H10525

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. AHP-10-01-94

Registry No. H-10525

LOCALITY

State Florida/Alabama

General Locality Perdido Bay

Sublocality Ross Point to Alabama Point

1994

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

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DATE NOV 3 1995

NOAA FORM 77-28 (11-72)

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

REGISTER NO.

H-10525

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.

AHP-10-01-94

State: Florida/Alabama

General locality: Perdido Bay

Locality: Ross Point to Alabama Point

Scale: 1:10,000 Date of survey: Jan. 12 - Mar. 18, 1994

Instructions dated: September 25, 1992 Project No.: OPR-J223

Vessel: 0518

Chief of party: LCDR James E. Waddell, Jr., NOAA

Surveyed by: David B. Elliott

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

Graphic record scaled by: RWR, LAM, CEP, DBE

Graphic record checked by: RWR, LAM, CEP, DBE

Evaluation by: R. Davies ~~Protracted by~~ Automated plot by: HP Design Jet 650C

Verification by: R. Davies

Soundings in ~~fathoms~~ ~~feet~~ Meters & Decimeters at ~~MLW~~ 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.

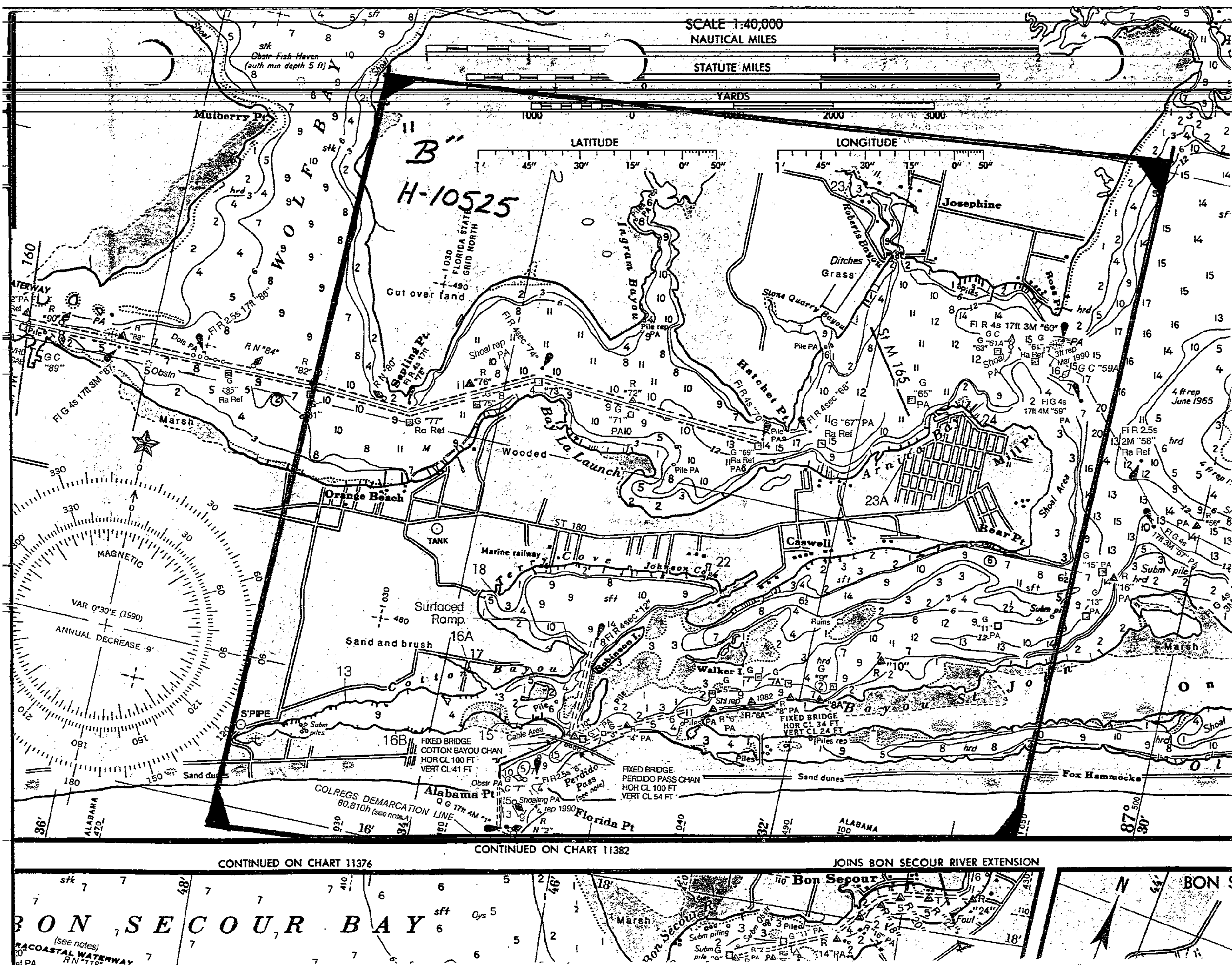
All depths listed in this report are referenced to mean lower low water unless otherwise noted.

AWOIS / SURF 11/9/95 MCR

NOV 3 1995 S Clark

NOAA FORM 77-28 SUPERSEDES FORM C&GS-537.

U.S. GOVERNMENT PRINTING OFFICE: 1984 - 652-007/41215



SCALE 1:40,000
NAUTICAL MILES
STATUTE MILES
YARDS
LATITUDE
LONGITUDE
"B"
H-10525
FLORIDA STATE GRID NORTH
Cut over land
Mulberry Pt
W O L F B A Y
Marsh
Orange Beach
Sapling Pt
Ingram Bayou
Hatchet Pt
Bay La Launch
Wooded
Roberts Bayou
Stone Quarry Bayou
Ditches
Grass
Josephine
Ross Pt
St M 165
Arnica Bay
Mill Pt
Bear Pt
Shoal Area
Caswell
ST 180
TANK
Marine railway
Terry Cove
Johnson Cove
Surfaced Ramp
Sand and brush
Cotton Bayou
Robinson I
Walker I
Bayou St John
Ruins
FIXED BRIDGE COTTON BAYOU CHAN HOR CL 100 FT VERT CL 41 FT
FIXED BRIDGE PERDIDO PASS CHAN HOR CL 100 FT VERT CL 54 FT
FIXED BRIDGE HOR CL 34 FT VERT CL 24 FT
Cable Area
Perdido Pass (see note)
Alabama Pt
Florida Pt
COLREGS DEMARCATION LINE 80.810h (see note A)
Sand dunes
Fox Hammocks
MAGNETIC
VAR 0°30'E (1990)
ANNUAL DECREASE 9'
Obstr Fish Haven (auth min depth 5 ft)
4 ft rep June 1965
CONTINUED ON CHART 11382
CONTINUED ON CHART 11376
JOINS BON SECOUR RIVER EXTENSION
BON SECOUR BAY
Bon Secour
Bon Secour R

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10525
FIELD NO. AHP2-10-1-94
SCALE: 1:10,000
1994
ATLANTIC HYDROGRAPHIC PARTY TWO
CHIEF OF PARTY: LCDR James E. Waddell Jr., NOAA

A. PROJECT ✓

This survey was conducted according to Hydrographic Project Instructions OPR-J223-AHP, Pensacola and Perdido Bays, Florida and Alabama, dated September 25, 1993; change No.1 dated January 4, 1993; and change No. 2 dated October 13, 1993.

The purpose of project OPR-J223-AHP is to provide contemporary hydrographic surveys to update nautical charts in Pensacola and Perdido Bays, Florida. The area was last surveyed in 1935 by the Coast and Geodetic Survey using predominately lead line methods. The project area is traversed by vessels and barges containing grains, soybeans, cypress logs, petroleum, seafood, and various other products.

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

B. AREA SURVEYED ✓ See Eval Rpt, Section B

The area surveyed for H-10525 covers Perdido Bay from Ross Point to Alabama Point, Alabama. The approximate survey limits are as follows:

North: 30°19.6'N
South: 30°16.2'N
East: 087°30.6'W
West: 087°35.0'W

This survey was conducted from January 12, 1994 (DN 012) to March 18, 1994 (DN 077).

C. SURVEY VESSEL ✓

Vessel 0518 (EDP No. 0518), a 21-foot MonArk was 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 programs was used for on-line data acquisition. A list of all HP-DPS programs and versions used for data processing is appended. The NOS program VELOCITY (Ver. 2.0) and WordPerfect (Ver. 6.0) were also used during this survey.

E. SONAR EQUIPMENT ✓

Not Applicable.

