

H10527

NOAA FORM 70-35A

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

DESCRIPTIVE REPORT

Type of Survey ... Hydrographic .....

Field No. .... AHP-10-3-94 .....

Registry No. .... H-10527 .....

LOCALITY

State ..... Alabama .....

General Locality .. Wolf Bay .....

Sublocality ..... Bay La Launch to Sandy Creek .....

.....

1994

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

LIBRARY & ARCHIVES

DATE ..... AUG 7 1995 .....

HYDROGRAPHIC TITLE SHEET

H-10527

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-10-3-94

State Alabama

General locality Wolf Bay

Locality Bay La Launch to Sandy Creek

Scale 1:10,000 Date of survey February 14 - March 24, 1994

Instructions dated September 25, 1992\* Project No. OPR-J223-AHP

Vessel 1292

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

Surveyed by J. Budlong, B.Link, C.Miller, R.Ramos, T.Rybarski, J. Waddell

Soundings taken by echo sounder, hand lead, pole Innerspace Model 448, S/N 188

Graphic record scaled by RR, TMR, JB

Graphic record checked by RR, TMR

Evaluation by: R. Davies 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.

*Surf/Aways 9/22/95  
mcr*

\* Change 1 dated January 4, 1993, Change 2 dated October 13, 1993

*SC 8/7/95*

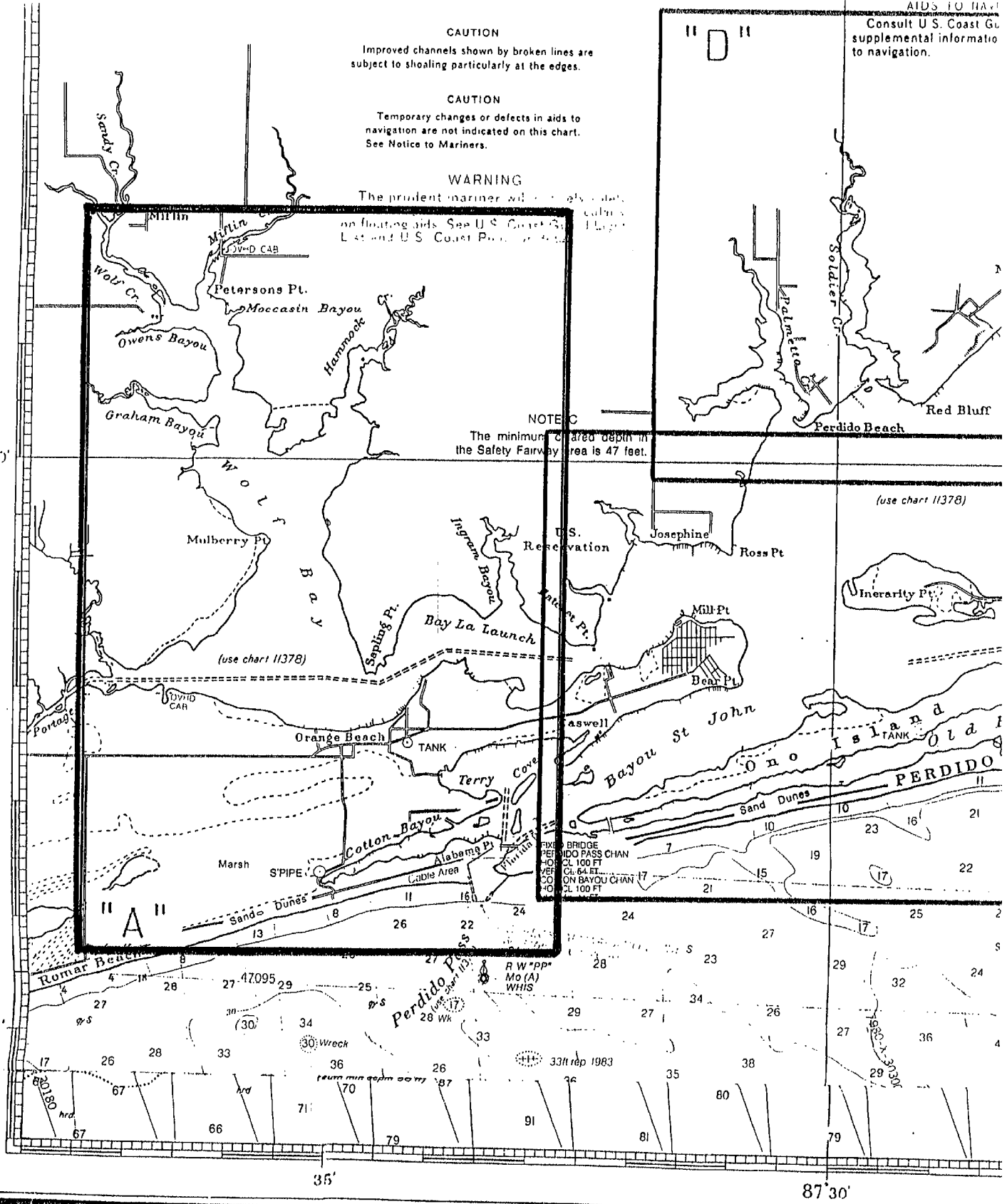
AIDS TO NAVIGATION  
Consult U.S. Coast Guard  
supplemental information  
to navigation.

CAUTION  
Improved channels shown by broken lines are  
subject to shoaling particularly at the edges.

CAUTION  
Temporary changes or defects in aids to  
navigation are not indicated on this chart.  
See Notice to Mariners.

WARNING  
The prudent mariner will not rely solely  
on floating aids. See U.S. Coast Guard Light  
List and U.S. Coast Pilot for details.

NOTE  
The minimum cleared depth in  
the Safety Fairway area is 47 feet.



20'

15'

36'

87'30"

Dec. 7/91

**1382**  
**LORAN-C OVERPRINTED**

CAUTION  
This chart has been corrected from the Notice to Mariners  
published weekly by the Defense Mapping Agency Hydro-  
graphic/Topographic Center and the Local Notice to Mariners  
issued periodically by each U.S. Coast Guard district to the  
date shown in the lower left hand corner.

This nautical chart has  
National Ocean Service  
comments for Improving  
Survey (N/CG22), National

Descriptive Report to Accompany  
Hydrographic Survey H-10527  
Field Number AHP-10-3-94  
Scale 1:10,000  
February - March 1994  
Atlantic Hydrographic Party Two  
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, dated September 25, 1992; Change 1 dated January 4, 1993; and Change 2 dated October 13, 1993. Requests for hydrographic surveys in the general area of Pensacola, Florida have been received from the U.S. Navy, the U.S. Coast Guard, and recreational boaters.

The purpose of this project is to provide contemporary hydrographic surveys for updating nautical charts in Pensacola and Perdido Bays, Florida and Alabama. The area was last surveyed in 1935 by the U.S. Coast and Geodetic Survey using lead line methods.

**B. AREA SURVEYED** ✓ See Eval Rpt, Section 1

The survey encompasses all of Wolf Bay, including Miflin and Wolf Creeks to the north and Orange Beach, Alabama to the south. The approximate survey limits are as follows:

North -  $30^{\circ}22.0' N$   
East -  $87^{\circ}34.0' W$   
South -  $30^{\circ}17.5' N$   
West -  $87^{\circ}37.5' W$

This survey was conducted from February 14, 1994 (DN 45) to March 24, 1994 (DN 83).

**C. SURVEY VESSELS** ✓

NOAA launch 1292 (EDP No. 1292), a 21-foot MonArk, was used to collect all data on this survey.

## D. AUTOMATED DATA ACQUISITION AND PROCESSING ✓

Initially, version 4.03 of the PC-DAS suite of programs was used for on-line data acquisition on the survey vessel. However, on DN 45, the Oswego program would not allow data to be downloaded to a floppy disk. It was believed that the Oswego program was corrupted and therefore it was replaced with another copy of the program. After the new Oswego program was loaded, the Marijuana computer virus was discovered on the system. In order to ensure that the virus was eliminated, the PC-DAS hard drive was reformatted and PC-DAS version 5 was loaded.

During mainscheme data acquisition on DN 53, a data logging error with the PC-DAS system occurred which prevented the HP formatted raw data disk from converting in the HP system. To prevent a loss of data, the raw DOS data file had to be copied, read and viewed with Norton Utilities on the office PC. The error was identified as an end of file marker in the number 22 space (DGPS Position Delta-t). This end of file marker split a 130 character data string into two shorter, incomplete lines. The HDAPS system will not convert any data shorter than a 130 character data string. Once the end of file marker was identified, it was removed and the original 130 character data string was restored. This same data logging error occurred several times on DN 54 and DN 75. Using the technique described above, the end of file marker was removed and no data were lost. On DN 59, PC-DAS version 4.03 was loaded and no subsequent data logging errors occurred until DN 75. *(END of Survey)*

The Hydrographic Data Acquisition and Processing System (HDAPS) was used to process all hydrographic data for this survey. A listing of version numbers for the various HP-DPS programs used for all data processing is appended \*

The following IBM-PC compatible computer programs were used:

NADCON	Ver. 1.01
OSWEGO IBM PC	Ver. 3.6 (1986) &
TO HP FILE COPY	Ver. 3.3
C&GS Nautical Charting	
Application of SEACAT Profiler	Ver. 2.00
NOS Sound Velocity Processing	
for Nautical Charting Division, C&GS	Ver. 2.00
WORDPERFECT	Ver. 6.0

## E. SONAR EQUIPMENT ✓

Not Applicable.

