10294

Diagram No. 1264-2

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey ... Hydrographic

Field No. ... HFP-10-1-89

Registery No. ... H-10294

LOCALITY

State ... Florida

General Locality ... Choctawhatchee Bay

Sublocality ... White Point to Boggy Bayou

19 89

CHIEF OF PARTY
LCDR D.A. Waltz

LIBRARY & ARCHIVES

DATE ... June 14, 1990

☆U.S. GOV. PRINTING OFFICE: 1985—566-054

10294

chts
11385A

11360 NC ?
11388 NC
11006 NC ?

NOAA FORM 77-28 (11-72)

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

HYDROGRAPHIC TITLE SHEET

REGISTER NO.

H-10294

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.

HFP-10-1-89

State Florida

General locality Choctawhatchee Bay

Locality White Point to ~~Valparaiso~~ BOGGY BAYOU

Scale 1:10,000 Date of survey ~~23~~ 24 Feb. 1989 - ~~13~~ 07 April 1989

Instructions dated July 14,1987 Project No. OPR-J259 ~~-~~ HFP

Vessel HFP-2/ Launches - 0518, 1292, 0770

Chief of party LCDR. David A. Waltz

Surveyed by LT (JG) James S. Verlaque

Soundings taken by echo sounder, ~~hand lead, pole~~ ~~Echo~~ Sounder

Graphic record scaled by GH,DE,JO,MM,BL,JV **

Graphic record checked by GH,DE,JO,JV

Protracted by HDAPS Automated plot by ~~Bruning~~ XYNETICS 1201 PLOTTER (AHS)

Verification by Atlantic Marine Center, ATLANTIC HYDROGRAPHIC SECTION PERSONNEL

Soundings in ~~fathoms~~ XXXXXX feet at MLW XXXX MLLW

REMARKS: Change No. 1 - July 20, 1987

Change No. 2 - October 5, 1988

Change No. 3 - March 29, 1989

** GH - Glenn D. Hendrix
DE - David B. Elliott
JO - John P. Oswald
MM - Mark J. McMann
BL - Brian A. Link
JV - James S. Verlaque

NOTES IN THE DESCRIPTIVE REPORT WERE MADE IN RED DURING OFFICE PROCESSING.

EC 3-28-97

AWOIS & SURF ✓ SRB 6/90

XWW 6/20/90

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

☆ U.S. G.P.O. 1972-769-565/519 REG. #6

86°30'

25'