F. SOUNDING EQUIPMENT ✓

A Innerspace model 448 depth sounder, S/N 175 was used to collect all echo soundings on this survey. A standard lead line calibrated in meters, S/N 0518, was used during this survey for comparison readings with the echo sounder. A five-meter wooden sounding pole, constructed according to HSG No. 69, was used to obtain all pole soundings. No pole soundings taken.

No problems were encountered with any of the sounding equipment.

G. CORRECTIONS TO ECHO SOUNDINGS ✓

Correctors for the velocity of sound through water were determined from the casts listed below:

Velocity Table No.	Cast No.	Deepest Depth(m)	Applicable DN	Cast Position	Day
5	1	5.2	012-034	30°17'30"N 87°31'00"W	011
7	2	13.0	041	30°16'30"N 87°33'30"W	041
9	3	10.4	045-048	30°16'30"N 87°33'30"W	047
11	4	7.8	054-066	30°16'30"N 87°33'30"W	061
13	5	7.8	073-077	30°18'15"N 87°32'30"W	074

Corrections for the speed of sound through the water column were computed from data obtained with an Odom Hydrographic Systems Digibar (Model DB1100) speed of sound probe, S/N 155.

This instrument was calibrated by the manufacturer on May 3, 1993 and data quality assurance tests were performed before each cast. Program VELOCITY was used for computing the speed of sound correctors. Speed of sound corrections were applied to the sounding plot using the HDAPS Reapply Depth Correctors function. Copies of the tables and support documentation are in the "Survey Separates."*

Lead line comparisons were taken daily to determine echo sounder error. No echo sounder error was observed. The lead line comparison logs are in the "Survey Separates."* The lead line was calibrated using a steel tape on November 19, 1993 for launch 0518. No corrections were necessary. A copy of the calibration form is in the "Survey Separates."*

A static draft of 0.3 meter was applied to the final sounding plot by the HDAPS REAPPLY program. The draft was measured by subtracting the difference from a punch mark on the side of launch 0518, 0.6 meter above the transducer, to the water surface.

Settlement and squat measurements for launch 0518 were determined on November 19, 1993 (DN 323). These measurements were conducted at the Blue Angel Park pier in Perdido Bay, Florida using the level method. Settlement and squat correctors were applied to the final sounding sheet using the HDAPS REAPPLY program. Data from the settlement and squat test is in the "Survey Separates."*

Predicted tides for this project were provided on diskette by N/OES231 for the Pensacola, Florida reference station 872-9840. Correctors for three different tidal zones on sheet "B" were used as designated by the project instructions. The zones were numbered and are defined by the following geographic locations:

Zone # 1 = In Perdido Pass, south of a line from Florida Point to Alabama Point, (ie. all data south of Perdido Pass bridge).

Zone # 2 = In Bayou St. John, Terry Cove, Cotton Bayou and Old River west of 87°31.0'W.

Zone # 3 = In Bay La Launch, east of 87°34.6'W and west of 87°31.0'W.

	Time (min.)		
	High Water	Low Water	Range Ratio
Zone # 1	-2:00	-2:00	x 1.11
Zone # 2	-0:45	-0:45	x 0.80
Zone # 3	+3:10	+3:10	x 0.50

These correctors are designated in section 5.9 of the project instructions. Approved water levels were requested from the Product and Services Branch, Datums Section, N/OES231, in a letter dated March 29, 1994. A copy is appended to this report.* Approved Tide Note dated April 5, 1995 is attached.

* Filed with the hydrographic data.

H. CONTROL STATIONS ✓ See Eval Rpt, section II.

The horizontal control datum for this project is the North American Datum of 1983. Two horizontal control stations, EDEN 1993 (004), and CAL2 1993 (006) were used on this survey. These stations were established to third-order standards with GPS by AHP personnel in November. The Horizontal Control Report for these positions was submitted to N/CG2333 on November 30, 1993. These stations served as our GPS base station site and also our launch performance checkpoint during work on this survey. Positions for these stations are shown in the "Control Station" list, appended to this report.

I. HYDROGRAPHIC POSITION CONTROL ✓

Differential GPS (DGPS) was used for all hydrographic data acquired on this survey. Ashtech M-XII receiver (S/N 700157E1075) and antenna (S/N 700271A0064) were used for the reference station. An Ashtech Sensor (S/N 700417B1070) with antenna (S/N 700378A0275) was used as the remote station on launch 0518. TAD model 150 VHF radios were used as the data link between the base station receiver and the launch sensor. The primary GPS base station site (004) was set at the Eden Condominium on Perdido Key, Florida. Prior to using station EDEN 1993, the program MONITOR was run at this site to test for multi-path problems. This test indicated 100% availability at a 1:10,000 survey scale. Results of this test are included in the "Survey Separates."*

In addition to the radio data link the New Orleans Beacon Transmitter at English Turn, Louisiana located at 29°52'43.878"N, 089°56'31.380"W, was used intermittently when the radio data link could not be received. The soundings inside Cotton Bayou (positions 735-818) were collected exclusively with the beacon receiver (S/N X-1089) and antenna (S/N MBA-M1029). While the switching between positioning systems was not documented, the beacon receiver was compared to the radio data link on numerous occasions alongside of piles and piers previously positioned by the VHF radio data link and found to be in total agreement. Performance checks were likewise compared at the calibration points for both methods of electronic positioning and no discrepancies were noted.

Daily DGPS performance checks were conducted in accordance with FPM 3.4.4 by comparing the DGPS position of the vessel to our computed third-order position of CAL2 1993, in Lillian, Alabama. To obtain a performance check, the launch was brought alongside the checkpoint and the Easting, Northing, number of SVs, HDOP, and time of observation were noted on the echogram for each day of operations. These values were then entered into a Lotus spreadsheet table which would compute the acceptable error margin (based on the HDOP) and the 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 data.

J. SHORELINE See EVAL Report, section J

Because this project was team processed with the Pacific Hydrographic Section, no final field sheet was generated. The shoreline was transferred by hand from TP-00542 (CRS No. 0001793) in blue ink on the boat sheet and verified in black on the sounding plot. Shoreline verification was accomplished during inshore hydrographic data acquisition and by visual inspection. The reference number descriptions, field notes, and explanations of new shoreline features are on the graphic record, and on the boat sheet.

Recommendation: Shoreline shown on the Cartographic Revision Survey and changes shown in red on the ~~sounding plot submitted with this survey~~ smooth sheet, should supersede currently charted shoreline. Concur

K. CROSSLINES ✓

A total of 24.1 linear nautical miles of crosslines and channel lines were run, which represents approximately 30% of the main scheme hydrography. Cross line soundings agree with the main scheme soundings within 0.3 meters.

L. JUNCTIONS ✓

This survey junctions with H-10527 to the west and H-10528 to the east, both 1:10,000 scale surveys from OPR-J223-AHP.

Junction soundings between this survey and H-10527 and H-10528 are in good agreement, with differences of 0.2 meters or less.

M. COMPARISON WITH PRIOR SURVEYS See EVAL Report, section M

Prior survey comparison will be completed by the Pacific Hydrographic Section.

N. ITEM INVESTIGATION REPORTS ✓

Eighteen AWOIS items, numbers 6962, 8451, 8452, 8453, 8454, 8455, 8456, 8459, 8460, 8461, 8462, 8463, 8464, 8529, 8532, 8533, 8612 and 8772, were investigated as part of this survey. All item reports are appended.

O. COMPARISON WITH THE CHART ✓ See Eval Rpt, section O.

Comparison was made with the following charts:

Chart No.	Edition	Edition Date
11378	27th	MAY 7, 1994
11378	26th	Sept. 5, 1992
11382	34th	March 27, 1993

There were no dangers to navigation identified on this survey.

Soundings from this survey are within 0.3 to 0.5 meter of those charted.

The following detached positions are new features and are recommended for charting at the following location:

Pos.#	Latitude	Longitude	Item
109	30°18'14.20"N	87°33'37.06"W	Pier (Red) ✓
110	30°18'39.25"N	87°31'01.49"W	Pier (Red) ✓
111	30°18'03.91"N	87°30'54.73"W	Pile (1) ✓ ✓
112	30°17'56.66"N	87°31'27.20"W	Pile (2) ✓
113	30°17'31.81"N	87°32'20.34"W	Pile (1) ✓
114	30°17'31.81"N	87°32'34.12"W	Pile (2) ✓
115	30°17'32.83"N	87°32'43.82"W	Pile (2) ✓
116	30°17'31.43"N	87°32'53.74"W	~~Pile~~ Pier (Red) ✓

In general this survey compares well with the chart. An exception is that the rock jetties at 30°17'28.5"N, 87°31'06.0"W are portrayed on TP-00542 but do not appear on chart number 11378. These jetties were identified by reference number 63 and a centerline was run between them, positions 660-663.