\* Filed with the hydrographic data.

## F. SOUNDING EQUIPMENT

An Innerspace model 448 depth sounder, S/N 188, was used to collect all echo soundings on this survey.

A standard lead line calibrated in meters, S/N 1292, was used during this survey for comparison readings with the echo sounder. Comparisons were generally taken in depths of 4 meters or less. A 3-meter wooden sounding pole with 0.2- and 0.5-meter graduations was also used during shoreline verification.

No problems were encountered with any of the sounding equipment. Depths in the survey area range from 0.7 to 5.7 meters.

## G. CORRECTIONS TO ECHO SOUNDINGS

Corrections for the speed of sound through the water column were computed from data acquired with two Sea-Bird Electronics SEACAT velocity probes, S/N 1448 and S/N 287. These instruments were calibrated by Sea-Bird Electronics, Inc. A copy of the calibration data is in the "Survey Separates." \*

The following velocity casts were taken on this survey:

Cast No.	Table No	DN	Applicable Days	Latitude (N)	Longitude (W)	Max. Depth
1	1	59	45-69	30/18/05	87/36/00	6.9 m
2	N/U	74	N/U	30/18/05	87/36/42	5.5 m
3	2	75	74-76	30/18/05	87/35/42	5.9 m
4	N/U	83	N/U	30/18/05	87/35/30	6.0 m

N/U - Not used on this survey.

TABLE 1 and 2  
were used during  
this survey.

Casts 1, 2 and 4 were taken with SEACAT S/N 1448. Cast 3 was taken with SEACAT S/N 287 because the office trailer's computer was not configured correctly to download the cast data. After the configuration problem was corrected, a cast taken with SEACAT S/N 1448 on DN 74 was processed. This cast produced sound velocity correctors identical to the cast taken on DN 75 using SEACAT S/N 287. The cast from DN 75 was used because it has a deeper extrapolated depth. Cast 4 was not used because it produced the same correctors as cast 3.

Program VELOCITY was used for computing the speed of sound correctors. Copies of the tables and support documentation are in the "Survey Separates." \*

Lead line comparisons were taken to determine instrument error. No instrument error was observed. The lead line was calibrated on February 10, 1994 with a steel tape. No corrections were necessary. A copy of the calibration form is in the "Survey Separates." \*

\* Filed with the hydrographic data.

A static draft of 0.3 meters was applied to the final sounding plot by the HDAPS Reapply Depth Correctors program. The draft was measured by subtracting the difference from a punch mark on the side of the launch 1292, 0.6m above the transducer, to the water surface.

Settlement and squat measurements for vessel 1292 were taken on March 31, 1993 using the level method. Settlement and squat correctors were applied to the final sounding plot by the HDAPS Reapply Depth Correctors program. Data from the settlement and squat tests are in the "Survey Separates." \*

The final sounding sheet is plotted using predicted tides determined for Pensacola, Florida using zoned time and height correctors designated in section 5.9 of the project instructions. Wind speed and direction during this survey had a far greater effect on the true water levels than did normal tidal action. This resulted in higher water levels during periods of southerly winds, and lower water levels during periods of northerly winds.

Approved water levels were requested from the Product and Services Branch, N/OES231, in a letter dated March 28, 1994. A copy of this memo is appended to this report. \* Approved Tide Note dated July 7, 1994 is attached.

## H. CONTROL STATIONS / See Eval Rpt, Section 2

The horizontal control datum used for this survey is the North American Datum of 1983. EDEN (004) and CAL3 (007) were used as horizontal control stations for this survey. The Control Station List is appended. These stations were established to third-order, class I standards with GPS by AHP personnel. These stations served as our GPS base station site (004) and our launch performance checkpoint (007) during work on this survey.

## I. HYDROGRAPHIC POSITION CONTROL ✓

Differential GPS (DGPS) was the only method of positioning used for all hydrographic data collected on this survey. Accuracy requirements were met for this 1:10,000 scale survey per section 4.4 of the Hydrographic Manual and section 3.4 of the Field Procedures Manual. Ashtech M-XII receiver (S/N 700157E1075) and antenna (S/N 700271A0064) were used for the reference station. An Ashtech Sensor (S/N 700378A0273) was used as the remote station on launch 1292. 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 the Eden base station, the program MONITOR was run at this site to test for multi-path at a 1:10,000 survey scale. Results of this test are included in the "Survey Separates." \*

Performance checks were accomplished by comparing the DGPS position of the vessel to the established calibration point, CAL3, per section 3.4.4 of the Field Procedures Manual. Performance checks were obtained daily. Abstracts of the performance checks are in the "Survey Separates." \*

\* Filed with the hydrographic data.

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

## J. SHORELINE *See Ema Report, section 2*

Shoreline support data were supplied by N/CG241 in the form of cartographic revision surveys (CRS) of registered shoreline maps from job CM-7719 (NAD 27). Shoreline shown on the mylar boat sheet was transferred by hand from BP-150716.

There was no final field sheet for H-10527, as this project was team processed with the Pacific Hydrographic Section. All shoreline details have been verified and are shown on the boat field sheet. Shoreline verification was accomplished by comparison of the main scheme hydrography which junctions at shore, detached positions, or by visual inspections. Field notes are located on the boat sheet and echograms.

The following changed or new features were located during this survey: *(Corrected for approved tides)*

Position No. 865<sup>✓</sup> describes a six-inch diameter pile at 30°18'07.95"N, 87°34'04.17"W, which was <sup>bare</sup>exposed 1.4 meters at the time of investigation.

Position No. 866<sup>✓</sup> describes a twelve-inch diameter pile at 30°17'50.66"N, 87°34'15.60"W, which was <sup>bare</sup>exposed 2.5 meters at the time of investigation.

Position No. 867<sup>✓</sup> describes a six-inch diameter pile at 30°17'49.75"N, 87°34'15.26"W, which was <sup>uncover 5</sup>exposed 0.3 meter at the time of investigation.

Position No. 868<sup>✓</sup> describes the offshore end of pier ruins extending into shore from 30°17'48.70"N, 87°34'18.68"W, which was <sup>uncover 5</sup>exposed 0.9 meter at the time of investigation.

Position No. 869<sup>✓</sup> describes the offshore end of pier ruins at 30°17'46.12"N, 87°34'27.63"W, which was <sup>uncover 5</sup>exposed 0.5 meter at the time of investigation. *Position describes ten piles in two rows of five each which do not extend to shore.*

Position No. 870<sup>✓</sup> describes the center of four twelve-inch diameter piles at 30°17'42.25"N, 87°34'38.78"W, which were <sup>bare</sup>exposed 1.5 meters at the time of investigation.

Position No. 871<sup>✓</sup> describes the offshore end of pier ruins at 30°17'40.80"N, 87°34'59.61"W, which were <sup>uncover 5</sup>exposed 0.7 meter at the time of investigation.

Position No. 872<sup>✓</sup> describes the inshore end of pier ruins at 30°17'40.07"N, 87°35'00.08"W, which were <sup>uncover 5</sup>exposed 0.7 meter at the time of investigation.

Position No. 873<sup>✓</sup> describes a six-inch diameter pile at 30°17'43.59"N, 87°35'06.45"W, which was <sup>bare</sup>exposed 1.0 meter at the time of investigation.



Position No. 874<sup>✓</sup> describes a snag, approximately 7 meters long, at 30°17'48.44"N, 87°35'35.54"W, which was <sup>uncover's</sup> exposed 0.1 meter at the time of investigation.

Position No. 875<sup>✓</sup> describes a snag, approximately 10 meters long, at 30°17'48.93"N, 87°35'38.50"W, which was <sup>bases</sup> exposed 1.0 meter at the time of investigation.

Position No. 876<sup>✓</sup> describes a snag, approximately 15 meters long, at 30°17'49.87"N, 87°35'45.18"W, which was <sup>bases</sup> exposed 1.2 meters at the time of investigation.

Position No. 877<sup>✓</sup> describes a snag at 30°17'57.21"N, 87°36'06.61"W, which was <sup>uncover's</sup> exposed 0.8 meter at the time of investigation.

Position No. 878<sup>✓</sup> describes a snag, approximately 5 meters long, at 30°17'58.66"N, 87°36'12.11"W, which was <sup>uncover's</sup> exposed 0.3 meter at the time of investigation.