PROJECT PROGRESS SKETCH

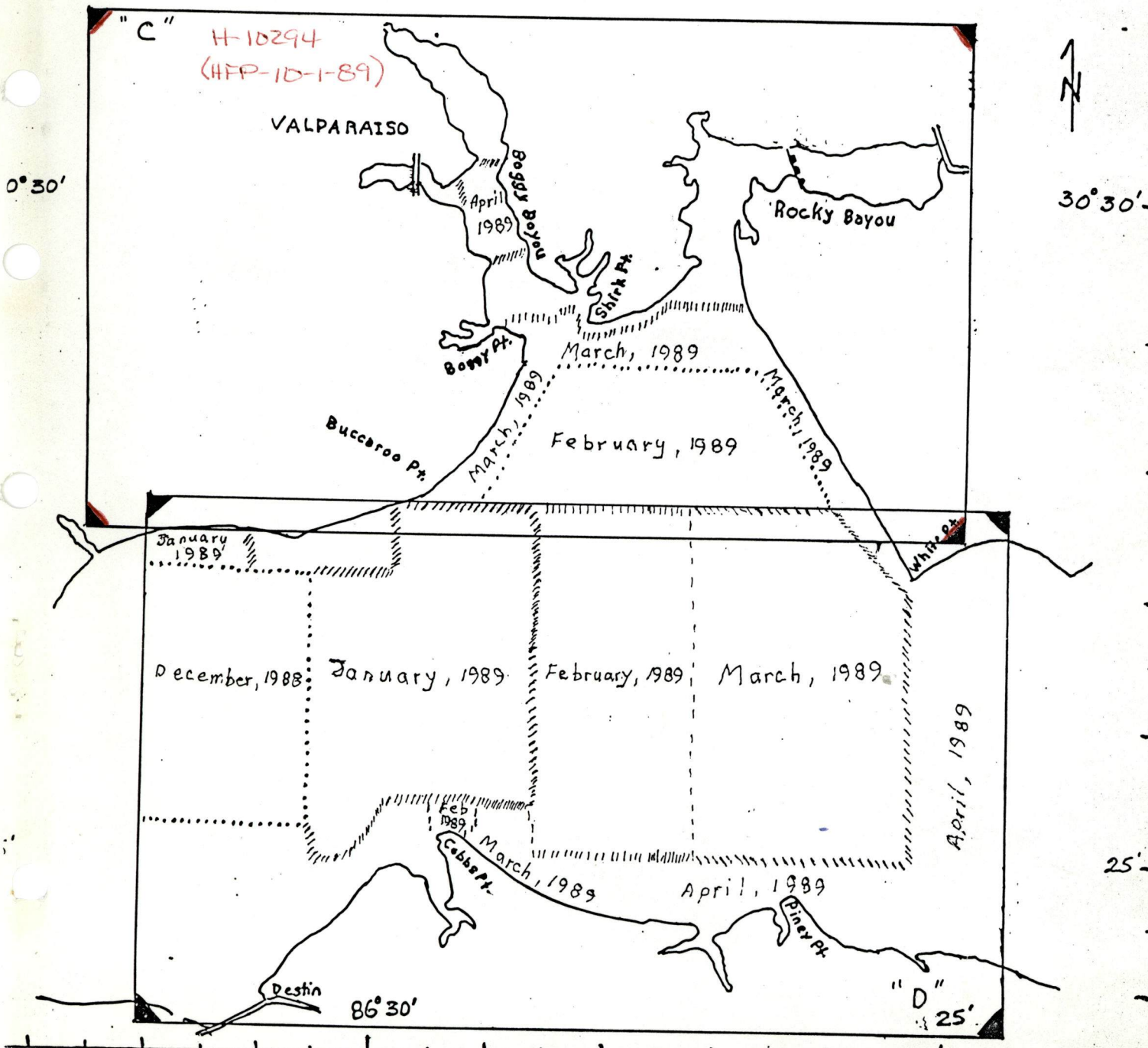
OPR-J259-HFP
CHOCTAWHATCHEE BAY
FLORIDA

HYDROGRAPHIC FIELD PARTY 2

LCDR DAVID A. WALTZ
Commanding
1988-1989
from chart 11388
(1:40,000)

LEGEND:

	DEC 88	JAN 89	FEB 89	MAR 89	APR 89
SQNM SDG	1.4	6.2	8.0	9.0	1.0
LNM SDG	26	136	113	144	19
LNM TO/FM	15	50	110	126	30
LNM MISC	10	30	65	65	15
DP/BS	0	0	5	70	0
TIDE STA.	2	2	0	0	4
CONTROL (set/rec)	0	0	0	0	0