Recommendation: Chart the jetties at 30°17'28.5"N, 87°31'06.0"W. Concur

Recommendation: Sounding data from this survey should supersede charted data. Concur

P. ADEQUACY OF SURVEY ✓

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

Q. AIDS TO NAVIGATION ✓

There are 36 non-floating and 6 floating aids to navigation within this survey area. All of these aids appear to serve their intended purpose. The following table provides a comparison between survey, light list (USCG Light List (USCGLL) Vol IV, 1994 edition), and charted positions of all fixed aids to navigation.

Pos. No.	USCG LL No.	Charted position	Surveyed position	Distance/Direction to Charted Location	
29	31485	30°18'24" 87°33'48"	30°18'26.48"N 87°33'53.18"W	130 m/Southeast	Lt "74"
30	31480	30°18'19" 87°33'50"	30°18'19.49"N 87 °33'54.32"W	150 m/East	DBN "73"
31	31475	30°18'21" 87°33'13"	30°18'21.75'N 87°33'15.99"W	70 m/East	DBN "72"
32	31470	30°18'16" 87°33'12"	30°18'16.81"N 87°33'16.59"W	130 m/East	DBN "71"
33	31465	30°18'17" 87°32'32"	30°18'17.83"N 87°32'30.85"W	50 m West	Lt "70"
34	31460	30°18'15" 87°32'32"	30°18'13.86"N 87°32'30.15"W	50 m West	DBN "69"
35	31455	30°18'23" 87°32'15"	30°18'23.09"N 87°32'15.31"W	On station	Lt "68"
36	31450	30°18'19" 87°32'10"	30°18'19.62"N 87°32'08.84"W	50 m West	DBN "67"
37	31445	30°18'40" 87°31'40"	30°18'38.27"N 87°31'44.23"W	150 m East	DBN "65"
38	31440	30°18'58" 87°31'19"	30°18'56.91"N 87°31'19.61"W	50 m North	DBN "63"
39	31435	30°19'00" 87°31'12"	30°18'58.33"N 87°31'11.08"W	40 m North	C "61A"

40	31430	30°18'57" 87°31'05"	30°18'56.93"N 87°31'04.86"W	On station	DBN "61"
41	31425	30°19'05" 87°30'58"	30°19'05.10"N 87°30'57.97"W	On station	LT "60"
42	31420	30°18'54" 87°30'55"	30°18'52.11"N 87°30'53.08"W	100 m Northwest	C "59A"
43	31415	30°18'49" 87°30'48"	30°18'49.02"N 87°30'48.30"W	On station	LT "59"
44	4970	30°17'37" 87°31'00	30°17'37.79"N 87°31'10.58"W	275 m East	DBN "11"
45	4965	30°17'23" 87°31'35"	30°17'23.85"N 87°31'34.14"W	40 m West	DBN "10"
46	4960	30°17'11" 87°31'49"	30°17'11.19"N 87°31'49.90"W	On station	DBN "9"
47	4955	30°17'08" 87°31'53"	30°17'11.48"N 87°31'45.99"W	230 m Southwest	DBN "8A"
48	None	Charted As "8A"	30°17'08.35"N 87°31'53.49"W	On station	C "7B"
49	4945	30°17'09" 87°32'04"	30°17'09.47"N 87°32'04.39"W	On station	DBN "7A"
50	4950	30°17'05" 87°32'04"	30°17'05.92"N 87°32'04.78"W	On station	DBN "8"
51	4940	30°17'10" 87°32'15"	30°17'05.31"N 87°32'15.34"W	150 m South	DBN "7"
52	4935	30°17'02" 87°32'14"	30°17'02.47"N 87°32'14.51"W	On station	DBN "6A"
53	4925	30°17'01" 87°32'29"	30°17'01.79"N 87°32'29.16"W	On station	DBN "5"
54	4930	30°16'57" 87°32'29"	30°16'57.64"N 087°32'29.27"W	On station	DBN "6"

55	4920	30°16'49" 87°32'55"	30°16'49.24"N 87°32'46.94"W	240 m West	DBN "4"
56	4915	30°16'45" 87°33'02"	30°16'45.91"N 87°33'02.93"W	50 m South	DBN "3"
57	4910	30°16'42" 87°33'10"	30°16'45.12"N 87°33'11.70"W	110 m Southeast	DBN "1"
58	4900	30°16'43" 87°33'12"	30°16'46.25"N 87°33'14.74"W	150 m Southeast	DBN "10"
59	4890	30°16'27" 87°33'21"	30°16'26.37"N 87°33'21.53"W	30 m North	LT "6"
60	4895	30°16'26" 87°33'26"	30°16'25.21"N 87°33'26.40"W	35 m Northeast	C "7"
61	4885	30°16'18" 87°33'25"	30°16'19.13"N 87°33'26.46"W	90 m Southeast	N "4"
62	4880	30°16'11" 87°33'24"	30°16'11.26"N 87°33'24.49"W	On station	N "2"
63	4875	30°16'11" 87°33'28"	30°16'11.14"N 87°33'28.71"W	On station	LT "1"
64	4905	30°17'11" 87°33'11"	30°17'11.34"N 87°33'11.84"W	On station	LT "12"

Note: There were 31 privately maintained non-floating aids to navigation within the limits of this survey. They were positioned consecutively by numbers 65-95 on DN 014.

There were no ~~overhead cables~~, overhead pipelines nor ferry routes within the limits of this survey. All bridge clearances should remain as charted. Concur

R. STATISTICS ✓

Description	Quantity
Total Number of Positions	1497
Total Lineal Naut. Miles of Hydrography	77.4
Total Lineal Nautical Miles of Cross Lines	24.1
Square Nautical Miles of Hydrography	5.5
Days of Production	22
Detached Positions	121
Bottom Samples	28
Tide Stations	2
Velocity Casts	5

S. MISCELLANEOUS ✓

Bottom samples were taken as directed in section 6.7 of the Project Instructions and submitted to the Smithsonian Institution on January 26, 1994. Bottom sample positions are plotted on the detached position plot submitted with this survey and are listed on the Oceanographic Log Sheet-M, NOAA Form 75-44, which is included in the "Survey Separates." *

No tidal anomalies were observed during this survey.

T. RECOMMENDATIONS ✓

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

* Filed with the hydrographic data.

U. REFERRAL TO REPORTS ✓

Title	Transmittal Information
Descriptive Report to Accompany Survey H-10527	Pacific Hydrographic Section N/CG245, Seattle, WA (5/94)
Descriptive Report to Accompany Survey H-10528	Pacific Hydrographic Section N/CG245, Seattle, WA (5/94)
Horizontal Control Report for OPR-J223-AHP	Pacific Photogrammetric Party N/CG2333, Seattle, WA (11/30/93)
User Evaluation Report	Pacific Hydrographic Section N/CG245, Seattle, WA (3/94)
Coast Pilot Report	Pacific Hydrographic Section N/CG245, Seattle, WA (5/94)

Submitted by: David B. Elliott
Atlantic Hydrographic Party

AWOIS NO: 6962 ✓

Item Description: Mooring structure? Submerged Obstruction.

Source: BNM4627/83, LNM48/83.

AWOIS Position: **Lat -** 30/16/19.72N **Lon -** 087/33/29.93W

Required Investigation: S2, ES, BD, DI, 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/20/94 (DN:020)

Position Numbers: None **Launch Number:** 0518

Investigation Used: Local Knowledge **Water Visibility:** 2m
Alabama Marine Police
Position Determined By: DGPS

Investigation Summary: During an onsight echosounder search along the Perdido Pass north western jetty NOAA launch 0518 was approached by the Alabama Marine Police. Officers Mark Parden and Ed Lockridge were inquiring about our operation. They were then informed about the proposed submerged obstruction. The officers stated that the channel and vicinity of AWOIS 6962 had been dredged twice since 1983. While on board the vessel Mr. Paul Warren the area engineer of the Mobile District Army Corps of Engineers was contacted by cellular phone. Mr. Warren stated that the Perdido Pass last dredging took place in 1989 and 1993. A letter was forwarded by Mr. Warren and states that the afore mentioned dredging took place and the Corps is only responsible for the defined limits of the channel. The alleged obstruction was reported at the edge of the channel and would have been discovered during dredging operations. Mr. Warren confirmed that dredging was taking place in 1983 and that the obstruction reported may have been a contact with a jackdown or spud barge used during dredging for pipes leading to shore. Mr. Warren's letter is attached to this AWOIS report and the dredging survey by the U.S.C.O.E. is filed in the accordion file for H-10525. (Attached to this report) AHP divers made a 50 meter radius diver circle search at slack tide on a buoy drop in the center of the scaled position for AWOIS 6962 to insure no obstruction existed. The result of this dive by D. Elliott and R. Ramsey was nothing found.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged obstruction be removed from the chart at the following location: Concur

Recommended Position: **Lat -** 30/16/19.72 **Lon -** 087/33/29.93

Recommended Least Depth: N/A

****

COMPILATION NOTES

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
MOBILE AREA OFFICE
7861 13TH STREET
IRVINGTON, ALABAMA 36544-2899

January 24, 1994

David Elliott
NOAA, AHP
P. O. Box 56
Lillian, AL 36549

Dear Mr. Elliott:

Per your telephone conversation on January 20, 1994, the following information is furnished:

(a) Certain parts of the Perdido Pass Project (Tangents 1, 2, and 3, the Impoundment Basin and the cross over channel between Tangents 4 and 5) were maintenance dredged and completed in October 1992. Other parts of the Perdido Pass Project (Tangents 5 and 6) were last dredged during November 1989.