Position No. 880<sup>✓</sup> describes an L-shaped pier with a boat house at 30°17'57.04"N, 87°36'13.42"W, which was <sup>bases</sup> exposed 1.0 meter at the time of investigation. *Drawn in red*

Position No. 881<sup>✓</sup> describes an L-shaped pier at 30°17'59.89"N, 87°36'20.31"W, which was <sup>bases</sup> exposed 1.7 meters at the time of investigation. *Drawn in red.*

Position No. 882<sup>✓</sup> describes a pier at 30°17'59.88"N, 87°36'22.66"W, which was <sup>bases</sup> exposed 1.4 meters at the time of investigation. *Drawn in red.* ✓

Position No. 883<sup>✓</sup> describes a pier at 30°17'59.12"N, 87°36'25.56"W, which was <sup>bases</sup> exposed 1.6 meters at the time of investigation. *Drawn in red.* ✓

Position No. 884<sup>✓</sup> describes pier ruins at 30°18'01.05"N, 87°36'33.20"W, which were <sup>bases</sup> exposed 1.3 meters at the time of investigation.

Position No. 887<sup>✓</sup> describes the offshore end of pier ruins at 30°18'00.84"N, 87°36'53.35"W, which were <sup>uncover's</sup> exposed 0.7 meter at the time of investigation.

Position No. 889<sup>✓</sup> describes pier ruins extending to shore at 30°20'10.36"N, 87°34'39.65"W, which were <sup>bases</sup> exposed 1.0 meter at the time of investigation.

Position No. 890<sup>✓</sup> describes an L-shaped pier, which is under construction, at 30°20'12.39"N, 87°34'39.91"W, which was <sup>bases</sup> exposed 1.0 meter at the time of investigation. *Drawn in red.* ✓

Position No. 891<sup>✓</sup> describes a pier at 30°20'22.48"N, 87°34'45.42"W, which was <sup>bases</sup> exposed 1.7 meters at the time of investigation. *Drawn in red.* ✓

Position No. 892<sup>✓</sup> describes a twelve-inch diameter pile at 30°20'26.94"N, 87°34'48.06"W, which was <sup>bases</sup> exposed 2.0 meters at the time of investigation.

Position No. 893 describes the offshore end of snags extending to shore (tip of point) at 30°20'28.21"N, 87°34'50.19"W, which was <sup>uncovered</sup> ~~exposed~~ 0.6<sup>7</sup> meter at the time of investigation.

Position No. 894 describes a boat house connected to shore at 30°20'46.42"N, 87°34'43.65"W, which was <sup>bares</sup> ~~exposed~~ at the time of investigation. <sup>uncovered</sup> Pier notation added to smooth sheet. Symbology is not shown due to scale of survey.

Position No. 895 describes a snag at 30°21'13.78"N, 87°34'22.79"W, which was <sup>uncovered</sup> ~~exposed~~ 0.5<sup>6</sup> meter at the time of investigation.

Position No. 896 describes the offshore end of pier ruins at 30°21'18.51"N, 87°34'20.17"W, which were <sup>uncovered</sup> ~~exposed~~ 0.8<sup>9</sup> meter at the time of investigation.

Position No. 897 describes the offshore end of pier ruins at 30°21'17.87"N, 87°34'21.75"W, which were <sup>uncovered</sup> ~~exposed~~ 0.5<sup>6</sup> meter at the time of investigation.

Position No. 898 describes a pier with a boat house at 30°20'57.91"N, 87°34'38.15"W, which was <sup>bares</sup> ~~exposed~~ 1.0 meter at the time of investigation. <sup>uncovered</sup> Drawn in red.

Position No. 899 describes a snag at 30°20'54.82"N, 87°34'45.82"W, which was <sup>uncovered</sup> ~~exposed~~ 0.1<sup>2</sup> meter at the time of investigation.

Position No. 900 describes a "T" shaped pier at 30°20'59.86"N, 87°34'44.10"W, which was <sup>uncovered</sup> ~~exposed~~ 0.8<sup>9</sup> meter at the time of investigation. <sup>uncovered</sup> Drawn in red.

Position No. 901 describes a snag at 30°20'40.19"N, 87°34'51.43"W, which was <sup>uncovered</sup> ~~exposed~~ 0.6<sup>7</sup> meter at the time of investigation.

Position Nos. 902 and 903 describe a foul area with snags in the vicinity of 30°20'33.3"N, 87°34'56.10"W. The snags were <sup>bares</sup> ~~exposed~~ 0.9<sup>10</sup> meter at the time of investigation.

Position No. 904 describes a twelve-inch diameter pile at 30°20'23.41"N, 87°34'57.33"W, which was <sup>bares</sup> ~~exposed~~ 3.0<sup>1</sup> meters at the time of investigation.

Position No. 905 describes a snag at 30°20'16.17"N, 87°35'03.46"W, which was <sup>uncovered</sup> ~~exposed~~ 0.1<sup>2</sup> meter at the time of investigation.

Position No. 906 describes a snag at 30°20'14.97"N, 87°35'36.18"W, which was <sup>uncovered</sup> ~~exposed~~ 0.4<sup>5</sup> meter at the time of investigation.

Position Nos. 907 through 909 describe an area foul with snags in the vicinity of 30°20'36.50"N, 87°35'56.40"W. The snags range from <sup>uncovered</sup> ~~exposed~~ 0.5<sup>7</sup> to <sup>bares</sup> 3.0<sup>2</sup> meters at the time of investigation.

Position No. 910 describes the offshore end of an area foul with snags at 30°20'43.99"N, 87°35'59.61"W. The snags were <sup>bares</sup> ~~exposed~~ 1.0<sup>2</sup> meter at the time of investigation.

Position Nos. 911 through 912 describe an area foul with snags in the vicinity of 30°20'47.50"N, 87°35'56.60"W. The snags range from <sup>uncovered</sup> exposed 0.4 to <sup>bars 3</sup> 1.1 meters at the time of investigation.

Position No. 913 describes an L-shaped pier with a boat house on the south side at 30°20'49.73"N, 87°35'57.45"W, which was <sup>Drawn in red.</sup> exposed 1.0 <sup>bars</sup> meter at the time of investigation.

Position No. 914 describes an L-shaped pier at 30°20'53.45"N, 87°35'57.00"W, which was <sup>bars</sup> exposed 1.0 meter at the time of investigation. <sup>Drawn in red.</sup>

Position No. 915 describes an L-shaped pier with a boat house on the south side at 30°21'00.32"N, 87°36'00.33"W, which was <sup>Drawn in red.</sup> exposed 1.2 <sup>bars</sup> meters at the time of investigation.

Position No. 916 describes the offshore end of snags extending to shore from 30°21'03.65"N, 87°35'58.92"W, which were <sup>uncovered</sup> exposed 0.8 <sup>bars</sup> meter at the time of investigation.

Position No. 918 describes the west offshore end of a pier with a boat house at 30°21'20.02"N, 87°35'54.25"W. <sup>Pier not shown due to scale of survey. Notation added to smooth sheet to describe area.</sup>

Position No. 919 describes the offshore end of a boat house at 30°21'18.79"N, 87°35'58.23"W.

Position No. 920 describes the offshore end of an L-shaped pier at 30°21'18.31"N, 87°35'59.37"W.

Position No. 922 describes the offshore end of an L-shaped pier at 30°21'27.62"N, 87°36'17.89"W.

Position No. 923 describes the offshore end of a pier with a boat house at 30°21'44.62"N, 87°36'10.86"W.

Position No. 924 describes the offshore end of a pier with boat house at 30°21'44.84"N, 87°36'10.54"W.

Position No. 925 describes the offshore end of a pier with boat house at 30°21'47.82"N, 87°36'10.78"W.

Position Nos. 926 and 927 describe the south and north sides, respectively, of a submerged cable crossing sign in the vicinity of 30°21'49.60"N, 87°36'09.40"W. <sup>Noted as marker (sign, subm cable crossing) on sounding plot.</sup>

Position No. 928 describes the west side center of a fixed bridge at 30°21'50.10"N, 87°36'09.26"W. The vertical and horizontal clearances can be found on the echogram.

Position No. 929 describes the offshore end of an L-shaped pier at 30°21'50.33"N, 87°36'09.98"W, which was <sup>uncovered</sup> exposed 0.6 <sup>bars</sup> meter at the time of investigation.

Position No. 930 describes a submerged snag at 30°21'34.11"N, 87°36'18.74"W, which was <sup>covered</sup> ~~was~~ 0.3 meter below the water surface at the time of investigation. *a.1*

Position No. 931 describes the offshore end of a pier with a covered enclosure at 30°21'17.89"N, 87°36'27.23"W, which was <sup>bare</sup> ~~was~~ exposed 1.0<sup>3</sup> meter at the time of investigation. *Drawn in red.*

Position No. 932 describes the offshore end of a pier with a boat house at 30°21'27.92"N, 87°36'41.70"W, which was <sup>uncovered</sup> ~~was~~ exposed 0.6<sup>9</sup> meter at the time of investigation.

