58'09.82"W	pile (2 ⁶) at MHW
118/1014	30°26'27.82"N 086°58'12.86"W	pile (2 ⁶) at MHW
118/1015	30°26'15.42"N 086°58'10.46"W	pile (3 ¹) at MHW
118/1016	30°27'23.30"N 086°56'57.50"W	pile (2 ¹) at MHW
118/1017	30°27'29.16"N 086°57'03.76"W	pile (1 ⁶) at MHW
118/1018	30°27'30.63"N 086°56'56.66"W	pile (2 ⁶) at MHW
118/1019	30°27'26.81"N 086°56'54.15"W	pile (2 ¹) at MHW
118/1020	30°27'21.93"N 086°56'01.98"W	ovhd pwr cable support (towers)
118/1021	30°27'27.62"N 086°55'59.85"W	ovhd pwr cable support (tower)
137/1086	30°27'44.32"N 086°57'53.54"W	pile (2) at MHW
137/1087	30°27'47.22"N 086°57'52.03"W	pile (5) at MHW

137/1088	30°27'46.86"N 086°57'40.00"W	pile (1 ⁵) at MHW
137/1089	30°27'41.95"N 086°57'31.87"W	pile (2) at MHW
137/1090	30°27'44.90"N 086°57'29.34"W	pile (2) at MHW
160/2254	30°26'43.30"N 086°53'52.53"W	pile (1 ⁵) at MHW
160/2258	30°26'21.31"N 086°54'23.76"W	pipes (0 ⁹)
160/2260	30°26'24.58"N 086°54'28.70"W	obstr cov 0' (concrete)
180/2339	30°27'33.64"N 086°55'45.37"W	wreck (0 ²)
181/2388	30°26'33.55"N 086°52'49.39"W	stump (0 ⁴)
181/2390	30°26'31.67"N 086°52'52.75"W	pile (0 ⁹)
193/2582	30°26'48.46"N 086°54'48.11"W	pile (0 ⁷)
214/2704	30°27'14.44"N 086°56'38.96"W	submerged obstr cov 0 ⁷ (pipe)

Recommendation: All of the features listed above should be charted.

Concur

The charted piles at 30°26'24"N, 086°54'24"W, were not visible during main scheme hydrography. A chain drag was attempted for the submerged piles on day 174 (pos. 2276-2279). A hang occurred at position 2277 on the western edge of the charted piles, as well as on position 2279 at the eastern edge of the drag area. Position 2277 was retained as a detached position on a submerged pile. This position was not included in the detached position editor because it was extracted from a chain drag line. The remaining data from the drag was rejected.

Recommendation: Because the area was too foul to continue dragging, the hydrographer recommends revising the charted piles to submerged piles at the charted locations. A submerged pile should also be charted at 30°26'24.0"N, 086°54'26.4"W (position 2277). (cov 0⁸)

Concur

*Chart subm piles as shown on the smooth sheet.
Because of congestion, the sand limit line was not recommended for charting.*

The charted piles at 30°26'25"N, 086°54'30"W no longer exist. There were no piles visible in the area during main scheme hydrography. A chain drag was conducted over an area 150 meters by 170 meters on day 174 (pos. 2280-2324) and nothing was found. An obstruction was found visually on the western edge of the search area before the chain drag was conducted. Detached position number 2260 was taken on this object on day 160.

Recommendation: The charted piles should be deleted and an obstruction should be charted at 30°26'24.6"N, 086°54'28.7"W. *obstr (concrete) cov 0'* *CONCL*

The charted pile located at 30°26'45"N, 086°54'15"W no longer exists. There was no pile visible in the area during main scheme hydrography. A chain drag was conducted over an area 50 meters by 100 meters on day 181 (pos. 2391-2404) and nothing was found.

Recommendation: Delete the charted pile. *CONCL*

The charted piles at 30°26'39"N, 086°54'45"W no longer exist. There were no piles visible in the area during main scheme hydrography. A chain drag was conducted over an area 130 meters by 150 meters on day 181 (pos. 2405-2429), and day 182 (pos. 2432-2449). A hang occurred at the offshore edge of the search area and detached position number 2450 was taken.