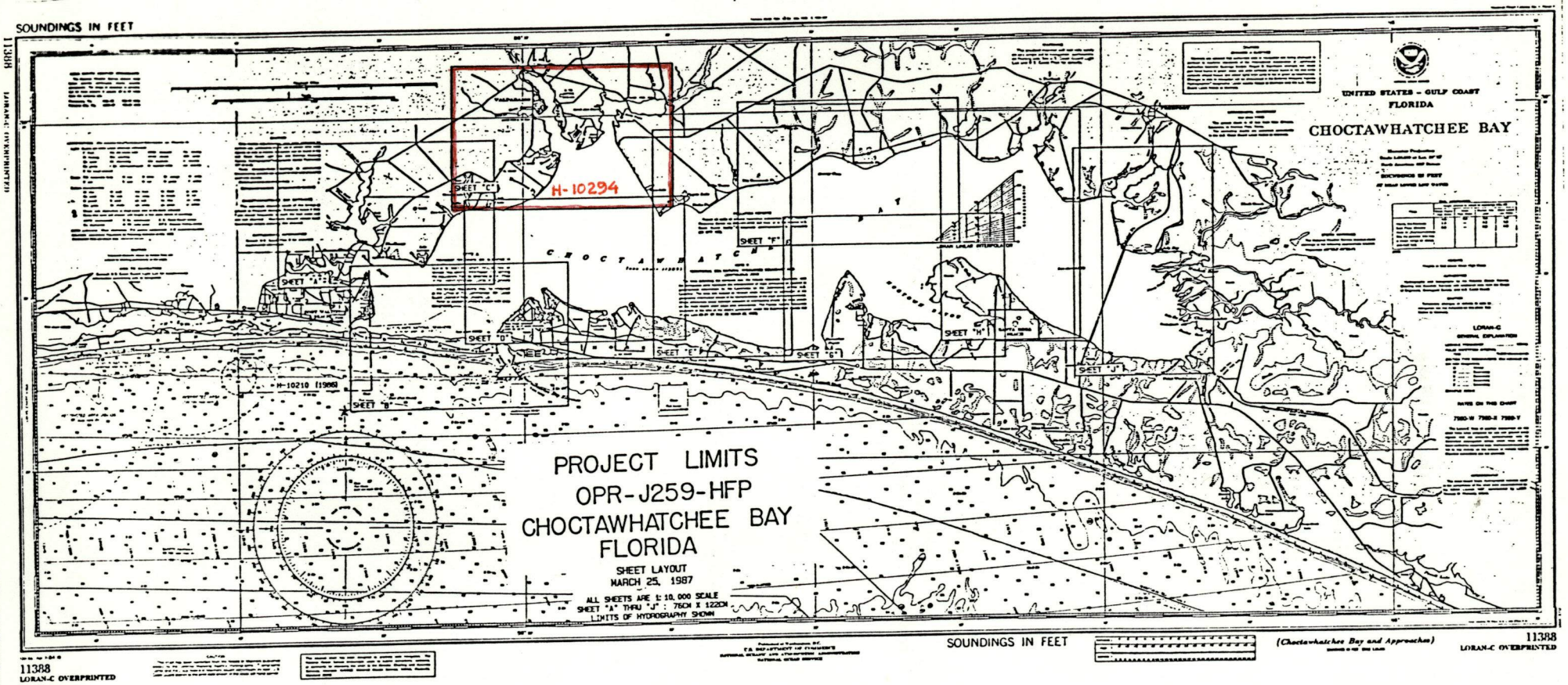

SOUNDINGS IN FEET
UNITED STATES - GULF COAST
FLORIDA
CHOCTAWHATCHEE BAY
H-10294
H-10210 (1986)
SHEET "A"
SHEET "B"
SHEET "C"
SHEET "D"
SHEET "E"
SHEET "F"
SHEET "G"
SHEET "H"
SHEET "J"
PROJECT LIMITS
OPR-J259-HFP
CHOCTAWHATCHEE BAY
FLORIDA
SHEET LAYOUT
MARCH 25, 1987
ALL SHEETS ARE 1: 10,000 SCALE
SHEET "A" THRU "J" : 76CM X 122CM
LIMITS OF HYDROGRAPHY SHOWN
SOUNDINGS IN FEET
(Choctawhatchee Bay and Approaches)
11388
LORAN-C OVERPRINTED
11388
LORAN-C OVERPRINTED

TABLE OF CONTENTS

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY
OPR-J259-HFP
HFP-10-1-89
H-10294
1989

A. PROJECT

General

The purpose of project OPR-J259-HFP, sheet C, was to obtain modern hydrographic data to revise existing nautical charts of Choctawhatchee Bay, Florida. Charted depths are based primarily on leadline surveys conducted in 1935 and 1939. The water traffic in the bay includes commercial vessels using the Intracoastal Waterway, fishing vessels, and pleasure boats.

This survey was conducted in accordance with Hydrographic Project Instructions OPR-J259-HFP, issued July 14, 1987, Change No. 1 issued July 20, 1987, Change No. 2 issued October 5, 1988, and Change No. 3 issued March 29,1989.