Position No. 933 describes the offshore end of a pier with a boat house at 30°21'28.91"N, 87°36'42.09"W, which was <sup>bare</sup> ~~was~~ exposed 1.2<sup>5</sup> meters at the time of investigation.

Position No. 934 describes the offshore end of a pier with a boat house at 30°21'29.89"N, 87°36'42.88"W, which was <sup>bare</sup> ~~was~~ exposed 0.7<sup>10</sup> meter at the time of investigation.

Position No. 935 describes the offshore end of a pier with a boat house at 30°21'30°.38"N, 87°36'43.49"W, which was <sup>bare</sup> ~~was~~ exposed 0.8<sup>11</sup> meter at the time of investigation.

Position No. 936 describes a snag at 30°21'31.31"N, 87°36'44.20"W, which was <sup>uncovered</sup> ~~was~~ exposed 0.2<sup>5</sup> meters at the time of investigation.

Position No. 937 describes a snag at 30°21'31.91"N, 87°36'44.54"W, which was <sup>uncovered</sup> ~~was~~ exposed 0.2<sup>5</sup> meters at the time of investigation.

Position No. 938 describes the offshore end of a pier with a boat house that is under construction at 30°21'38.09"N, 87°36'51.72"W, and was <sup>bare</sup> ~~was~~ exposed 1.3<sup>6</sup> meters at the time of investigation. *Drawn in red.*

Position No. 939 describes a 12"x12" timber and snag obstruction at 30°21'39.26"N, 87°36'59.04"W, which was <sup>uncovered</sup> ~~was~~ exposed 0.0<sup>3</sup> meter at the time of investigation. *Noted as obstr (wood) on the sounding plot.*

Position No. 940 describes the offshore end of a pier with a boat house at 30°21'39.06"N, 87°36'53.96"W, which was <sup>bare</sup> ~~was~~ exposed 0.7<sup>12</sup> meter at the time of investigation. *Drawn in red*

Position No. 941 describes the offshore end of a pier with a boat house at 30°21'42.42"N, 87°37'04.98"W, which was <sup>bare</sup> ~~was~~ exposed 0.9<sup>12</sup> meter at the time of investigation.

Position No. 942 describes the offshore end of a pier with a boat house at 30°21'43.05"N, 87°37'04.98"W, which was <sup>bare</sup> ~~was~~ exposed 0.8<sup>11</sup> meter at the time of investigation.

Position No. 943 describes a submerged snag at 30°21'46.66"N, 87°37'17.41"W, which was <sup>uncovered</sup> ~~was~~ 0.1<sup>2</sup> meter below the water surface at the time of investigation.

Position No. 944 describes a snag at 30°21'48.11"N, 87°37'18.00"W, which was <sup>uncovered</sup> ~~was~~ exposed 0.2<sup>5</sup> meter at the time of investigation.

Position No. 945 describes a snag at 30°21'49.62"N, 87°37'17.41"W, which was <sup>uncovers</sup> ~~exposed~~ 0.3<sup>6</sup> meter at the time of investigation.

Position No. 947 describes the offshore end of a pier with a boat house at 30°21'55.33"N, 87°37'16.26"W, which was <sup>bases</sup> ~~exposed~~ 1.5<sup>8</sup> meters at the time of investigation.

Position No. 948 describes the offshore end of a pier at 30°21'59.75"N, 87°37'16.20"W, which was <sup>bases</sup> ~~exposed~~ 0.8 meter at the time of investigation.

Position No. 949 describes a the offshore end of a pier at 30°22'01.06"N, 87°37'16.16"W, which was <sup>bases</sup> ~~exposed~~ 1.2 meters at the time of investigation.

Position No. 950 describes the offshore end of a pier with a boat ramp on the south side at 30°22'04.52"N, 87°37'13.89"W, which was <sup>bases</sup> ~~exposed~~ 1.1 meters at the time of investigation.

Position No. 951 describes the offshore end of a pier at 30°22'06.99"N, 87°37'10.93"W, which was <sup>bases</sup> ~~exposed~~ 0.7 meter at the time of investigation.

Position No. 953 describes the offshore end of a pier with a boat house at 30°22'07.99"N, 87°37'09.43"W, which was <sup>bases</sup> ~~exposed~~ 1.0 meter at the time of investigation.

Position No. 954 describes the center of a fixed bridge at 30°22'13.13"N, 87°37'06.44"W. The vertical and horizontal clearances can be found on the echogram.

Position No. 955 describes the offshore end of pier ruins extending into shore from 30°22'04.35"N, 87°37'15.26"W, which were <sup>uncovers</sup> ~~exposed~~ 0.4<sup>7</sup> meter at the time of investigation.

Position No. 956 describes an Alabama Waterway Commission "Idle Speed, No Wake" sign at 30°22'08.14"N, 87°37'21.00"W, which was <sup>bases</sup> ~~exposed~~ 2.0<sup>3</sup> meters at the time of investigation.  
Note as "marker (sign, Idle speed)" on sounding plot.

Position No. 957 describes the center of two piles which are parallel to the shoreline at 30°22'08.54"N, 87°37'21.44"W, which were <sup>bases</sup> ~~exposed~~ 2.0<sup>2</sup> meters at the time of investigation.

Position Nos. 958 and 959 describe the south and north offshore corners, respectively, of a large boat house in the vicinity of 30°22'10.4"N, 87°37'22.1"W. A boat ramp is located just north of the boathouse.

Position No. 960 describes a six-inch diameter pile at 30°22'11.88"N, 87°37'22.80"W, which was <sup>bases</sup> ~~exposed~~ 1.6<sup>9</sup> meters at the time of investigation.

Position No. 962 describes a six-inch diameter pile at 30°22'12.60"N, 87°37'23.15"W, which was <sup>bases</sup> ~~exposed~~ 1.8<sup>2.1</sup> meters at the time of investigation.

Position No. 963 describes the center of a fixed bridge at 30°22'13.06"N, 87°37'23.96"W. The vertical and horizontal clearances can be found on the echogram.

Position No. 964 ✓ describes a snag at 30°21'39.44"N, 87°37'04.14"W, which <sup>uncovers</sup> was exposed 0.2<sup>5</sup> meter at the time of investigation.

Position No. 965 ✓ describes the offshore end of a pier with a boat house at 30°21'37.74"N, 87°37'04.29"W, which was exposed 0.7<sup>10</sup> meter at the time of investigation. <sup>bare.s</sup>

Position No. 966 ✓ describes a snag at 30°21'30.59"N, 87°36'46.76"W, which was <sup>uncovers</sup> exposed 0.3<sup>6</sup> meter at the time of investigation.

Position No. 967 ✓ describes the offshore end of pier ruins extending into shore from 30°21'15.90"N, 87°36'42.78"W, which were exposed 0.3<sup>6</sup> meter at the time of investigation.

Position No. 968 ✓ describes the offshore end of a pier with a boat house at 30°21'07.84"N, 87°36'52.70"W, which was exposed 0.9<sup>5</sup> meter at the time of investigation. <sup>bare.s</sup>

Position No. 969 ✓ describes the offshore end of a pier with a boat house at 30°21'08.93"N, 87°36'51.72"W, which was exposed 1.0<sup>3</sup> meter at the time of investigation. <sup>bare.s</sup>

Position No. 970 ✓ describes the offshore end of a pier with a boat house at 30°21'08.86"N, 87°36'50.41"W, which was exposed 1.2<sup>5</sup> meters at the time of investigation. <sup>bare.s</sup>

Position No. 972 ✓ describes the offshore end of a pier with a boathouse at 30°21'08.96"N, 87°36'46.26"W, which was exposed 1.0<sup>3</sup> meter at the time of investigation. <sup>bare.s</sup>

Position No. 973 ✓ describes a boat ramp at 30°21'07.68"N, 87°36'39.59"W.

Position No. 974 ✓ describes a boat ramp at 30°21'07.57"N, 87°36'39.31"W.

Position No. 975 ✓ describes a ten-inch diameter pile at 30°20'40.22"N, 87°36'11.96"W, which was <sup>uncovers</sup> exposed 0.6<sup>9</sup> meter at the time of investigation.

Position No. 976 ✓ describes the offshore end of a pier with a boat house at 30°20'34.00"N, 87°36'12.56"W, which was exposed 1.2<sup>5</sup> meters at the time of investigation. <sup>bare.s</sup> Drawn in red.

Position No. 977 ✓ describes the offshore end of an L-shaped pier with a boat house at 30°20'29.11"N, 87°36'23.57"W, which was exposed 1.1<sup>4</sup> meters at the time of investigation. <sup>bare.s</sup>

Position No. 978 ✓ describes a twelve-inch diameter pile at 30°21'12.45"N, 87°36'04.64"W, which was <sup>bare.s</sup> exposed 1.4 meters at the time of investigation.

Position No. 979 ✓ describes the offshore end of a pier with a boat house, which are under construction, at 30°20'30.29"N, 87°36'28.07"W, which was exposed 1.6 meters at the time of investigation. <sup>bare.s</sup> Drawn in red.