(b) A copy of our latest channel condition surveys is enclosed. Please note the Federal navigation channel is uniquely defined. There are shoals outside of this defined project alignment even though inside the total area is defined by the jetties and seawall. The Corps maintains only the defined channels.

If I can be of further help to you, please don't hesitate to contact me again.

Sincerely,

Paul J. Warren
Area Engineer
Mobile Area Office

Enclosure
a/s

AWOIS NO. 8451

Item Description: Permit for pier construction.

Source: CL1109/75--COE

AWOIS Position: **Lat -** 30/16/55.00N **Lon -** 087/31/53.00W

Required Investigation: VS, BD 100m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/20/94 (DN:020)

Position Numbers: 101 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: A pier was found visually near the approximate position fitting the description of the AWOIS. A detached position and photograph was taken at the offshore end of a wooden pier with covered boat slip. The pier is ten feet wide and 100 feet long and ~~is~~ exposed ~~1.0~~ 0.9 meters at ~~MLLW~~. MHW There were no submerged piles at this location.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted piles reported be removed from the chart and a new pier be charted at the following location: The shoaling map BP-15071G has the pier drawn. Concur

Recommended Position: Lat - 30/16/55.47N **Lon -** 087/31/49.58W

Recommended Least Depth: N/A

****

COMPILATION NOTES

AWOIS NO: 8452 ✓

Item Description: Pilings PA

Source: CL1537/79--USPS

AWOIS Position: **Lat -** 30/16/51.50N **Lon -** 087/32/37.00W

Required Investigation: VS, BD 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/18/94 (DN:018)

Position Numbers: 100 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: A wooden pile was found visually near the reported location at the west end of Ono Island. A detached position and photograph was taken at this position. It was noted that a broken pile flush with the bottom ~~is exposed~~ covers existed alongside the new pile at position 100. The pile 1.0 meter at ~~MLLW~~. mHW

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pilings be revised to a charted pile at the following location: Concur
Remove PA note

Recommended Position: **Lat -** 30/16/50.02N **Lon -** 087/32/38.82W

Recommended Least Depth: N/A

****

COMPILATION NOTES

AWOIS NO: 8453 /

Item Description: Shoal Report

Source: LNM22/82--8th CGD, sand shoaling buildup reported in Bayou St. John Channel between daybeacons 6 & 8.

AWOIS Position: **Lat -** 30/17/01.72N **Lon -** 087/32/24.93W

Required Investigation: ES, ##

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 03/18/94 (DN:077)

Position Numbers: 1383-1413 **Launch Number:** 0518

Investigation Used: ES **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: The reported shoaling in Bayou St. John channel is existing on the north side of the channel. A fifty meter line spacing development was completed to show the nature of the shoaling trend. This region is subjected to northerly wind where sand encroaches to the northern edge of the channel.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted shoaling be retained as charted at the following location: Do not concur, remove charted note "shl rep", chart depths as found on this survey. Depths range from 0.6-0.9 meters (2-3ft) just north of DBNS "5" & "7".

Recommended Position: **Lat -** 30/17/07.00N **Lon -** 087/32/14.00W

Recommended Least Depth: ~~1.0~~ 0.9m @ MLLW with ~~predicted~~ Approved tides.

****

COMPILATION NOTES

AWOIS NO: 8454 ✓

Item Description: Submerged piles.

Source: Unknown, CL1537/79--USPS

AWOIS Position: **Lat -** 30/16/27.50N **Lon -** 087/34/42.00W

Required Investigation: VS, BD, DI 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/21/94 (DN:021)

Position Numbers: 104 **Launch Number:** 0518

Investigation Used: VS, DI. **Water Visibility:** 3-4m

Position Determined By: DGPS

Investigation Summary: A 50 meter radius diver circle search for submerged pilings was conducted at the reported position. The water depth was 1.5 to 2.0 meter of water with good visibility. The result of this dive was nothing found.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged pilings be removed from the chart at the following location: Concur

Recommended Position: **Lat -** 30/16/27.55N **Lon -**087/34/41.88W

Recommended Least Depth: N/A

****

COMPILATION NOTES

AWOIS NO: 8455 ✓

Item Description: Visible Wreck (believed removed)
Currently charted as submerged.

Source: Unknown, CL1537/79--USPS

AWOIS Position: **Lat -** 30/16/21.00N **Lon -** 087/34/58.00W

Required Investigation: VS, SD, DI 100m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/21/94 (DN:021)

Position Numbers: 106 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: A 100 meter radius diver circle search for a visible wreck was conducted at the reported position. The water depth was 0.5 to 1.0 meter of water with good visibility. The result of this dive was nothing found.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged wreck be removed from the chart at the following location: Concur

Recommended Position: **Lat -** 30/16/21.23N **Lon -**087/34/58.03W

Recommended Least Depth: N/A

****

COMPILATION NOTES

AWOIS NO: 8456 ✓

Item Description: Submerged pile

Source: BP41652/45--1945 C&GS A.P.R., LNM5/53

AWOIS Position: **Lat -** 30/17/46.22N **Lon -** 087/30/42.92W

Required Investigation: VS, ES, BD 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/21/94 (DN:021)

Position Numbers: 107 **Launch Number:** 0518

Investigation Used: VS, DI. **Water Visibility:** 4m

Position Determined By: DGPS

Investigation Summary: A 50 meter radius diver circle search for a submerged pile was conducted at the reported position. The water depth was 0.5 to 1.0 meter of water with good visibility. The result of this dive was nothing found.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged pile be removed from the chart at the following location: Concur

Recommended Position: **Lat -** 30/17/46.18N **Lon -** 087/30/42.85W

Recommended Least Depth: N/A

****

COMPILATION NOTES

AWOIS NO: 8459 ✓

Item Description: Submerged wreck.

Source: NM27/61, CL913/61, CL1697/65, CL1095/67, CL1148/67, CL701/79--USPS.

AWOIS Position: Lat - 30/19/~~30~~03.72N **Lon** - 087/30/59.93W

Required Investigation: VS, S2, BD, ES, DI, SD. -- 100m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/21/94 (DN:021)

Position Numbers: 108 **Launch Number:** 0518

Investigation Used: VS, DI. **Water Visibility:** 4m

Position Determined By: DGPS

Investigation Summary: A 100 meter radius diver circle search for a submerged wreck was conducted at the reported position. The water depth was 3.0 to 4.0 meter of water with good visibility. The result of this dive was the keel of the vessel being found approximately 3 meters from the buoy drop on the bottom with scattered timbers along the length of the keel projecting no more than 4 to 5 inches off the bottom. There was no sign of the engine or any metal. The least depth by leadline was 4.~~3~~5 meter at MLLW by ~~predicted~~ Approved tides.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged wreck be retained and revised at the following location: Concur

Recommended Position: Lat - 30/19/03.53N **Lon** - 087/30/59.93W

Recommended Least Depth: 4.~~3~~5 meter at MLLW

****

COMPILATION NOTES

AWOIS NO: 8460 ✓

Item Description: Pile PA

Source: CL1304/84--USPS

AWOIS Position: **Lat -** 30/18/48.72N **Lon -** 087/32/16.43W

Required Investigation: VS, 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/20/94 (DN:020)

Position Numbers: 103 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: A single piling was found visually at the approximate position reported on the west side of the entrance to Stone Quarry Bayou. A detached position and photograph was taken at this position. The pile ~~is exposed~~ pieces 2.0 meter at ~~MLLW~~. MHW