Recommendation: The piles should be charted as submerged at the currently charted location. *Chart a 1.1 meter obstruction at 30°26'38.47"N, 086°54'45.13"W, Remne charted piles. Do not CONCL*

The charted piles at 30°26'27"N, 086°53'03"W no longer exist. There were no piles visible in the area during main scheme hydrography. A chain drag was conducted over an area 100 meters by 400 meters on day 182 (pos. 2451-2493) and nothing was found. A visual search was conducted for possible submerged piles located inshore of the chain drag area limit. There was good visibility of the bottom from near shore out to a depth of one meter, and nothing was found.

Recommendation: Delete the charted piles. *CONCL*

The charted submerged pile at 30°27'32"N, 086°55'58"W, no longer exists. A visual search was conducted over an area 100 meters by 150 meters with good visibility of the bottom from shore out to a depth of 1.2 meters. Nothing was found. Detached position number 2496 was taken on day 190, to verify the search location.

Recommendation: Delete the charted submerged pile. *CONCL*

P. ADEQUACY OF SURVEY ✓

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

Q. AIDS TO NAVIGATION

There are no aids to navigation, bridges, submerged pipelines or submerged cable areas within the limits of this survey. *current*

There are five overhead power cables located in the survey area. Four are shown on the revision survey and the chart. They are shown in black ink on the final field sheet. An overhead power cable not on the revision survey or the chart was located at 30°27'27"N, 086°56'00"W. Detached position numbers 1020 and 1021 were taken on the cable support towers on day 118. This cable runs parallel to and has the same clearance as the currently charted power cable in this area. The new cable is shown in red ink and the support towers are shown in black ink on the final field smooth sheet.

R. STATISTICS ✓

<u>Description</u>	<u>0770</u>	<u>0517</u>	<u>Total</u>
Total Number of Positions	2093	587	2680
Total Lineal Nautical Miles of Hydrography	109.3	24.4	133.7
Total Square Nautical Miles of Hydrography			7.4
Days of Production			31
Detached Positions	31	10	41
Bottom Samples			36
Tide Stations			2
Velocity Casts			5

S. MISCELLANEOUS ✓

No significant current conditions were observed while conducting this survey.

Thirty-six bottom samples were taken and submitted to the Smithsonian Institution as directed in section 6.7 of the project instructions. Bottom sample positions and descriptions are plotted on the overlay and are listed on the Oceanographic Log Sheet-M, NOAA Form 75-44, in the "Survey Separates." ✕

There were no predicted tide anomalies observed during this survey.

All chain drag data was track plotted on the Overlay. All chain-drag data has been checked and edited for bad positional data and labeled "NOT FOR SMOOTH PLOT."

Positions numbers and soundings in East Bay River and Tom King Bayou are "see field sheet" and are shown in violet ink on the final field sheet and black on the smooth sheet. DATA has been digitized and incorporated into the digital data file.

* Filed with the hydrographic data

There were twenty-four omitted positions and no duplicated position in this survey.

The terms bares, uncovers, covers, and least depth were used on this survey. This survey was processed before the format was changed to above or below.

T. RECOMMENDATIONS ✓

Specific recommendations concerning this survey are made in sections J, N, O and P of this report. No inadequacies, additional work, nor further investigations were identified after field work was completed. *COMMIT*

U. REFERRAL TO REPORTS ✓

<u>Title</u>	<u>Transmittal Information</u>
Descriptive Report to Accompany Survey H-10450	Pacific Hydrographic Section N/CG245 Seattle, WA (1993)
Descriptive Report to Accompany Survey H-10454	Pacific Hydrographic Section N/CG245 Seattle, WA (1993)
Horizontal Control Report for OPR-J259-AHP	Field Photogrammetry Section N/CG23322 Norfolk, VA (1992)
User Evaluation Report OPR-J259-AHP	Atlantic Hydrographic Section N/CG244 Norfolk, VA (1994)
Coast Pilot Report OPR-J259-AHP	Atlantic Hydrographic Section N/CG244 Norfolk, VA (1994)

Submitted by: Glenn D. Hendrix, Launch Hydrographer-in-Charge

CONTROL STATIONS as of 27 Jan 1992

No	Type	Latitude	Longitude	H Cont	Freq	Del Code	MM/DD/YY	Station Name
001		030:19:41.774	087:10:22.533	0	250	0.0	10/00/92	TRIS 1992
002		030:24:27.633	087:12:27.549	0	139	0.0	10/00/92	PITT Cal Point 1992
003		030:34:03.622	036:59:47.491	0	139	0.0	12/15/92	Blackwater Channel Light 30
004		030:17:15.417	087:29:09.073	50	0	0.0	11/29/92	EGEN 1992
005		030:10:35.005	087:26:19.266	2	0	0.0	11/29/92	CAL 1 1992
006		030:14:22.477	087:26:10.177	2	0	0.0	11/29/92	CAL 2 1992