Position No. 980<sup>✓</sup> describes the offshore end of a pier with a covered enclosure at 30°20'30.39"N, 87°36'28.82"W, which was ~~exposed~~<sup>bared</sup> 1.6 meters at the time of investigation.

Position No. 981<sup>✓</sup> describes the offshore end of a pier with a boat house, which are under construction, at 30°20'29.99"N, 87°36'30.72"W, which was ~~exposed~~<sup>bared</sup> 1.6 meters at the time of investigation. *Drawn in red.*

Position No. 982<sup>✓</sup> describes the offshore end of a pier with a boat house at 30°20'31.12"N, 87°36'30.92"W, which was ~~exposed~~<sup>bared</sup> 1.5 meters at the time of investigation. *Drawn in red.*<sup>✓</sup>

Position No. 983<sup>✓</sup> describes the offshore end of an L-shaped pier at 30°20'32.39"N, 87°36'46.92"W, which was ~~exposed~~<sup>bared</sup> 1.7 meters at the time of investigation. *Drawn in red.*<sup>✓</sup>

Position No. 984<sup>✓</sup> describes a boat ramp at 30°20'32.74"N, 87°36'47.50"W.

Position No. 985<sup>✓</sup> describes the offshore end of an L-shaped pier with a boat house at 30°20'35.50"N, 87°36'51.77"W, which was ~~exposed~~<sup>bared</sup> 1.2 meters at the time of investigation.

Position No. 986<sup>✓</sup> describes the offshore end of a pier with a boat house at 30°20'39.55"N, 87°36'56.66"W, which was ~~exposed~~<sup>bared</sup> 1.3 meters at the time of investigation.

Position No. 987<sup>✓</sup> describes a snag at 30°20'40.08"N, 87°36'58.65"W, which was ~~exposed~~<sup>uncovered</sup> 0.5 meter at the time of investigation.

Position No. 988<sup>✓</sup> describes the offshore end of a pier with a boat house at 30°20'40.91"N, 87°36'59.37"W, which was ~~exposed~~<sup>bared</sup> 1.7 meters at the time of investigation. *Pier is too small to show at survey scale. Notation has been added to the smooth sheet to describe area.*

Position No. 989<sup>✓</sup> describes a twelve-inch diameter pile at 30°20'01.30"N, 87°36'09.92"W, which was ~~exposed~~<sup>bared</sup> 1.8 meters at the time of investigation.

#### K. **CROSSLINES**<sup>✓</sup>

A total of 10.2 linear nautical miles of crosslines were acquired on H-10527 which equals 10.5% of the main scheme hydrography. Cross line soundings agree with the main scheme soundings within 0.5 meters. This difference is attributed to running main scheme hydrography during times when strong winds affected local water levels.

#### L. **JUNCTIONS**<sup>✓</sup> *See Eval Rpt, Section 5*

This survey junctions to the east with survey H-10525, a 1:10,000 scale survey from 1994. Junction sounding comparison between this survey and H-10525 are within 0.2 meters.

**M. COMPARISON WITH PRIOR SURVEYS** *See Enc Report, section 6*

See Pacific Hydrographic Section's evaluation report for H-10527.

**N. ITEM INVESTIGATION REPORTS**

<u>AWOIS NO.</u>	<u>SECTION</u>	<u>STATUS</u>	<u>RECOMMENDATION</u>
8465	N2	Disproved	Delete "Obstn" symbol and note. Chart soundings from present survey.
8466	N3	Disproved	Delete charted submerged wreck symbol and note. Chart soundings from present survey.
8468	N4	Disproved	Delete charted "Obstr Fish Haven" note and symbol. Chart soundings <i>Do not concur</i> from present survey.
8534	N5	Disproved	Delete note "Shoal rep, PA." Chart soundings from present survey.
8535	N6	Disproved	Delete "Dols PA" symbol and note. Chart soundings from present survey.

**N2 AWOIS ITEM 8465 ✓✓**

**1. Area of Investigation**

State: Alabama, Baldwin County  
Locality: Wolf Bay  
Reported Latitude: 30° 18' 00.000" N  
Reported Longitude: 87° 36' 00.000" W  
Datum: NAD83  
Feature: Obstruction

**2. Description of Item**

In LNM 41/86, a steel cylinder, approximately 9 feet long and 5 feet in diameter was reported aground approximately 30 yards south of the channel at approximate position 30/18/00N, 87/36/00 W. It had been marked with a temporary green lighted buoy.



### 3. Survey Requirements

Survey requirements specify using a visual search, echo sounder search, or bottom drag within a 50-meter search radius.

### 4. Method of Investigation

A 100-meter radius dive investigation was conducted on DN 76. Additionally, the Pensacola Unit of the U.S.C.G. Aids to Navigation was contacted (904-455-2354) as well as several local residents.

### 5. Results of Investigation

Divers spent thirty minutes conducting a 100-meter circle search (Pos. No. 1267). The average water depth was 1.4 meters with 2.0 meters of water visibility. The described AWOIS item was not found.

CPO Lewis, U.S.C.G., stated that the owner was responsible for marking the obstruction. He said the owner probably marked the cylinder with the lighted buoy and salvaged it a short time later. Local residents stated that no steel tank was known to exist in the area. They believed it may have been salvaged, however they do not know by whom.

### 6. Comparison with Prior Surveys

Not applicable.

### 7. Comparison with the Chart and Charting Recommendations

The note "Obstr" and symbol are charted on NOAA Chart 11378, Santa Rosa Sound to Dauphin Island, 1:40,000, 26th Ed., Sept. 5, 1992.\* It is recommended that the note and symbol be deleted from the chart and that the soundings from this survey be used in the common area.

\* Also 27<sup>th</sup>, MAY 7, 1994

N3 AWOIS ITEM 8466 ✓✓

#### 1. Area of Investigation

State:	Alabama, Baldwin County
Locality:	Wolf Bay
Reported Latitude:	30° 18' 06.720" N
Reported Longitude:	87° 36' 13.930" W
Datum:	NAD83
Feature:	wreck

## 2. Description of Item

CL1790/74 states that the U.S. Power Squadron reported the burned remains of a boat, showing 2 to 3 feet just north of the Intracoastal Waterway, across from can buoy "125." The position was estimated to be 30/18/07 N, 87/36/21 W, (NAD27). U.S. Coast Guard responded to this report, which resulted in the repositioning of the wreck at position 30/18/06 N, 87/36/14 W, (NAD27), which is 100 yards west of Pensacola/Mobile buoy 124 (now R"88") and 30 yards north of the channel. The USCG reported wreck is in two feet of water and two feet of wreckage was showing above the water.

In addition, the AWOIS listing states that the U.S. Power Squadron reported in CL1304/84 that the shipwreck charted near mile marker 160 was not present. The shipwreck is charted as a submerged wreck.

## 3. Survey Requirements

Survey requirements specify using a visual search, echo sounder search, or bottom drag within the 50-meter search radius.

## 4. Method of Investigation

An echo sounder search was conducted in the area using 10-meter line spacing. Additionally, interviews were conducted with several local residents.

## 5. Results of Investigation

Soundings within the area searched ranged from 1.<sup>8</sup><sub>6</sub> to 5.<sup>0</sup><sub>2</sub> meters. No wreck, wreckage, or ruins were seen in the area.

Several local residents reported the wreck's engine was removed and the hulk towed away.

## 6. Comparison with Prior Surveys

Not applicable.

## 7. Comparison with the Chart and Charting Recommendations

The wreck is charted on NOAA Chart 11378, Santa Rosa Sound to Dauphin Island, 1:40,000, 26th Ed., Sept. 5, 1992.\* It is recommended that the wreck be deleted from the chart and that the soundings from this survey be used in the common area. \* Also 27<sup>th</sup> Edition, May 7, 1994.

✓  
concur

N4. AWOIS ITEM 8468 ✓✓

**1. Area of Investigation**

State: Alabama, Baldwin County  
Locality: Wolf Bay  
Reported Latitude: 30° 19' 30.720" N  
Reported Longitude: 87° 35' 29.930" W  
Datum: NAD83  
Depth: 5 feet  
Feature: Obstruction Fish Haven

**2. Description of Item**

In CL1475/76, a permit for an artificial fishing reef is requested. The reef was to be established in March 1976 by sinking an old automobile, weighted by chains, in position 30/19/30N, 87/35/30W, approximately 150 yards east of Mulberry Point. Reef will have a minimum clearance of 5 feet below MLW.

**3. Survey Requirements**

Survey requirements specify an echo sounder search within a 100-meter search radius. A disapproval may be acquired using salvage documentation.

**4. Method of Investigation**

An echo sounder search was conducted using 10-meter line spacing.

**5. Results of Investigation**

The soundings within the search area range from 2.5 to 2.9 meters. The bottom is flat, with no significant change in the bottom contour.

**6. Comparison with Prior Surveys**

Not applicable.