Survey of Methods

Hydrographic Field Party 2 (HFP 2) has been outfitted with the Hydrographic Data Acquisition and Processing System (HDAPS) and an automated range-azimuth system (POLAR FIX) for on-line data collection and post processing. The HDAPS system in use on HFP 2 is a semi-automated data acquisition system which is able to collect sounding data by multiple lines of position (MLOP) for precise positioning. POLAR FIX consists of a sensing head and a controlling unit on shore which tracks a set of mirrors on the MonArk by telemetry. A position is computed from POLAR FIX by transmitting an angle and distance to the Monark via an antenna connected to the controlling unit.

The HDAPS system currently in use, consists of the following system components: a Hewlett Packard (HP) 9000 Model 300 computer, an HP 9153C Disk Drive with a Winchester hard disk storage capacity of 20 Mbytes, an HP 98785A Color Monitor, a Bruning-Nicolett ZETA 824 plotter, an HP 82906A printer, and an M4 Data Model 9800 Tape streamer. The interface between the computer and the hydrographic sensors is with Navitronic's Hyflex 1000. Data are acquired on a Comflex 1030 NX hard disk and archived on 3-inch double sided micro floppy disks. A Navitronic Path Guidance Unit (PGU) functions both as a remote steering display for the coxswain and as a remote control for the HDAPS. All software programs are written in HP BASIC.

In the data acquisition mode, high frequency digitized depths are recorded while simultaneously applying a draft correction. Baseline calibration correctors for each line of position, located in the C-O table, are also applied on-line. Predicted tides and sound velocity correctors are applied off-line from respective corrector tables. Sounding plots and trackline plots are produced off-line during post processing.

On-line data was converted off-line to the HP hard drive to generate a master printout displaying data collected for that day. After the printouts were edited against the fathograms, data abstracts were generated to insure all edits were performed prior to plotting the data.

Raw data stored on the 3-inch floppy disks were labeled with a five digit code. The first three digits corresponded to the day with the last two digits labeled as zeroes. Edited data stored on magnetic tapes were also labeled with a five-digit code. The first three digits corresponded to the day number, with the fourth and fifth digits arbitrarily labeled with a one denoting an edited tape compiled off-line.

On-line operations were conducted from VESNO's 0518, 1292, and 0770. Sounding lines were run at 100 meter line spacing, per section 4.3 of the Hydrographic Manual. Mainscheme lines were run as near to shore as possible to define safe limits of navigation. In most cases, HFP 2 surveyed up to the 2 foot curve. Shoals and mud flats existing from the 2 foot curve to the shoreline are discussed in Section P. Data acquired from VESNO's 0518 and 1292 has been processed with the intent of superseding all prior charts of the survey area. Range-azimuth data was collected by VESNO 0770 for part of Boggy Bayou, but not all mainscheme and shoreline hydrogrography was completed. As a result, the survey was blocked off with all range-range data being plotted and all range-azimuth data "not smooth plotted" (NSP), but included with the survey for reference. See also sections 1.a. and 1.b. of the Evaluation Report.

B. AREA SURVEYED

The project area for sheet "C" extended in Choctawhatchee Bay from White Point to Boggy Point including Boggy Bayou, Rocky Bayou, and their tributaries. The survey was bounded by 30-31-24 N to the north, by 86-30-30 W to the west, by 86-25-00 W to the east, and junctioned to the south with ~~H-10292~~ D-100 (30-27-37 N). The northern, western, and eastern limits were the limits of safe navigation. This survey was conducted from February ~~9~~ 24 through ~~March 31, 1989~~ APRIL 7, 1989.

C. SOUNDING VESSELS

The following 21-foot MonArks were used for this survey:

EDP #	Days
0518	055,058-059,068,069, 073,075-076,079-082, 086-087,089-090,096.
1292	055,068
0770	097

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

Raytheon DE-719 echo sounders were the only sounding equipment used for this survey:

EDP #	S/N	Days
0518	10744	055,058,059
0518	5881	068,069,073,075,076,079-082, 086-087,089-090,096
1292	7881	055,068
0770	5881	097

In accordance with the Hydrographic Manual, depths recorded with the DE-719 echo sounders were measured in feet with a calibrated velocity of sound through water of 4800 ft/sec.