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Coast and Geodetic Survey
Norfolk, Virginia 23510-1114

Atlantic Hydrographic Party
439 West York St.
Norfolk, VA 23510-1114

07 March 1994

Commander, (OAN)
Eighth U. S. Coast Guard District
Hale Boggs Federal Building
501 Magazine St.
New Orleans, LA 70130-3396

**ADVANCE
INFORMATION**

Dear Sir,

While conducting a basic hydrographic survey (Registry No. H-10460) of Pensacola, Florida, East Bay, East Bay River to East Bay, several uncharted features were identified as dangers to navigation. These features are listed on an attachment to this letter and are recommended for inclusion in the Local Notice to Mariners.

Positions are in NAD83 datum and the elevations and depth have been reduced to Mean Lower Low Water (MLLW) using predicted tides. The features were located using Differential GPS. This information affects chart 11385, 20th Edition/November 23/91, NAD 1983 datum. A chart section showing the locations of these dangers is attached.

Questions concerning this report should be directed to me at (904) 458-0067 or Mr. Dennis Hill at the Pacific Hydrographic Section, Seattle, WA at (206) 526-6853.

Sincerely,

JCDR James E. Waddell, Jr., NOAA
Chief, Atlantic Hydrographic Party
Atlantic Hydrographic Party

Attachment

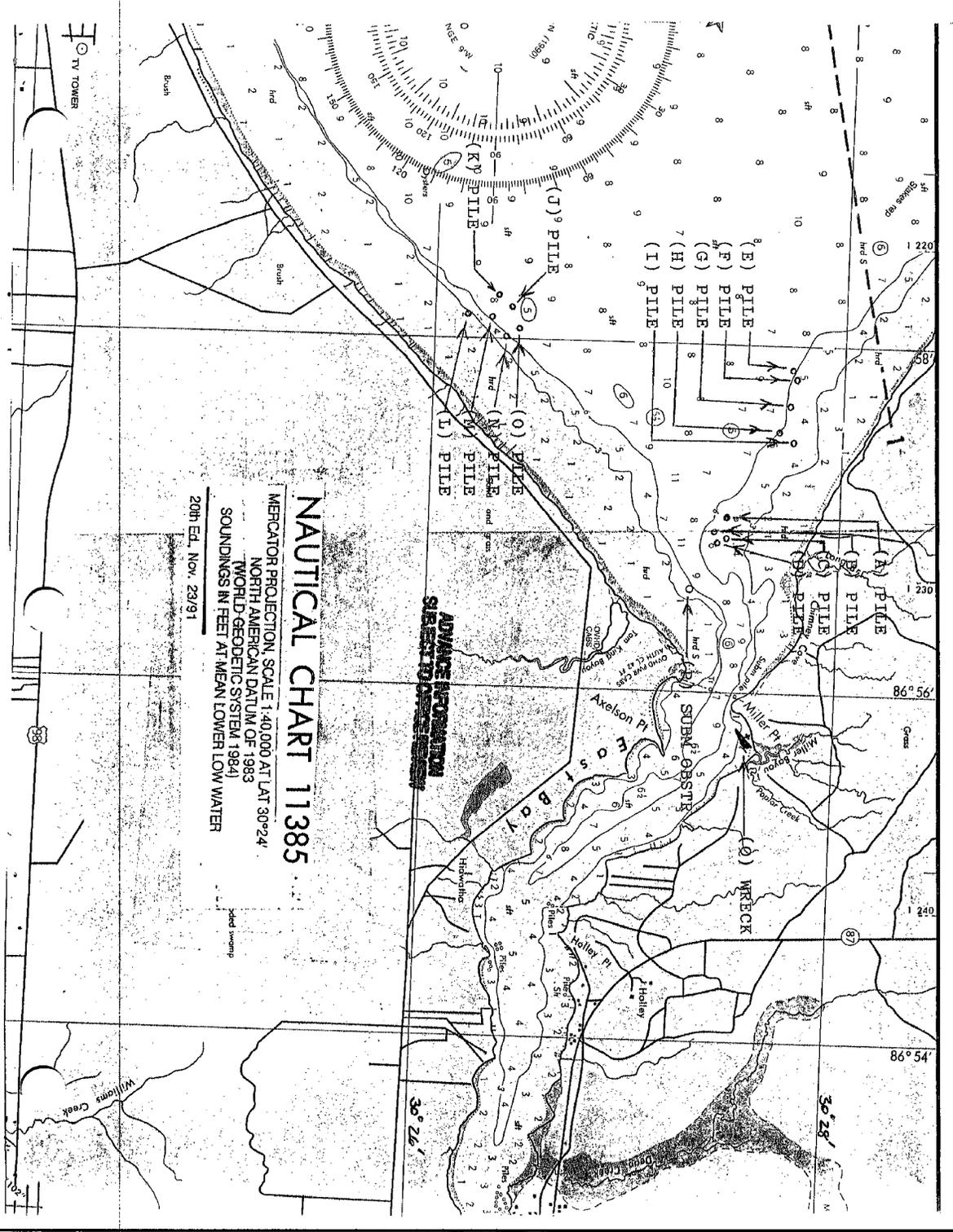
cc: N/CG221
N/CG245
DMAHTC



**ADVANCE
INFORMATION**

Danger to Navigation Affecting Chart 11385

Feature	Latitude (N)	Longitude (W)	Elevation
(A) pile	30°27'29.16"	086°57'03.76"	bares 5.9 ft 1.8 m
(B) pile	30°27'23.30"	086°56'57.50"	bares 7.5 ft 2.3 m
(C) pile	30°27'30.63"	086°56'56.66"	bares 9.2 ft 2.8 m
(D) pile	30°27'26.81"	086°56'54.15"	bares 7.5 ft 2.3 m