CHARTING RECOMMENDATION

The hydrographer recommends that the charted Pile be revised, ~~and~~ Chart ~~retained~~ at the following location: Remove PA note Pile(MHW) concur

Recommended Position: **Lat -** 30/18/47.70N **Lon -** 087/32/17.83W

Recommended Least Depth: N/A

****

COMPILATION NOTES

AWOIS NO: 8461 ✓

Item Description: Pile PA

Source: CL1537/79--USPS

AWOIS Position: **Lat -** 30/18/19.00N **Lon -** 087/32/24.00W

Required Investigation: VS, BD 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/18/94 (DN:018)

Position Numbers: 99 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: A submerged pile in ruins was located visually near the reported position marking the sand bar off Hatchet Point. The submerged pile is broken off near the bottom and had a least depth of 1.0' meter. The pile projects off the bottom by two inches. This feature is of no danger to navigation and should be removed from the chart. A detached position was taken but, no photograph could be obtained.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pile PA be removed from the chart at the following position: Concur, chart 1 Obstr (piles) at the position below. (3 Obstr)

Recommended Position: Lat - 30/18/20.93N **Lon -** 087/32/22.72W

Recommended Least Depth: 1.0' m @ MLLW

****

COMPILATION NOTES

AWOIS NO: 8462 ✓

Item Description: Pile

Source: CL1537/79--USPS

AWOIS Position: **Lat -** 30/18/05.00N **Lon -** 087/32/59.00W

Required Investigation: VS, BD 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/18/94 (DN:018)

Position Numbers: 98 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: Two wooden piles were found visually near the reported approximate position marking a sand bar off a point of land as described. A detached position and photograph was taken at this position. The pile ~~is exposed~~ Bares ~~2.0~~ 1.9 meters at ~~MLLW~~. MHW

CHARTING RECOMMENDATION

The hydrographer recommends that the charted piles be revised at the following position: Do not concur. Delete charted Pile PA, chart piles at the position below.

Recommended Position: Lat - 30/17/59.51N **Lon -** 087/33/01.30W

Recommended Least Depth: N/A

****

COMPILATION NOTES

AWOIS NO: 8463 ✓

Item Description: Pile PA

Source: CL1790/74--USPS

AWOIS Position: Lat - 30/18/43.72N **Lon** - 087/33/17.93W

Required Investigation: VS 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/18/94 (DN:018)

Position Numbers: 97 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: A single piling was found visually at the approximate position reported on the west side of the entrance to Ingram Bayou. A detached position and photograph was taken at this position. The pile is leaning to the west but, is in good condition. The pile ~~is exposed 1.0~~ uncovers 0.9 meter at MLLW.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pile be revised to the following position: ~~Delete~~ Pile Rep PA. Chart pile (MLLW) at the position below

Recommended Position: Lat - 30/18/45.04N **Lon** - 087/33/17.88W

Recommended Least Depth: N/A

****

COMPILATION NOTES

AWOIS NO: 8464 ✓

Item Description: Four pilings. PA

Source: CL1790/74--USPS

AWOIS Position: **Lat -** 30/19/12.72N **Lon -** 087/33/28.93W

Required Investigation: VS, BD 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/18/94 (DN:018)

Position Numbers: 96 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: Inside Ingram Bayou four wooden pilings in a ten foot square were found in the approximate position reported. A detached position and photograph was taken at this position. The pilings ~~are~~ ~~exposed 2.0~~ bare meters at ~~MLLW~~ MHW.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pilings be revised to the following position: Delete Piles PA concur

Recommended Position: **Lat -** 30/19/11.37N **Lon -** 087/33/28.24W

Recommended Least Depth: N/A

****

COMPILATION NOTES

AWOIS NO: 8529 ✓

Item Description: Shoal Report PA Rep 1990 (Not on 27th Edition of 11378)

Source: LNM/90--8th CGD, add shoaling PA.

AWOIS Position: **Lat -** 30/16/18.70N **Lon -** 087/33/23.90W

Required Investigation: ES, ## 75m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 02/10/94 (DN:041)

Position Numbers: 136-142 **Launch Number:** 0518

Investigation Used: ES **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: The reported shoal on the inside of the Perdido Pass jetties was found during mainscheme hydrography. The least depth was 0.~~8~~ 6 meters at mllw with ~~predicted~~ Approved tides. The east side of the jetty is partially submerged and southerly seas continue to add sand to the area of the reported shoal.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted shoal be retained as charted at the following location: Do not concur, chart depths as found on this survey Delete shoaling PA rep 1990 note

Recommended Position: **Lat -** 30/16/18.70N **Lon -** 087/33/23.90W

Recommended Least Depth: 0.8m @ mllw with ~~predicted~~ Approved tides.

****

COMPILATION NOTES

AWOIS NO: 8532 ✓

Item Description: Shoal Report

Source: LNM11/90--8th CGD, add shoal PA 3 Ft. report.

AWOIS Position: **Lat** - 30/18/56.20N **Lon** - 087/31/01.00W

Required Investigation: ES, ## 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 03/14/94 (DN:073)

Position Numbers: 1200-1207 **Launch Number:** 0518

Investigation Used: ES **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: The reported shoal at the entrance to Arnica Bay is existing and is marked by USCG Green Can # 59A. A fifty meter line spacing development was completed on the same day as mainscheme hydrography to insure a good agreement with predicted tides. The least depth was 0.8[7] meters at MLLW along the southern edge of the Intra coastal waterway approximately 150 meters southeast of the reported location.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted shoal be retained as charted at the following location: Do not concur, Remove 3Ft rep MAR 1990, chart depths as found on this survey. Depths of 0.7 - 1.0 meters (2-3ft) exist just south of buoy "59A" to daybeacon "61".

Recommended Position: Lat - 30/18/52.00N **Lon** - 087/30/51.00W

Recommended Least Depth: 0.8[7]m @ MLLW with ~~predicted~~ Approved tides.

****

COMPILATION NOTES

AWOIS NO: 8533 ✓

Item Description: Shoal Report

Source: LNM12/90--8th CGD, add shoal PA.

AWOIS Position: **Lat -** 30/19/00.00N **Lon -** 087/31/15.00W

Required Investigation: ES, ## 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 03/14/94 (DN:073)

Position Numbers: 1208-1224 **Launch Number:** 0518

Investigation Used: ES **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: The reported shoal at the entrance to Arnica Bay is existing and is marked by USCG Green Can # 61A. A fifty meter line spacing development was completed on the same day as mainscheme hydrography to insure a good agreement with predicted tides. The least depth was 0.7 meters at MLLW along the southern edge of the Intra coastal waterway approximately 80 meters southeast of the reported location.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted shoal be retained as charted at the following location: Do not concur, remove charted note "shoal". chart depths as found on this survey.

Recommended Position: Lat - 30/18/58.00N **Lon** - 087/31/11.00W

Recommended Least Depth: 0.7m @ MLLW with ~~predicted~~ Approved tides.

****

COMPILATION NOTES

AWOIS NO: 8612 ✓

Item Description: Platform (reported not to exist)

Source: BP41652--CS349, CL701/79--USPS

AWOIS Position: **Lat -** 30/17/30.72N **Lon -** 087/31/51.93W

Required Investigation: VS, ES, BD, 50m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 01/20/94 (DN:020)

Position Numbers: 102 **Launch Number:** 0518

Investigation Used: VS, DI. **Water Visibility:** 3m

Position Determined By: DGPS

Investigation Summary: A 50 meter radius diver circle search for platform ruins was conducted at the reported position. The water depth was 0.5 to ~~1.0~~ 0.9 meter of water with good visibility. The result of this dive was nothing found.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted platform ruins be removed from the chart at the following location: Cancur

Recommended Position: **Lat -** 30/17/30.75N **Lon -** 087/31/51.83W

Recommended Least Depth: N/A

****

COMPILATION NOTES

AWOIS NO: 8772 ✓

Item Description: A group of 4 piles.