Survey records were scanned by NOAA Commissioned Officers and Survey Technicians. Upon scanning the DE-719 analog records, any significant peaks or deeps which occured between soundings, missed depths, incorrectly digitized soundings, and effects of sea and swell action on the echograms were corrected. Soundings which had erratic positions displayed by high residuals on the raw printout were "smoothed" in post processing. If more than four consecutive soundings had high residuals with an erratic track plot, data was rejected and later reran. In areas where only two lines of position (LOP's) were received, the raw printout would indicate the angle of intersection from these lines enclosed by a bracket. If more than four consecutive angles were outside of the 30-150 degree intersection with an erratic trackline plot, the data was rejected and later rerun. Smoothing was also performed for four angles or less which did not lie between 30 and 150 degrees.

The position of the Mini-Ranger antenna was in line with the DE-719 transducer on each MonArk eliminating the need for an antenna offset correction. A draft correction of 1.2 feet was applied and inserted in the C-O table. By HDAPS convention, the "offset" was defined as the left/right displacement of the sensor, positive to the right when facing the bow of the vessel. "Height" was the up/down displacement of the sensor from the static waterline, positive down. The location of the high frequency DE-719 transducer was used as the starting point (0,0) for the on-board coordinate system. The C-O table is included with Separate E.*

2. VELOCITY CORRECTIONS

Corrections for sound velocity in water were conducted from data obtained with a DIGIBAR. Program "Velocity" was used for velocity correction computations.

Velocity casts were conducted in the same area where hydrographic data was obtained for the period that the computed correctors were to be applied. The data collected for each velocity cast was used directly to construct the corresponding velocity table. For example, between days 026 and 062, hydrographic data was collected for sheets C and D. The velocity values given by cast #2 were used in computing velocity table #2. This velocity table was used until day 062 at which time velocity cast #3 was conducted and velocity table #3 was generated, etc. No averaging between two casts occured nor was required.

All velocity tables were applied off-line by the HDAPS system and may be found in Separate D.

Table Applied	Cast	Day	Depth	Location	Days
2	2	026	43 feet	30/26/00 N 086/31/00 W	026-062
3	3	062	34 feet	30/26/00 N 086/27/00 W	063-093
4	4	094	43 feet	30/27/30 N 086/28/00 W	094-097

A data quality assurance test (DQA) was performed prior to each use of the DIGIBAR to determine sound velocity correctors. After cast #3, the DIGIBAR (s/n 155) did not pass the DQA test. A new DIGIBAR (s/n 154) was used for the final velocity cast. Velocity tables are included in Separate D.*

All soundings were corrected for velocities during the survey.

* DATA REMOVED FROM ORIGINAL DESCRIPTIVE REPORT AND FILED WITH FIELD DATA.

4. BAR CHECKS

Bar checks were attempted from the MonArks for comparison of digital and analog depths. The DE-719 echo sounders would not digitize with the bars constructed for the MonArks. Therefore, barcheck values were not compared with velocity correctors.

5. VERTICAL CASTS

No vertical casts were performed during this survey.

6. DRAFT CORRECTION

A draft correction of 1.2 feet was applied to all on-line data.

7. SETTLEMENT AND SQUAT

Settlement and squat correctors trials for VESNO's 0518 and 1292 were performed on day 082. Correctors for each vessel were entered on the C-O tables and applied on-line to all survey data. Trials were not conducted for VESNO 0770. Data acquired by VESNO 0770 has been labeled as NSP data and is not recommended for charting.

8. TIDE CORRECTORS

Predicted tide correctors were applied off-line by HDAPS to all soundings that were acquired with the DE-719 echo sounder. All echo sounding data plotted on the final field sheets were plotted with predicted tide correctors.