(E) pile	30°27'44.32"	086°57'53.55"	bares 7.5 ft 2.3 m
(F) pile	30°27'47.22"	086°57'52.03"	bares 5.9 ft 1.8 m
(G) pile	30°27'46.86"	086°57'41.00"	bares 5.9 ft 1.8 m
(H) pile	30°27'41.95"	086°57'31.87"	bares 7.5 ft 2.3 m
(I) pile	30°27'44.90"	086°57'29.34"	bares 7.5 ft 2.3 m
(J) pile	30°26'27.82"	086°58'12.86"	bares 9.7 ft 3.0 m
(K) pile	30°26'18.50"	086°58'14.90"	bares 9.2 ft 2.8 m
(L) pile	30°26'15.42"	086°58'10.45"	bares 10.8 ft 3.3 m
(M) pile	30°26'21.89"	086°58'10.41"	bares 10.8 ft 3.3 m
(N) pile	30°26'25.93"	086°58'03.76"	bares 9.7 ft 3.0 m
(O) pile	30°26'28.36"	086°58'09.82"	bares 9.7 ft 3.0 m
(P) subm obstr	30°27'14.44"	086°56'38.97"	subm 3.9 ft 1.2 m
(Q) wreck	30°27'33.64"	086°55'45.37"	awash

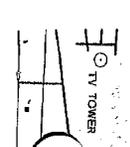


NAUTICAL CHART 1385

MERCATOR PROJECTION, SCALE 1:40,000 AT LAT 30°24'
 NORTH AMERICAN DATUM OF 1983
 (WORLD GEODETIC SYSTEM, 1984)
 SOUNDINGS IN FEET AT MEAN LOWER LOW WATER

20th Ed. Nov. 23/91

ADVANCE INFORMATION
 SUBJECT TO CHANGE





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Coast and Geodetic Survey
Seattle, Washington 98115-0070

July 5, 1994

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

**ADVANCE
INFORMATION**

Dear Sir:

During the office processing of hydrographic survey H-10460 in Pensacola Bay, a danger to navigation has been discovered. This danger affects the following chart:

<u>Chart</u>	<u>Edition/Date</u>	<u>Datum</u>
11385	21st Ed., 9/25/93	NAD83

It is recommended that this danger to navigation be included in the Local Notice to Mariners.

Questions concerning this report should be directed to the Pacific Hydrographic Section at (206) 526-6853.