**7. Comparison with the Chart and Charting Recommendations**

The note "Obstr Fish Haven (authorized minimum depth 5 ft)" and symbol are charted on NOAA Chart 11378, Santa Rosa Sound to Dauphin Island, 1:40,000, 26th Ed., Sept. 5, 1992. It is recommended that the note and symbol be deleted from the chart and that the soundings from this survey be used in the common area. ~~Do not concern.~~ We do not have the authority to remove. It is recommended that the obstr Fish Haven be noted as "abandoned" (see below)

Remove Fish Haven, per telcon with State of Alabama Dept of Marine Resources, Walter Tatum, tel 334-968-7576 Haven has silted over & will no longer be used, permit expired 12/31/77. mcr 9/22/95.

**N5. AWOIS ITEM 8534** ✓✓

**1. Area of Investigation**

State:	Alabama, Baldwin County
Locality:	Wolf Bay
Reported Latitude:	30° 18' 20.70" N
Reported Longitude:	87° 33' 59.90" W
Datum:	NAD83
Feature:	shoal

**2. Description of Item**

AWOIS item 8534 originated from Local Notice to Mariners 37/91.

**3. Survey Requirements**

Survey requirements specify using reduced line spacing within a 75-meter search radius.

**4. Method of Investigation**

An echo sounder search was conducted using 10-meter line spacing. Additionally, a 10-meter line spacing search was conducted around Buoy 74A (Pos. No.637).

**5. Results of Investigation**

Soundings within the AWOIS search area range between 2.8 and 5.0 meters. Most of the this area lies within the Intracoastal Waterway channel. The shoalest sounding in the area around buoy "74A" is 2.8 meters.

1  
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**6. Comparison with Prior Surveys**

Not applicable.

**7. Comparison with the Chart and Charting Recommendations**

The note "Shoal rep PA" is charted on NOAA Chart 11378, Santa Rosa Sound to Dauphin Island, 1:40,000, 26th Ed., Sept. 5, 1992.\* It is recommended that the note be deleted from the chart and that buoy "74A" and the soundings from this survey be charted in the common area. *CONCUR*

\* Also 27th Ed., May 7, 1994

**N6. AWOIS ITEM 8535 ✓**

**1. Area of Investigation**

State:	Alabama, Baldwin County
Locality:	Wolf Bay
Reported Latitude:	30° 18' 06.000" N
Reported Longitude:	87° 35' 40.000" W
Datum:	NAD83
Feature:	dolphins

**2. Description of Item**

CL1755/77 states that the U.S. Power Squadron reported an uncharted row of piles existing between buoys N"116" and N"120." Five pile clusters were added for barge traffic. A row of five dolphins were added to the chart from position 30/18/06N, 87/35/35W to 30/18/06N, 87/35/45W, (NAD83). This item was scaled from chart 11378, 26th Ed., 1992.

The dolphins were not shown on a 1978 photo (TP-00542/78--CM-7719).

**3. Survey Requirements**

Survey requirements specify searching 50 meters either side of an axis along 30/18/07N, from 87/35/35W to 87/35/45W (NAD83), using visual search, bottom drag, or diver investigation. A disapproval may be acquired using salvage documentation.

**4. Method of Investigation**

A dive investigation was conducted on DN 76. Additionally, the Pensacola Unit of the U.S.C.G. Aids to Navigation was contacted (904-455-2354).

**5. Results of Investigation**

During the course of mainscheme hydrography, no dolphins were visible. Divers performed a 75-meter circle search (Pos. No. 1268) in excellent water visibility and discovered nothing. CPO Lewis and BM1 Voynovich, U.S.C.G., stated that their records show that the dolphins were not referenced during a 1980 service report. They do not know who removed them or when.

**6. Comparison with Prior Surveys**

Not applicable.

## 7. Comparison with the Chart and Charting Recommendations

The note "Dols PA" and symbol are charted on NOAA Chart 11378, Santa Rosa Sound to Dauphin Island, 1:40,000, 26th Ed., Sept. 5, 1992.\* It is recommended that the note and symbols *Do not* be deleted from the chart and that the soundings from this survey be used in the common area. *CONCUR*  
*\* 27th Ed. MAY 7, 1994*  
*See FUR Report, section 7*

### O. COMPARISON WITH THE CHART *See FUR Report, section 7*

Soundings from this chart originate from prior survey H-5723, H-2073, and BP28785-87. Final sounding comparisons will be done by Pacific Hydrographic Section.

No dangers to navigation were identified on this survey.

Five AWOIS items within the survey area originate from miscellaneous sources and are described in section N. of this report.

Non-sounding features were compared with the 26th edition of Chart No. 11378, dated September 5, 1992. The following features were investigated during this survey:

Position Nos. 886<sup>✓</sup> and 887<sup>✓</sup> serve to disprove the existence of an overhead cable at 30°17'59"N, 87°36'39"W. Local residents stated that the overhead cable was rerouted around the inlet approximately five years earlier.

**Recommendation:** Delete the charted overhead cable. *CONCUR*

Position No. 888 describes the disproval of a charted pier in the vicinity of 30°19'52.26"N, 87°34'55.37"W. No signs of ruins were visible at the time of investigation.

**Recommendation:** Delete the charted pier. *CONCUR*

Position Nos. 994, 995, and 996 describe the disproval of three charted islets in the vicinity of 30°18'12"N, 87°36'21"W. Additionally, 50-meter line spacing (Pos. Nos. 1088 through 1140) was utilized to define the depth contours in the area. Depths ranged from 0.7 to ~~2.0~~<sup>1.0</sup> meters. The hydrographer believes these charted features were the spoils from when the Intracoastal Waterway was initially dredged. Soundings from the 1891 survey (H-2073) range from 4 to 8 feet.

**Recommendation:** Delete the charted islets. *CONCUR*

Position No. 1000 describes the disproval of a charted pile in the vicinity of 30°18'02.43"N, 87°37'19.72"W. A 50-meter circle drag was conducted and nothing was found.

**Recommendation:** Delete the charted pile. *CONCUR*

Position No. 1001 describes the disproval of a charted pier in the vicinity of 30°18'55.38"N, 87°35'49.20"W. A 150-meter circle drag was conducted and nothing was found.

**Recommendation:** Delete the charted pier. *Concur*

Position No. 1269 describes the disproval of charted islets in the vicinity of 30°18'01.87"N, 87°37'12.19"W. Divers conducted a 50-meter radius circle search and found nothing. The hydrographer believes the charted islets originated from H-2073 (1891), before the Intracoastal Waterway channel was dredged. These charted islets do not appear on BP-150716.

**Recommendation:** Delete the charted islets. *Concur*

Position No. 1270 describes the disproval of a charted pile in the vicinity of 30°18'02.29"N, 87°36'36.24"W. Divers conducted a 50-meter radius circle search and found nothing.

**Recommendation:** Delete the charted pile. *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 14 non-floating and 7 floating aids to navigation in the survey area. All 14 non-floating aids and 5 of the 7 floating aids are published in the U.S. Coast Guard Light List, Vol. 4, 1993. The following list shows the comparison between survey, light list and positions scaled from NOS chart 11378.

##### Buoy 74A (not in 1993 Light List)

Published Position	None	
Hydro Field Position	30° 18' 20.430"N	87° 34' 04.910"W ✓
Scaled Position	None (Buoy is not charted)	

##### Daybeacon 75 (Light List # 31490)

Published Position	None	
Hydro Field Position	30° 18' 11.998"N	87° 34' 08.616"W ✓
Scaled Position	30° 18' 10"N	87° 34' 07"W

Daybeacon 76 (Light List # 31495)

Published Position	None	
Hydro Field Position	30° 18' 15.662"N	87° 34' 12.230"W ✓
Scaled Position	30° 18' 15"N	87° 34' 12"W

Daybeacon 77 (Light List # 31500)

Published Position	None	
Hydro Field Position	30° 18' 00.309"N	87° 34' 29.687"W ✓
Scaled Position	30° 18' 00"N	87° 34' 29"W

Light 78 (Light List # 31505)

Published Position	30° 17' 36"N	87° 34' 24"W
Hydro Field Position	30° 18' 05.027"N	87° 34' 30.253"W ✓
Scaled Position	30° 18' 06"N	87° 34' 30"W

Buoy 80 (Light List # 31510)

Published Position	None	
Hydro Field Position	30° 18' 03.823"N	87° 34' 38.021"W ✓
Scaled Position	30° 18' 06"N	87° 34' 40"W

Daybeacon 81 (Light List # 31515)

Published Position	None	
Hydro Field Position	30° 18' 02.251"N	87° 35' 04.479"W ✓
Scaled Position	30° 18' 02"N	87° 35' 05"W

Daybeacon 82 (Light List # 31520)

Published Position	None	
Hydro Field Position	30° 18' 05.632"N	87° 35' 04.037"W ✓
Scaled Position	30° 18' 06"N	87° 35' 05"W

Buoy 84 (Light List # 31525)