During the course of the survey, prevailing northerly winds resulted in much lower water levels than normal. The low water effects were most noticeable at the northern ends of Boggy and Rocky Bayou where mud flats became extremely visible. Sand bars and mud flats on the eastern and western edges of the survey area along the shoreline were also prominent with northerly winds. To delineate the shoal depths, the sounding vessels ran 50-meter splits (buffer lines) on the inshore areas with prevailing southerly winds. Consequently, with predicted tides applied to the sounding data, the contour lines drawn on the sounding and smooth plots near the shoreline areas resembled a sawtooth configuration. It is suspected that smooth tides applied to the sounding data will result in smooth contours near the shoreline. The tidal datum for this project was mean lower low water.* The operating tide station at Pensacola, Florida (872-9840), served

*Application of smooth tides rectified irregular curve situation.

as the control for datum determination for all subordinate stations. Additional control for datum determination was provided by the operating tide station at Destin, East Pass. Two additional tide stations, Big Hammock Point and Valparaiso, Boggy Bayou, were installed and monitored from 4 hours before to 4 hours after completion of the survey. The datum determination for predicted tides in the 1989 Tide Table is mean low water instead of mean lower low water.

On day 097, the Destin, East Pass tide gage was knocked off the tide well onto the dock by a pleasure craft. The tide staff was also slightly disturbed. The gage was repositoned on the tide well and appeared to be operating properly. Closing levels may show a difference in elevation from opening levels as a result of the tide staff being displaced. Smooth tides were requested from Chief, Sea and Lake Levels Branch, N/OMA12, in a letter dated April 12, 1989.

E. HYDROGRAPHIC SHEETS (FIELD)

The assigned survey scale was 1:10,000. All sheets were produced during post processing by HFP 2 with the HDAPS system on the Bruning-Nicolett ZETA 824 plotter. A list of submitted sheets for H-10294 follows:

Sheet	Scale	Quantity
Boat Sheet	1:10,000	1
Master Sheet	1:10,000	2
Edited Trackline	1:10,000	2
Rough Sounding Plot	1:10,000	2
Smooth Sounding Plot	1:10,000	1
Smooth Overlay (XL,DP,channel lines)	1:10,000	1

All survey sheets were submitted with the Descriptive Report to N/MOA23, Hydrographic Surveys Branch,* Atlantic Marine Center in Norfolk, Virginia.

F. CONTROL STATIONS SEE ALSO SECTION 2.9. OF THE EVALUATION REPORT

The horizontal control datum for this project was the North American Datum of 1927. The following stations were used as Falcon Mini-Ranger shore stations during this survey:

No.	Name	Source	Year
103	JIM	AMC	1988
105	SHOTGUN	AMC	1988
106	BLUE	AMC	1988

* N/CG244, Atlantic Hydrographic Section.

No.	Name	Source	Year
107	SHIRK	AMC	1988
115	SMITH	AMC	1988
123	BOGGY BAYOU LT. 1	AMC	1988
111	ANDERSON	AMC	1988
150	NICEVILLE EGLIN AFB RADIO MAST	AMC	1988

All stations were established using third order - class one traverse methods between November of 1987 and 1988 by Clifford S. Middleton Jr. from Coastal Surveys Unit, N/MOA2222. The original Horizontal Control Report may be found with the survey data in a cahier folder.

G. HYDROGRAPHIC POSITION CONTROL

Hydrographic position control was accomplished using the Falcon 484 Mini-Ranger system which provided accuracy to exceed 1:10,000 scale survey requirements. Range/range positioning, using four stations simultaneously, was used during this project. A survey network was set up to allow four reference stations to be accessed simultaneously by HDAPS. The following MOTOROLA Mini-Ranger equipment was used:

VESNO	Equipment	s/n
0518	RPU	D0017
	CDU	E0008
	R/T	E2965
1292	RPU	E0149
	CDU	D0062
	R/T	E2917

Remote Reference Stations:

Code	s/n	Station	Days
6	E2909	103	055,058,059,068,069,073,075 076,080-082,086-087,090,096
7	F3244	105	058,059,068,069,073,075, 080-082,086-087,090,096
2	E2913	106	055,058,059,068,069,073, 080-082,086-087,090,096
8	E2907	107	055,058,059,068,069,075,076 080-082,086-087,090,096
1	F3237	123	073,075,076

Range/Azimuth positioning, using an automated unit (POLAR FIX) was also used near the completion of the survey. A completed area was not covered using POLAR FIX resulting in all range/data not being smooth plotted (NSP). SEE ALSO SECTIONS 1.9 AND 1.b. OF THE EVALUATION REPORT.