Sincerely,

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

Enclosure

cc: DMA/HTC
AHP
N/CG221



Hydrographic Survey Registry Number: H-10460

**ADVANCE
INFORMATION**

Survey Title: State: Florida
Locality: Pensacola Bay
Sublocality: East Bay River to East Bay

Project Number: OPR-J223-AHP

Survey Date: March - August, 1993

Features are reduced to Mean Lower Low Water using predicted tides.

Affected Nautical Chart:

<u>Chart</u>	<u>Edition/Date</u>	<u>Datum</u>
11385	21st Ed., 9/25/93	NAD83

<u>Danger to Navigation</u>	<u>Latitude (N)</u>	<u>Longitude (W)</u>
Submerged Pile, 3.3 ft (1.0m)	30/26/38.479	086/54/45.125

Questions concerning this report should be directed to the Pacific Hydrographic Section at (206) 526-6853.

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY
OPR-J223-AHP
AHP-10-06-93
H-10460
1993

This basic hydrographic survey was conducted in accordance with the project instructions for OPR-J223-AHP, the Hydrographic Manual, the Hydrographic Survey Guidelines, and the Field Procedures Manual. The survey data and reports were completed under frequent supervision. All reports were reviewed in their entirety and all supporting records checked by Mr. Brian Link, Assistant Chief of Party. The final field sheet and descriptive report were reviewed and approved by LCDR James E. Waddell, Jr., Chief of Party.

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


James E. Waddell, Jr.
Lieutenant Commander, NOAA
Chief, Atlantic Hydrographic Party



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

ORIGINAL

DATE: March 9, 1994

MARINE CENTER: Pacific

HYDROGRAPHIC PROJECT: OPR-J223-AHP2

HYDROGRAPHIC SHEET: H-10460

LOCALITY: Florida, Pensacola Bay, East Bay River to East Bay

TIME PERIOD: March 23 - August 2, 1993

TIDE STATION USED: 872-9702 Holley, East Bay, Fl.
Lat. $30^{\circ} 27.0'N$ Lon. $86^{\circ} 55.1'W$

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 1.78 ft.
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.5 ft.

TIDE STATION USED: 872-9840 Pensacola, Fl.
Lat. $30^{\circ} 24.2'N$ Lon. $87^{\circ} 12.8'W$

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 8.28 ft.
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.2 ft.

REMARKS: RECOMMENDED ZONING

1. East of $86^{\circ} 56.0'W$ times and heights are direct on Holley, East Bay, Fl. (872-9702).
2. West of $86^{\circ} 56.0'W$ times are direct and apply a X1.18 range ratio to all heights on Pensacola, Fl. (872-9840).

Note: Times are tabulated in Central Standard Time.

William M. Gibson
CHIEF, DATUMS SECTION



GEOGRAPHIC NAMES

Name on Survey	ON CHART NO. 11385 ON PREVIOUS SURVEY NO. 3837a CON U.S. QUADRANGLE MAPS FROM LOCAL INFORMATION Shoreline maps P.O. GUIDE OR MAP GRAND MCNALLY ATLAS U.S. LIGHT LIST										
	A	B	C	D	E	F	G	H	I	J	K
AXELSON POINT	X				X						1
CHIMNEY COVE	X				X						2
DEAN CREEK	X				X						3
EAST BAY	X	X			X						4
EAST BAY RIVER	X	X			X						5
FLORIDA (title)	X				X						6
HARPER	X				X						7
HIAWATHA	X										8
HOLLEY	X				X						9
HOLLEY POINT	X				X						10
MILLER BAYOU	X				X						11
MILLER POINT	X				X						12
PENSACOLA BAY (title)	X										13
TOM KING BAYOU	X				X						14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25

Approved:

C. Harrington
 Chief Geographer - N/O 45

JUN 29 1994

HYDROGRAPHIC SURVEY STATISTICS

H-10460

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

RECORD DESCRIPTION		AMOUNT		RECORD DESCRIPTION		AMOUNT	
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	2						
ENVELOPES							
VOLUMES							
CAHIERS							
BOXES				1			

SHORELINE DATA							
SHORELINE MAPS (List):							
PHOTOBATHYMETRIC MAPS (List):							
NOTES TO THE HYDROGRAPHER (List):							
SPECIAL REPORTS (List):							
NAUTICAL CHARTS (List):							