Published Position	None	
Hydro Field Position	30° 18' 06.320"N	87° 35' 25.037"W ✓
Scaled Position	30° 18' 06"N	87° 35' 24"W

Daybeacon 85 (Light List # 31530)

Published Position	None	
Hydro Field Position	30° 18' 02.325"N	87° 35' 33.764"W ✓
Scaled Position	30° 18' 03"N	87° 35' 32"W

Light 86 (Light List # 31535)

Published Position	None	
Hydro Field Position	30° 18' 07.046"N	87° 35' 42.272"W ✓
Scaled Position	30° 18' 07"N	87° 35' 42"W



Light 87 (Light List # 31540)

Published Position	None	
Hydro Field Position	30° 18' 03.407"N	87° 36' 10.281"W ✓
Scaled Position	30° 18' 03"N	87° 36' 10"W

Daybeacon 88 (Light List # 31545)

Published Position	None	
Hydro Field Position	30° 18' 06.196"N	87° 36' 10.501"W ✓
Scaled Position	30° 18' 06"N	87° 36' 10"W

Buoy 89 (Light List # 31550)

Published Position	None	
Hydro Field Position	30° 18' 03.958"N	87° 36' 31.547"W ✓
Scaled Position	30° 18' 04"N	87° 36' 30"W

Buoy 90 (Light List # 31555)

Published Position	None	
Hydro Field Position	30° 18' 06.392"N	87° 36' 34.080"W ✓
Scaled Position	30° 18' 06"N	87° 36' 31"W

Daybeacon 91 (Light List # 31560)

Published Position	None	
Hydro Field Position	30° 18' 04.143"N	87° 36' 45.271"W ✓
Scaled Position	30° 18' 03"N	87° 36' 44"W

Daybeacon 92 (Light List # 31565)

Published Position	None	
Hydro Field Position	30° 18' 05.877"N	87° 36' 45.441"W ✓
Scaled Position	30° 18' 06"N	87° 36' 44"W

Daybeacon 93 (Light List # 31570)

Published Position	None	
Hydro Field Position	30° 18' 03.688"N	87° 37' 07.939"W ✓
Scaled Position	30° 18' 03"N	87° 37' 09"W

Light 94 (Light List # 31575)

Published Position	None	
Hydro Field Position	30° 18' 06.244"N	87° 37' 20.480"W ✓
Scaled Position	30° 18' 06"N	87° 37' 20"W

Buoy 95 (Light List # 31580)

Published Position	None	
Hydro Field Position	30° 18' 02.729"N	87° 37' 24.880"W ✓
Scaled Position	30° 18' 03"N	87° 37' 26"W

Buoy 95A (not in 1993 Light List)

Published Position	None	
Hydro Field Position	30° 18' 00.997"N	87° 37' 28.904"W ✓
Scaled Position	None (buoy is not charted)	

The Pensacola office of the U.S.C.G. Aids to Navigation was contacted [Phone number (904) 455-2354] on DN 77. BM1 Voynovich stated that Buoy 74A was established in September 1991 and was set in 8 feet of water, to mark the tip of a shoal (AWOIS 8534) that encroaches into the channel. In addition, BM1 Voynovich stated that Buoy 95A was established in July 1992 to mark a shoal and was set in 9 feet of water. *These aids are recommended for charting. See the above positions.*

All fixed aids to navigation adequately serve their intended purpose. The characteristics listed in the Light List, Volume IV, 1993 Edition are accurate. *correct*

**R. STATISTICS** ✓

<u>Description</u>	<u>Quantity</u>
Total Number of Positions	1353
Total Lineal Nautical Miles of Hydrography	107.5
Total Lineal Nautical Miles of Cross Lines	10.2
Square Nautical Miles of Hydrography	6.3
Days of Production	14
Detached Positions	164
Bottom Samples	20
Tide Stations	1
Velocity Casts	2

**S. MISCELLANEOUS** ✓

No significant current conditions were observed while conducting this survey.

There were 20 bottom samples acquired on this survey. They were submitted to the Smithsonian Institution as directed in section 6.7 of the project instructions. Bottom sample positions are plotted on the detached position plot and are listed on the Oceanographic Log Sheet-M, NOAA Form 75-44, in the "Survey Separates." \*

\* Filed with the hydrographic data.

Through observations made by AHP personnel, as well as discussions with local residents, and a reference noted in the NOS, Tide Tables, 1993, it has been noted that prolonged (two or more days) of northerly winds cause extremely low tides.

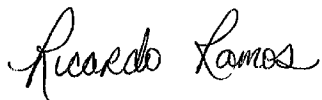
#### T. RECOMMENDATIONS ✓

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

#### U. REFERRAL TO REPORTS ✓

<u>Title</u>	<u>Transmittal Information</u>
Descriptive Report to Accompany Survey H-10527	Pacific Hydrographic Section Seattle, WA (N/CG245) (5/94)
Horizontal Control Report for OPR-J233-AHP	Field Photogrammetry Section Norfolk, VA (N/CG23322) (11/93)
User Evaluation Report OPR-J233-AHP	Atlantic Hydrographic Section Norfolk, VA (N/CG244) (3/94)
Coast Pilot Report	Pacific Hydrographic Section Seattle, WA (N/CG245) (5/94)

Respectfully Submitted by



Ricardo Ramos, LTJG, NOAA





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

ORIGINAL

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: July 7, 1994

MARINE CENTER: Pacific

HYDROGRAPHIC PROJECT: OPR-J223-AHP

HYDROGRAPHIC SHEET: H-10527

LOCALITY: Alabama, Wolf Bay, La Launch to Owens Bayou

TIME PERIOD: February 14 - March 24, 1994

TIDE STATION USED: 873-0667 Alabama Point, Perdido Pass, Al.  
Lat.  $30^{\circ} 16.7'N$  Lon.  $87^{\circ} 33.2'W$

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.  $30^{\circ} 21.3'N$  Lon.  $87^{\circ} 36.0'W$

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. North of  $30^{\circ} 20.0'N$  times and heights are direct on Peterson Point, Al. (873-0849).
2. South of  $30^{\circ} 20.0'N$  and north of  $30^{\circ} 17.6'N$ , apply a -20 minute time correction and heights are direct on Peterson Point, Al. (873-0849).
3. South of  $30^{\circ} 17.6'N$ , times and heights are direct on Alabama Point, Al. (873-0667).

Note: Times are tabulated in Central Standard Time.

  
CHIEF, DATUMS SECTION



GEOGRAPHIC NAMES

Name on Survey	A ON CHART NO. 11378 B ON PREVIOUS SURVEY NO. C ON U.S. QUADRANGLE MAPS D FROM LOCAL INFORMATION E ON LOCAL MAPS F P.O. GUIDE OR MAP G RAND McNALLY ATLAS H U.S. LIGHT LIST K BR 130716									
	A	B	C	D	E	F	G	H	K	
ALABAMA (title)	X		X							1
BAY LA LAUNCH (title)	X		X							2
GRAHAM BAYOU	X		X					X		3
HAMMOCK CREEK	X		X					X		4
MIFLIN			X					X		5
MIFLIN CREEK	X		X					X		6
MOCCASIN BAYOU	X		X					X		7
MULBERRY POINT	X		X					X		8
ORANGE BEACH	X		X					X		9
OWENS BAYOU	X		X					X		10
PETERSON POINT			X					X		11
SANDY CREEK			X					X		12
SAPLING POINT	X		X					X		13
WOLF BAY (title)	X		X					X		14
WOLF CREEK	X		X					X		15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25

Approved:

*Chris Clay*  
Chief Geographer

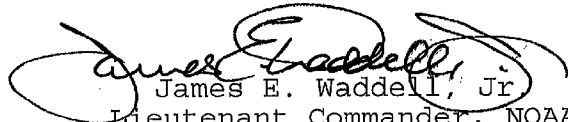
APR 3 1995

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY  
OPR-J223-AHP  
AHP-10-3-94  
H-10527  
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 descriptive report was 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

NOAA FORM 77-27(H) (9-83)		U.S. DEPARTMENT OF COMMERCE			REGISTRY NUMBER	
HYDROGRAPHIC SURVEY STATISTICS					H-10527	
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	1				1	
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 <i>The following statistics will be submitted with the cartographer's report on the survey</i>						
PROCESSING ACTIVITY				AMOUNTS		
				VERIFICATION	EVALUATION	TOTALS
POSITIONS ON SHEET						1353
POSITIONS REVISED						
SOUNDINGS REVISED						
CONTROL STATIONS REVISED						
				TIME-HOURS		
				VERIFICATION	EVALUATION	TOTALS
PRE-PROCESSING EXAMINATION						
VERIFICATION OF CONTROL						
VERIFICATION OF POSITIONS				58		58
VERIFICATION OF SOUNDINGS				31		31
VERIFICATION OF JUNCTIONS						
APPLICATION OF PHOTOBATHYMETRY						
SHORELINE APPLICATION/VERIFICATION						
COMPILATION OF SMOOTH SHEET				50		50
COMPARISON WITH PRIOR SURVEYS AND CHARTS					4	4
EVALUATION OF SIDE SCAN SONAR RECORDS						
EVALUATION OF WIRE DRAGS AND SWEEPS						
EVALUATION REPORT					27	27
GEOGRAPHIC NAMES						
OTHER*						
*USE OTHER SIDE OF FORM FOR REMARKS			TOTALS			
Pre-processing Examination by M. Larsen				Beginning Date 5/17/94	Ending Date 7/07/94	
Verification of Field Data by R. Davies				Time (Hours) 139	Ending Date 4/28/95	
Verification Check by B. Olmstead				Time (Hours) 2	Ending Date 7/13/95	
Evaluation and Analysis by R. Davies				Time (Hours) 31	Ending Date 6/02/95	
Inspection by B. Olmstead				Time (Hours) 18	Ending Date 7/18/95	