Source: Source Unknown

AWOIS Position: **Lat -** 30/16/50.00N **Lon -** 087/32/08.00W

Required Investigation: VS, BD, ES 75m radius

Charts Affected: 11378

INVESTIGATION

Date(s)/DN(s): 02/03/94 (DN:034)

Position Numbers: 121 **Launch Number:** 0518

Investigation Used: DI **Water Visibility:** 2m

Position Determined By: DGPS

Investigation Summary: A 100 meter radius diver circle search was conducted at the scaled charted location for these piles before this feature was assigned an AWOIS number. The result of this dive was nothing found.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted piles be removed from the chart at the following location: concur

Recommended Position: **Lat -** 30/16/50.00N **Lon -** 087/32/08.00W

Recommended Least Depth: N/A

****

COMPILATION NOTES

CONTROL STATIONS as of 28 Mar 1994

No	Type	Latitude	Longitude	H	Cart	Freq	Vel	Code	MM/DD/YY	Station Name
004	0	030:17:15.417	087:29:09.073	58	250	0.0	0.0		11/29/93	EDEN,1993(CONDO BASE STATION)
005	0	030:18:35.685	087:26:19.266	2	250	0.0	0.0		11/29/93	CAL 1,1993
006	0	030:24:22.477	087:26:10.133	2	250	0.0	0.0		11/29/93	CAL 2,1993

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

June 2, 1994

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

Dear Sir:

During the office processing of hydrographic surveys H-10527 in Perdido Bay, a danger to navigation has been discovered. This danger affects the following chart:

Chart	Edition/Date	Datum
11378	26th Ed., 9/5/92	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

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

Enclosure

cc: DMA/HTC
AHP
N/CG221

Hydrographic Survey Registry Number: H-10525 ✓

Survey Title: State: Florida
Locality: Perdido Bay
Sublocality: Ross Point to Alabama Point

Project Number: OPR-J223-AHP

Survey Date: January-March, 1994

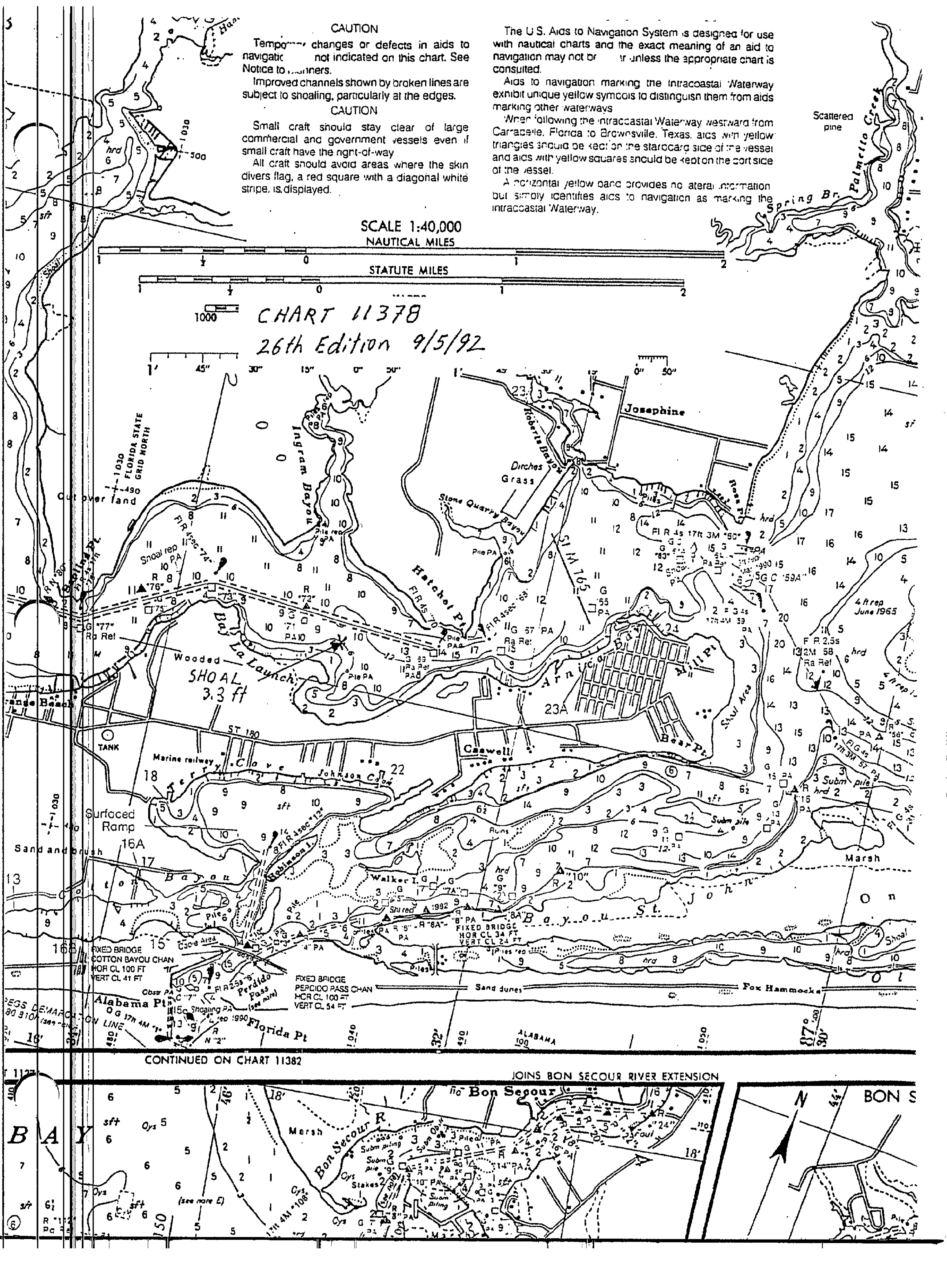
Features are reduced to Mean Lower Low Water using predicted tides.

Affected Nautical Chart:

Chart	Edition/Date	Datum
11378	26th Ed., 9/5/92	NAD83

Danger to Navigation	Latitude (N)	Longitude (W)
Shoal, 3.3 Feet	30/18/12.750	087/33/03.278

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


CAUTION
Tempo… changes or defects in aids to navigatio… not indicated on this chart. See Notice to Mariners.
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.
CAUTION
Small craft should stay clear of large commercial and government vessels even if small craft have the right-of-way.
All craft should avoid areas where the skin divers flag, a red square with a diagonal white stripe, is displayed.
The U.S. Aids to Navigation System is designed for use with nautical charts and the exact meaning of an aid to navigation may not be … unless the appropriate chart is consulted.
Aids to navigation marking the Intracoastal Waterway exhibit unique yellow symbols to distinguish them from aids marking other waterways.
When following the Intracoastal Waterway westward from Carrabelle, Florida to Brownsville, Texas, aids with yellow triangles should be kept on the starboard side of the vessel and aids with yellow squares should be kept on the port side of the vessel.
A horizontal yellow band provides no lateral information but simply identifies aids to navigation as marking the Intracoastal Waterway.
SCALE 1:40,000
NAUTICAL MILES
STATUTE MILES
CHART 11378
26th Edition 9/5/92
Scattered pine
Spring Br.
Palmetto Creek
Josephine
Roberts Bayou
Ingram Bayou
Ditches
Grass
Stone Quarry Bayou
Hatchet Pt
Cut over land
Shoal rep
SHOAL 3.3 ft
Wooded
Bay La Launch
Arnica Bay
Mill Pt
Shoal Area
Bear Pt
4 ft rep June 1965
TANK
ST 180
Caswell
Marine railway
Terry Cove
Johnson Cove
Surfaced Ramp
Sand and brush
Bayou
Robinson I.
Walker I.
Bayou St. John
Ruins
Marsh
FIXED BRIDGE
COTTON BAYOU CHAN
HOR CL 100 FT
VERT CL 41 FT
FIXED BRIDGE
PERDIDO PASS CHAN
HOR CL 100 FT
VERT CL 54 FT
FIXED BRIDGE
HOR CL 34 FT
VERT CL 24 FT
Perdido Pass
Alabama Pt
Florida Pt
Sand dunes
Fox Hammocks
ALABAMA
CONTINUED ON CHART 11382
JOINS BON SECOUR RIVER EXTENSION
Bon Secour
Bon Secour R.
BAY
Marsh
Stakes
BON S

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY
OPR-J223-AHP
AHP-10-01-94
H-10525
1994

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. All reports were reviewed by Mr. Brian Link, Assistant Chief of Party. The final sounding plot and descriptive report were reviewed and approved by LCDR James E. Waddell, Jr., Chief of Party. All supporting data and records were approved through Team Processing with Pacific Hydrographic Section in Seattle, Washington.

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: April 5, 1995

MARINE CENTER: Pacific

HYDROGRAPHIC PROJECT: OPR-J223-AHP

HYDROGRAPHIC SHEET: H-10525 (amended)

LOCALITY: Alabama, Perdido Bay, Ross Point to Alabama Point

TIME PERIOD: January 12 - March 18, 1994

TIDE STATION USED: 872-9962 Perdido Heights, Perdido Bay, Fl.
Lat. 30° 23.6'N Lon. 87° 25.5'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 2.52 ft.
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.7 ft.