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			2680	
POSITIONS REVISED				
SOUNDINGS REVISED				
CONTROL STATIONS REVISED				
	TIME-HOURS			
	VERIFICATION	EVALUATION	TOTALS	
PRE-PROCESSING EXAMINATION				
VERIFICATION OF CONTROL				
VERIFICATION OF POSITIONS	19		19	
VERIFICATION OF SOUNDINGS	10		10	
VERIFICATION OF JUNCTIONS				
APPLICATION OF PHOTOBATHYMETRY				
SHORELINE APPLICATION/VERIFICATION				
COMPILATION OF SMOOTH SHEET	14		14	
COMPARISON WITH PRIOR SURVEYS AND CHARTS		8	8	
EVALUATION OF SIDE SCAN SONAR RECORDS				
EVALUATION OF WIRE DRAGS AND SWEEPS				
EVALUATION REPORT		11	11	
GEOGRAPHIC NAMES				
OTHER				
*USE OTHER SIDE OF FORM FOR REMARKS	TOTALS	43	19	62
Pre-processing Examination by	M. Larsen	Beginning Date 6-22-94	Ending Date 7-11-94	
Verification of Field Data by	R. Davies	Time (Hours) 43	Ending Date 11-17-94	
Verification Check by	B. Olmstead	Time (Hours) 20	Ending Date 3-8-95	
Evaluation and Analysis by	R. Davies	Time (Hours) 19	Ending Date 3-21-95	
Inspection by	B. Olmstead	Time (Hours) 14	Ending Date 3-23-95	

**EVALUATION REPORT
H-10460**

1. INTRODUCTION

Survey H-10460 is a basic hydrographic survey accomplished by the Atlantic Hydrographic Field Party 2 under the following Project Instructions.

OPR-J223-AHP, dated September 25, 1992

CHANGE NO. 1, dated January 4, 1993

CHANGE NO. 2, dated October 13, 1993

This survey was conducted in East Bay, Florida and includes East Bay River. The surveyed area extends from latitude 30/25/30N to latitude 30/29/11N, and from longitude 86/51/59W to longitude 86/59/45W. The shoreline in the area is characterized by sand and marsh. Numerous private piers exist throughout the area. The bottom consists of mud and sand. Depths range from 0.2 meters along the shoreline to 4.7 meters in the center of East Bay River.

Depth curves depicted on the smooth sheet were selected from those authorized through HSG 69. However, instead of drafting all authorized curves only those curves considered necessary for the reasonable portrayal of the bottom were drafted. The selected curves are the one and two meter. A note was added to the smooth sheet to identify these values. A few supplemental depth curves have been added to the smooth sheet in brown as warranted.

Predicted tides for Pensacola, Florida were used for the reduction of soundings during field processing. Approved hourly heights zoned from Holley East, East Bay and Pensacola, Florida, gages 872-9702 and 872-9840 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 and velocity correctors are adequate. An accompanying computer printout contains the parameters and the correctors.

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

2. CONTROL AND SHORELINE

Sections H and I of the hydrographer's report and the 1992 Horizontal Control Report for OPR-J223-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 4 positions exceeded the limit in terms of HDOP. These positions are isolated and occur randomly throughout the survey area. A review of the data, however, indicates that none of these fixes are used to position dangers to navigation. The features or soundings located by these fixes are consistent with the surrounding information. These fixes are considered acceptable.

The position of the horizontal control station used during hydrography is a 1992 field value based on NAD 83.

The smooth sheet and accompanying overlays are annotated with NAD 27 adjustment ticks based on values determined with NGS program NADCON. Geographic positions based on NAD 27 may be plotted on the smooth sheet utilizing the NAD 83 projection by applying the following corrections.

Latitude: 0.712 seconds (21.912 meters)
Longitude: -0.136 seconds (-3.620 meters)

The year of establishment of control stations shown on the smooth sheet originates with the horizontal control records for this survey.

Cartographic Revision Surveys BP-148731 and BP-149096, updated by NANCEI support data, were compiled on NAD 27 and apply to this survey.