**EVALUATION REPORT  
H-10527**

**1. INTRODUCTION**

Survey H-10527 is a basic hydrographic survey accomplished by the Atlantic Hydrographic Party 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 Alabama and covers Wolf Bay between Bay La Launch and Sandy Creek. The survey area also includes Wolf, Miflin and Hammock Creeks and Graham, Owens and Moccasin Bayous. A portion of the Intracoastal Waterway running east to west is in the southern limits of this survey. The surveyed area extends from latitude 30/17/39N to latitude 30/22/11N, and from longitude 87/33/54W to longitude 87/37/25W. The bottom consists of mud and sand. Depths range from 0.2 meters near shore to 3.6 meters offshore in Bay La Launch. Generally, depths of 3.6 to 5.5 meters were found in the dredged Intracoastal Waterway.

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 1, 2, and 5 meter. A note was added to the smooth sheet to identify these values. Bottom characteristics are annotated on this survey. In addition, supplemental depth curves have been shown in brown where warranted.

Predicted tides for Pensacola, Florida were used for the reduction of soundings during field processing. Approved hourly heights zoned from Alabama Point and Peterson Point, gages 873-0667 and 873-0849, were used during office processing.

The field sheet parameters have been revised to center the hydrography on the office plot. Soundings have been corrected for dynamic draft, actual tides and sound velocity. Hydrographic positioning was obtained using differential GPS. An accompanying computer printout contains the correctors. Data is plotted using a Modified Transverse Mercator projection based on NAD 83 datum and is depicted on a single sheet at a scale of 1:10,000.

Survey data processed using the same Hydrographic Data Acquisition/Processing System (HDAPS) software suite used by the hydrographer; the Hydrographic Processing System (HPS), Release 19940714; 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.

## **2. CONTROL AND SHORELINE**

Sections H and I of the hydrographer's report and the Horizontal Control Report for OPR-J223-AHP, contain adequate discussions of horizontal control and hydrographic positioning.

A horizontal dilution of precision (HDOP) not to exceed 3.75 was computed for survey operations. There were no positions which exceeded the limit in terms of HDOP.

Positions of horizontal control stations used during hydrography are 1993 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: 0.721 seconds (22.200 meters)  
Longitude: -0.060 seconds (-1.613 meters)

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

Cartographic Revision Survey BP-150716, updated by NANCI support data, was compiled on NAD 27 and applies to this survey.

Numerous piers throughout the survey area are depicted on the sounding plot 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.

## **3. HYDROGRAPHY**

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

- a. delineate the bottom configuration, determine least depths, and draw the standard depth curves;
- b. reveal there are no significant discrepancies or anomalies requiring further investigation;
- 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.

#### 4. CONDITION OF SURVEY

The hydrographic records and reports received for processing are adequate and conform to the requirements of the Hydrographic Manual, 4th Edition, revised through Change No. 3, the Hydrographic Survey Guidelines, and the Field Procedures Manual, March 1993 edition, except as follows.

AWOIS item 8535, a row of five dolphins centered at latitude 30/18/06N, longitude 87/35/40W, was not completely disproved. The requirement was to conduct an investigation fifty meters out from the axis along latitude 30/18/07N from longitude 87/35/35W to longitude 87/35/45W, an extent covering approximately 280 meters. The 75 meters circle search performed during dive operations was not sufficient to satisfy the requirements to remove all the dolphins from the chart.

#### 5. JUNCTIONS

Survey H-10526 junctions with the following survey.

<u>Survey</u>	<u>Year</u>	<u>Scale</u>	<u>Area</u>
H-10525	1994	1:10,000	East

The junction with the above survey is complete.

#### 6. COMPARISON WITH PRIOR SURVEYS

H-2017(1890) 1:10,000  
 H-2073(1891) 1:10,000

Surveys H-2017 and H-2073 cover the entire area of the present survey. Shoreline has generally remained unchanged throughout the survey area except for the southern portion of the survey. This area has been straightened and dredged for the Intracoastal Waterway.

With the exception of the area of the Intracoastal Waterway, comparison of depths range from 0.0 to 0.6 meters (0-2 ft), the present survey is shoaler. In the area of the Intracoastal Waterway, depths range up to 2.1 meters (7 ft) deeper. Construction of new piers is present throughout the survey area.

H-5723(1935) 1:10,000

Survey H-5723 covers the survey area north of latitude 30/18/30N. Shoreline in the survey area has changed little through dynamic natural processes and man-made construction. Generally, comparison of depths range from 0.3 to 0.9 meters (1-2 ft), the present survey being shoaler. Construction of new piers is present throughout the survey area.

There are no AWOIS items which originate with the above mentioned prior surveys.

Survey H-10527 is adequate to supersede the above mentioned prior surveys within the common area.

## 7. COMPARISON WITH CHART

Chart 11378, 27th Edition, May 7, 1994; 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, except for the following:

Several charted notes (shoal) have been adequately investigated by hydrography and should be removed.

<u>Latitude(N)</u>	<u>Longitude(W)</u>
30/21/27	87/36/21
30/21/15	87/36/30
30/20/38	87/36/14
30/20/23	87/36/05
30/20/03	87/36/18
30/19/39	87/36/07
30/19/40	87/35/05
30/17/28	87/37/20

A charted islet located at latitude 30/20/54N, longitude 87/34/43W should be removed. Hydrography was conducted in this area and depths range for 0.8 to 1.1 meters (2.6 to 3.6 ft). The hydrographer found no indication that this feature currently exists.

A low water feature charted at latitude 30/18/15N and longitude 87/36/00W, should be removed from the chart. Present depths range from 1.2 to 1.8 meters (3.9 to 5.9 ft).

Survey H-10527 is adequate to supersede charted hydrography within the common area.

b. AWOIS

AWOIS items 8465, 8466, 8468, 8534 and 8535 originate with miscellaneous sources. Refer to the hydrographer's report for a discussion and disposition of these features and the following:

AWOIS 8535 was inadequately investigated for complete disproval. A 75-meter diver circle search covered the area of only two of the five charted dolphins. The two dolphins should be removed and the remaining three should be retained as charted but noted as submerged dols PA. These submerged dolphins are listed below.

<u>Feature</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
subm dol	30/18/06	87/35/35
subm dol	30/18/06	87/35/43
subm dol	30/18/06	87/35/46

c. Controlling Depths

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). However, the following area is noted for specific attention:

Depths of 0.5 to 2.0 meters (1 to 6 ft) were found by this survey to exist from 20 to 40 meters north and south of the Intracoastal Waterway between Daybeacon "86" and Pensacola-Mobile Light 94, between longitude 87/35/42W and longitude 87/37/21W. It is recommended that this area be monitored for shoaling.

d. Aids to Navigation

There are seven floating aids and fourteen fixed aids within the survey area. These aids to navigation were positioned, described adequately and serve their intended purpose.

Daybeacon "91" was located hydrographically with DGPS. It was 50 meters off the charted position. The new position does serve its intended purpose, marking the south side of the Intracoastal Waterway. It is recommended that this aid be charted at its survey position and the "PA" note removed.

There are no charted landmarks within the survey area. The hydrographer did not recommend any for charting.

e. Geographic Names

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

f. Dangers to Navigation

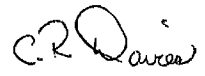
No dangers to navigation were generated during survey operations or office processing.

**8. COMPLIANCE WITH INSTRUCTIONS**

Survey H-10527 adequately complies with the project instructions, except where noted in this report.

**9. ADDITIONAL FIELD WORK**

This is a good hydrographic survey. Additional field work is recommended to disprove the three remaining charted dolphins mentioned in section 7.b of this report.

  
C.R. Davies  
Cartographer

APPROVAL SHEET  
H-10527

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: 7/19/95  
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 Simmons Date: 7/27/95  
Kathy Simmons  
Commander, NOAA  
Chief, Pacific Hydrographic Branch

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Final Approval

Approved:  
Andrew A. Armstrong III Date: Mar 31, 1997  
Andrew A. Armstrong III  
Captain, NOAA  
Chief, Hydrographic Surveys Division