TIDE STATION USED: 873-0667 Alabama Point, Perdido Pass, Al.
Lat. 30° 16.7'N Lon. 87° 33.2'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 2.62 ft.
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.8 ft.

TIDE STATION USED: 873-0849 Peterson Point, Wolf Bay, Al.
Lat. 30° 21.3'N Lon. 87° 36.0'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 2.40 ft.
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.8 ft.

REMARKS: RECOMMENDED ZONING

1. In Bayou St. John, Cotton Bayou, and Terry Cove, south of a line between points 30° 18.4'N, 87° 30.7'W, and 30° 17.1'N, 87° 35.2'W, times and heights are direct on Alabama Point, Al. (873-0667).

2. North of a line between points 30° 18.4'N, 87° 30.7'W, and 30° 17.1'N, 87° 35.2'W, and east of 87° 32.4'W in Arnica Bay, but including all of Stone Quarry Bayou, apply a -30 minute time correction and heights are direct on Perdido Heights, Fl. (872-9962).

3. North of a line between points 30° 18.4'N, 87° 30.7'W, and 30° 17.1'N, 87° 35.2'W, and west of 87° 32.4'W, in Wolf Bay and Bayou La Launch, apply a -20 minute time correction and heights are direct on Peterson Point, Al. (873-0849).

Note: Times are tabulated in Central Standard Time.

William M. Hubbard

CHIEF, DATUMS SECTION

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Office of Ocean and Earth Sciences
Silver Spring, Maryland 20910

ORIGINAL

See 4/5/95 Note Jcs

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: July 6, 1994

MARINE CENTER: Pacific

HYDROGRAPHIC PROJECT: OPR-J223-AHP

HYDROGRAPHIC SHEET: H-10525

LOCALITY: Alabama, Perdido Bay, Ross Point to Alabama Point

TIME PERIOD: January 12 - March 18, 1994

TIDE STATION USED: 872-9962 Perdido Heights, Perdido Bay, Fl.
Lat. 30° 23.6'N Lon. 87° 25.5'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 2.52 ft.
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.7 ft.

TIDE STATION USED: 873-0667 Alabama Point, Perdido Pass, Al.
Lat. 30° 16.7'N Lon. 87° 33.2'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 2.62 ft.
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.8 ft.

TIDE STATION USED: 873-0849 Peterson Point, Wolf Bay, Al.
Lat. 30° 21.3'N Lon. 87° 36.0'W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 2.40 ft.
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.8 ft.

REMARKS: RECOMMENDED ZONING

1. In Bayou St. John, Cotton Bayou, and Terry Cove, south of 30° 18.0'N, times and heights are direct on Alabama Point, Al. (873-0667).

2. North of 30° 17.7'N, and east of 87° 33.0'W, apply a -30 minute time correction and heights are direct on Perdido Heights, Fl. (872-9962).

3. North of 30° 17.6'N, and west of 87° 33.0'W, apply a -20 minute time correction and heights are direct on Peterson Point, Al. (873-0849).

Note: Times are tabulated in Central Standard Time.

CHIEF, DATUMS SECTION

NOAA FORM 76-155
(11-72)

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

GEOGRAPHIC NAMES

SURVEY NUMBER

H-10525

Page 1 of 2

Name on Survey	A ON CHART NO. 11378	B ON PREVIOUS SURVEY NO. H-5706	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	
ALABAMA (title)	X		X							1
ALABAMA POINT	X		X							2
ARNICA BAY	X		X							3
BAYOU LA LAUNCH	X		X							4
BAYOU SAINT JOHN	X	X	X							5
BEAR POINT	X		X							6
CASWELL (ppl)	X		X							7
COTTON BAYOU	X	X	X							8
FLORIDA (title)	X		X							9
FLORIDA POINT	X		X							10
HATCHET POINT	X		X							11
INGRAM BAYOU	X		X							12
JOHNSON COVE	X		X							13
JOSEPHINE (ppl)	X		X							14
MILL POINT	X		X							15
OLD RIVER	X	X	X							16
ONO ISLAND	X	X	X							17
PERDIDO BAY (title)	X		X							18
PERDIDO KEY	X		X							19
PERDIDO PASS	X		X							20
ROBERTS BAYOU	X		X							21
ROBINSON ISLAND	X		X							22
ROSS POINT	X		X							23
STONE QUARRY BAYOU	X		X							24
TERRY COVE	X		X							25

NOAA FORM 76-155 SUPERSEDES C&GS 197

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GEOGRAPHIC NAMES

SURVEY NUMBER

H-10525

Page 2 of 2

Name on Survey	A ON CHART NO. 11378	B ON PREVIOUS SURVEY NO. H-5706	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	
WALKER ISLAND	X		X							1
										2
										3
										4
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				Approved:						18
										19
				Curtis C. Lo						20
				Chief Geographer						21
				AUG 18 1995						22
										23
										24
										25

NOAA FORM 76-155 SUPERSEDES C&GS 197

NOAA FORM 77-27(H) (9-83)

U.S. DEPARTMENT OF COMMERCE

HYDROGRAPHIC SURVEY STATISTICS

REGISTRY NUMBER: H-10525

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	

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

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			1497
POSITIONS REVISED			
SOUNDINGS REVISED			
CONTROL STATIONS REVISED			
	TIME-HOURS		
	VERIFICATION	*EVALUATION*	*TOTALS*
PRE-PROCESSING EXAMINATION			
VERIFICATION OF CONTROL			
VERIFICATION OF POSITIONS	29		29
VERIFICATION OF SOUNDINGS	39		39
VERIFICATION OF JUNCTIONS			
APPLICATION OF PHOTOBATHYMETRY			
SHORELINE APPLICATION/VERIFICATION			
COMPILATION OF SMOOTH SHEET	97		97
COMPARISON WITH PRIOR SURVEYS AND CHARTS			
EVALUATION OF SIDE SCAN SONAR RECORDS			
EVALUATION OF WIRE DRAGS AND SWEEPS			
EVALUATION REPORT		12	12
GEOGRAPHIC NAMES			
OTHER*			
*USE OTHER SIDE OF FORM FOR REMARKS — TOTALS	165	12	177

Preprocessing Examination by LT M. Larsen	*Beginning Date* 5/23/94	*Ending Date* 6/7/94
Verification of Field Data by I. Almacen, J. Stringham, R. Davies	*Time (Hours)* 165	*Ending Date* 8/25/95
Verification Check by R. Davies, B.A. Olmstead	*Time (Hours)* 2	*Ending Date* 10/20/95
Evaluation and Analysis by R. Davies	*Time (Hours)* 12	*Ending Date* 8/25/95
Inspection by B. Olmstead	*Time (Hours)* 14	*Ending Date* 10/25/95

EVALUATION REPORT
H-10525

A. PROJECT

The hydrographer's report contains a complete discussion of the Project information.

B. AREA SURVEYED

This survey was conducted in Florida and Alabama and is located on Bayou La Launch, Arnica Bay and Bayou Saint John. This survey also covers Perdido Pass, Terry Cove, Terry Cove, Johnson Cove, Ingram Bayou, Roberts Bayou and the western portion of Old River. Perdido Pass extends between Florida Point and Alabama Point and is a dredged entrance channel from the Gulf of Mexico. Perdido Pass forks into two channels leading into either Terry Cove and Johnson Cove and the other into Bayou Saint John. The Intracoastal Waterway is reached from Perdido Pass via a marked entrance through Bayou Saint John. Depths range from 0.3 meter to 12.5 meters The bottom consists primarily of sand and mud.

C. SURVEY VESSELS

The hydrographer's report contains information relating to survey vessels.

D. AUTOMATED DATA ACQUISITION AND PROCESSING

Survey data were processed using the same Hydrographic Data Acquisition/Processing System (HDAPS) software used by the hydrographer; the Hydrographic Processing System (HPS) and AutoCad, Version 12.

At the time of the survey certification the format for the transmission of digital data had not been finally approved. In the interim, digital data for this survey exists in the standard HPS format which is a database format using the .dbf extension. In addition, the sounding plot, created with the .dbf data and enhanced using the AutoCad system, is filed both in the AutoCad drawing format, i.e., .dwg; and in the more universally recognized graphics transfer format, .dxf. Copies of these data files will be retained at PHS until data transfer protocols are developed and approved.

The drawing files necessarily contain information which is not part of the HPS data set such as geographic name text, line-type, and minor symbolization. In addition, those soundings deleted from the drawing for clarity purposes, remain unrevised in the HPS digital files to preserve the integrity of the original hydrographic data set. Cartographic codes used to describe the digital data are those authorized by Hydrographic Survey Guideline No. 75.