The following shoreline changes are depicted on the smooth sheet with a solid red line and supported with positional information. These revisions are adequate to supersede the common photogrammetrically delineated shoreline.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
pier	30/26/32.77	86/52/51.77
pier	30/26/35.66	86/52/47.35
pier	30/26/54.37	86/56/35.87

3. HYDROGRAPHY

Except where noted below, hydrography is adequate to;

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

Standard depth curves were adequately drawn and developed with the exception of the zero curve. Project Instructions limits inshore hydrography to the 0.7 meter depth curve based on the shallowness of the area and a small tide range. There is no mean lower low water line as defined by hydrography or photogrammetric source data.

The following positions within Tom King Bayou and in the entrance of East Bay River were acquired by the hydrographer as "see field sheet" fixes (SFS).

<u>Positions Numbers</u>		approximate	
		<u>Latitude(N)</u>	<u>Longitude(W)</u>
2583-2589	between	30/26/56	86/56/33
	and	30/26/46	86/56/10
2567-2576	between	30/26/27	86/52/32
	and	30/26/27	86/52/00

4. CONDITION OF SURVEY

With the exception of the following, 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 1993 edition.

An inadequate investigation was performed for the disproval of AWOIS item 8339. A full echo sounder investigation required two-meter line spacing in order to insonify 100% bottom coverage. See section 7.2.3, Field Procedures Manual.

5. JUNCTIONS

Survey H-10460 junctions with the following surveys.

<u>Survey</u>	<u>Year</u>	<u>Scale</u>	<u>Area</u>
H-10454	1993	1:10,000	Southwest
H-10450	1993	1:10,000	Northwest

The junctions with surveys H-10450 and H-10454 were not formally completed since these

surveys were previously processed and forwarded for charting. The junction comparisons were made using copies. There is good agreement between soundings and the curves are in adequate agreement.

6. COMPARISON WITH PRIOR SURVEYS

H-5834a(1935) 1:20,000

Survey H-5834a covers the entire area common to survey H-10460. Depths in East Bay are generally 0.3 meter (1 ft.) deeper on the present survey. Depths from Miller Point to East Bay River have generally remained the same. Shoreline has remained stable throughout the area. Numerous private piers have been constructed throughout the area since 1935. The different horizontal datums and relative accuracy of the data acquisition techniques account for the depth differences between the surveys.

There are no AWOIS items which originate with prior survey H-5834a.

Survey H-10460 is adequate to supersede the above mentioned prior survey within the common area.

7. COMPARISON WITH CHART

Chart 11385, 21st Edition, September 25, 1993; scale 1:40,000/80,000

a. Hydrography

Charted hydrography originates with the prior survey mentioned in section 6 and miscellaneous sources and requires no further discussion.

Survey H-10460 is adequate to supersede charted hydrography within the common area, except for AWOIS item 8339.

b. AWOIS

AWOIS item 8339 originates with a miscellaneous source. Although a hydrographic development was granted by N/CG241 in lieu of a bottom drag, the hydrographer performed an inadequate hydrographic development, to insonify 100% coverage of the bottom. The reported stakes (visible) are recommended to be charted as submerged. Of note, however, ten piles (stakes) were found on the adjoining survey H-10450, approximately one minute west of the reported position, in the vicinity of latitude 30/29/13.5N, longitude 87/01/03.3W. These features may be the reported AWOIS item.

c. Controlling Depths

There are no controlling depths found within the survey area.

d. Aids to Navigation

There are no fixed or floating aids to navigation within the survey area.

All charted landmarks should be retained as charted.

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

Seventeen dangers to navigation was reported by the hydrographer. One additional danger to navigation was generated during office processing. Copies of these reports are attached.

8. COMPLIANCE WITH INSTRUCTIONS

Survey H-10460 adequately complies with the project instructions except where noted in this report.

9. ADDITIONAL FIELD WORK

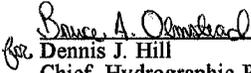
This is an adequate hydrographic survey. Additional field work is recommended to verify or disprove AWOIS 8339, see section 7 of this report.


C.R. Davies
Cartographer

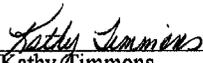
APPROVAL SHEET
H-10460

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.

 _____ Date: 3/23/95
for Dennis J. Hill
Chief, Hydrographic Processing Unit
Pacific Hydrographic Section

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

 _____ Date: 4/4/95
Kathy Timmons
Commander, NOAA
Chief, Pacific Hydrographic Section

Final Approval

Approved:
 _____ Date: 4/18/95
Andrew A. Armstrong III
Captain, NOAA
Chief, Hydrographic Surveys Branch