The field sheet parameters have been revised to center the hydrography on the office plot.

Data is plotted using a Modified Transverse Mercator projection and are depicted on a single sheet.

E. SONAR EQUIPMENT

Side scan sonar was not used on survey H-10525.

F. SOUNDING EQUIPMENT

Sounding equipment is discussed in the hydrographer's report.

G. CORRECTIONS TO SOUNDINGS

Predicted tides for Pensacola, Florida were used for the reduction of soundings during field processing. Approved hourly heights zoned direct from Perdido Heights, Florida and Alabama Point and Peterson Point, Alabama, gages 872-9962, 873-0667 and 873-0849 were used during office processing. The approved tide note dated July 6, 1994 has been superseded. See approved tide note dated April 5, 1995 (attached). Soundings have been corrected for dynamic draft, actual tides and sound velocity. The offset values and velocity correctors are adequate.

H. CONTROL STATIONS

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

The positions of the horizontal control stations used during hydrography are field values based on NAD 83. The smooth sheet is annotated with a NAD 27 adjustment tick 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: 0.725 seconds (22.312 meters)
Longitude: -0.067 seconds (-1.800 meters)

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

I. HYDROGRAPHIC POSITION CONTROL

Differential GPS(DGPS) was used to control this survey. NAD 83 is used as the horizontal datum for plotting and position computations. A horizontal dilution of precision (HDOP) not to exceed 3.75 was computed for survey operations. No positions exceeded the limits in terms of horizontal dilution of precision (HDOP).

J. SHORELINE

Cartographic Revision Survey BP-150716, updated by NANCI support data, was compiled on NAD 27 and applies to this survey. The shoreline has been digitized during office processing and applied to the smooth sheet. This data has been corrected to NAD 83.

Numerous piers throughout the survey area are depicted on the smooth sheet with a solid red line and were transferred from the final field sheet with supporting positional information. These revisions are adequate to supersede the common photogrammetrically delineated shoreline.

Several minor revisions to the shoreline are depicted on the smooth sheet with a dashed red line and were transferred without supporting positional information. These revisions are approximate but adequate to supersede the common photogrammetrically delineated shoreline.

K. CROSSLINES

Crosslines are adequately discussed in the hydrographer's report.

L. JUNCTIONS

Survey H-10525 junctions with the following surveys.

Survey	Year	Scale	Area
H-10527	1994	1:10,000	West
H-10528	1994	1:10,000	East

The junction with surveys H-10527 and H-10528 is complete. Soundings and depth contours are in good agreement.

M. COMPARISON WITH PRIOR SURVEYS

H-2017(1890) 1:10,000
H-5706(1935) 1:10,000

Surveys H-2017 and H-5706 cover the entire area of the present survey. Present survey depths are generally shoaler from 0.3 - 0.6 meters (1 - 2 ft). However, two specific areas reveal much greater change. The old Perdido Pass channel existing in 1934-35 is no longer present. Current survey depths in these areas are generally 0.6 - 2.1 meters (2 - 7 ft) shoaler. The new channel which exists between Alabama Point and Florida Point is situated approximately 500 meters southwest of the 1934-35 site. Current survey depths are generally 4 - 7 ft deeper (1.2 - 2.1 meters).

The majority of the shoreline in the area shows minor changes. However the area near Florida Point/Alabama Point and Perdido Pass has change significantly. Shoreline changes in these areas reflect a southwest movement from 400 -1700 meters. It is likely that these changes are due to the relocation of Perdido Pass and associated dredging, build up and construction activity.

The Intracoastal Waterway which runs through Arnica Bay and Bayou La Launch did not exist on either prior survey. A comparison of depths with survey H-2017 generally reveal the present survey is deeper by 2 - 4 feet.

Survey H-10525 is adequate to supersede the above mentioned prior surveys within the common area.

N. ITEM INVESTIGATIONS

Eighteen AWOIS Items originating from miscellaneous sources were investigated during survey operations. Discussion and disposition of these items have been adequately discussed in the hydrographer's report. See item investigation reports, attached.

O. COMPARISON WITH CHART

Survey H-10525 was compared with the following chart

Chart	Edition	Date	Scale	Datum
11378SC	27th	May 7, 1994	1:40,000/80,000	NAD83

Charted hydrography originates with the prior surveys mentioned in section M and miscellaneous sources. The prior surveys are discussed in section M and requires no further discussion.

Charted miscellaneous hydrography generally agrees well. The present survey depths are shoaler, between 0.3- 0.6 meters. The relative accuracy of the data acquisition methods, dynamic natural processes (storm activity over the past sixty years) and man-made construction account for the differences.

Perdido Pass Channel is a maintained channel with a controlling depth of 8.5 feet (2.6 meters). The depths found during this survey are consistent with or deeper than the controlling depth.

The west channel of Perdido Pass north of the bridge has a controlling depth of 7 feet (2.1 meters). The depths found during this survey are consistent with or deeper than the controlling depth. It is also recommended that the charted channel limits reflect the hydrography from this survey. In addition, depths of 0.6 to 1.2 meters (2 to 4 ft) were

found by this survey to exist on the east and west side of the west channel of Perdido Pass at latitude 30/16/45N, longitude 87/33/18W and latitude 30/16/51N, longitude 87/33/43W. This area is recommended to be monitored for shoaling.

The east channel of Perdido Pass north of the bridge has a controlling depth of 8 feet (2.4 meters). The depths found during this survey are consistent with or deeper than the controlling depth. In addition, depths of 2.0 meters (6 ft) were found by this survey to exists to the north side of the east channel of Perdido Pass at latitude 30/16/42N, longitude 87/33/08.5W. This area is recommended to be monitored for shoaling.

A note, *"shoaling PA (6ft rep 1994)"*, charted at latitude 30/17/00N, longitude 87/33/15W, should be removed. Hydrography from this survey show depths which range from 0.6 to 1.2 meters (2 to 4 ft). Chart area as shown on the smooth sheet.

A note, *"shoaling PA (4ft rep 1994)"*, charted at latitude 30/16/48N, longitude 87/33/00W, should be removed. Hydrography from this survey show depths which range from 2.0 to 2.6 meters (6 to 8 ft). Chart area as shown on the smooth sheet.

The Intracoastal Waterway is a federally maintained channel located within the area of the survey. The depths found during this survey are consistent with or deeper than the charted controlling depths. Survey depths range from 3.6 to 5.5 meters (12 to 18 ft).

Survey H-10525 is adequate to supersede charted hydrography within the common area.

P. ADEQUACY OF SURVEY

Hydrography is adequate:

a. delineate the bottom configuration, determine least depth, and draw the standard curves;

b. reveal there are no significant discrepancies or anomalies requiring further investigations; and

c. show the survey was properly controlled and soundings are correctly plotted.

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.

Q. AIDS TO NAVIGATION

There are 6 floating aids and 30 fixed aids to navigation located within the survey area. They have been positioned and they serve their intended purpose. There are also 31 privately maintained markers designating several different channels into small boat basins,

coves or bayous.

A landmark, tank, charted at latitude 30/17/32N, longitude 87/34/12W, was not discussed for its landmark value. It is recommended that this landmark be retained as charted.

R. STATISTICS

Statistics are itemized in the hydrographer's report.

S. MISCELLANEOUS

No additional miscellaneous items were noted during office processing.

T. RECOMMENDATIONS

This is a good hydrographic survey. No additional field work is recommended.

U. REFERRAL TO REPORTS

Referral to reports is discussed in the hydrographer's report.

Charles R. Davies
C.R. Davies
Cartographer

APPROVAL SHEET
H-10525

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 Date: 10/25/95
Bruce A. Olmstead
Senior Cartographer, Cartographic Section
Pacific Hydrographic Branch

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.

Kathy Timmons Date: 10/31/95
Kathy Timmons
Commander, NOAA
Chief, Pacific Hydrographic Branch

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Final Approval

Approved:

Andrew A. Armstrong III Date: 11/7/95
Andrew A. Armstrong III
Captain, NOAA
Chief, Hydrographic Surveys Division

NOAA FORM 75-96
(10-83)

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

MARINE CHART BRANCH

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10525

INSTRUCTIONS

A. Basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
B. Letter all information.
C. In "Remarks" column cross out words that do not apply.
D. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
11378	10/6/98	Russ Davies	Full ~~Part Before~~ After Marine Center Approval Signed Via Full application of
			Drawing No. soundings and features from smooth sheet.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
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SUPERSEDES C&GS FORM 8352 WHICH MAY BE USED.