Critical System Check:

Per section 3.1.3.2 of the Field Procedures Manual (FPM), dated January 1989, critical system checks were performed monthly for each code by the fixed point calibration method. Boggy Bayou Light 1 was the fixed point from which all codes listed above were checked. All critical check values were less than 5 meters which is within the required limits of the FPM. Results of the calibrations are included in Separate E.*

Non-Critcal System Checks:

Non-critical system checks were performed daily and recorded directly on the echograms at the beginning of hydrography each day. Non-critical system checks were documented by stopping the vessel and manually recording the station name, code, signal strength, and residual for each station. The comflex system on the MonArks does not display an ECR value nor are the DUMP ALPHA and DUMP GRAPHICS functions operative as a printer is not installed on these vessels. During all non-critical systems checks, the residuals were never higher than 5, nor were the residuals consistently above 5 during times of hydrography throughout this project.

Mini-Ranger Falcon Calibrations:

Baseline calibrations were performed to the standards of Section 3.1.2.1 of the Field Procedures Manual (FPM). Opening baseline calibrations were conducted on February 14 in Niceville, Florida. The baseline values were incorporated into the HDAPS and Comflex C-O tables and applied directly to all on-line data. All records of these calibrations are included in Separate E.*

Per the Field Procedures Manual, a closing baseline calibration was not performed as the survey was conducted in less than a six month period. The critical system checks performed on days 068, 075, and 097 were within tolerance and MLOP were used 100% during the project.

H. SHORELINE SEE ALSO SECTION 2.b. OF THE EVALUATION REPORT.

Shoreline shown on the boat sheet was transferred from registered shoreline number 00337 at a 1:10,000 scale. Shoreline on the master, smooth and overlay sheets were transferred from the boat sheet and should be used for reference only.

Per the Field Procedures Manual, detached positions were taken on new piers or other new items located in the survey area along the shoreline or on those items on the T-sheet which were no longer existing. Items located on the T-sheet which already

* DATA REMOVED FROM DESCRIPTIVE REPORT AND FILED WITH FIELD DATA.

existed, were visually verified and labeled with reference numbers.

Shoreline was verified by it's junction with hydrographic data and by visual inspection. A preliminary inspection of the shoreline was performed on March 8, identifying new piers, confirming the positions of existing piers from the T-sheets and locating those areas where piers no longer existed. These changes were noted on the boat sheet. Existing piers were labeled with reference numbers ~~5000-5005~~ 8000-8005 and were drawn on the boat sheet. Positions were acquired on new piers on day 089 with an HP3808B, s/n 1723A00712. These positions were assigned fix numbers 740-741 and were manually entered into contact table #1 after computing positions with the MTEN geodetic computations program. Positions 717-724 were detached positions taken on piers by VESNO 0518. All new piers are drawn in red on the overlay sheet. Detailed descriptions of shoreline verification are included with the sounding volume labeled "Descriptions".

Mainscheme hydrography was limited near shoreline areas due to extensive shoaling and mud flats. Fifty-meter splits were run near shoreline to delineate the 3-foot curve. The 3-foot curve was the limit of safe navigation for this survey. Changes in shoreline were drawn in red with verified shoreline remaining black.* The majority of shoreline consisted of marshland with intermittent sand beaches. * SEE SECTION 4. OF THE EVALUATION REPORT.

The following control stations were located seaward of the shoreline:

Signal #	Name
122	BOGGY BAYOU LIGHT #3
123	BOGGY BAYOU LIGHT #1
140	ROCKY BAYOU ENTRANCE LIGHT #1

Geographic positions for all control stations used on this survey are highlighted and included with the station list as Separate F.

I. CROSSLINES SEE ALSO SECTION 3.9. OF THE EVALUATION REPORT.

A total of 6.3 linear miles of crosslines were run on "C" sheet which amounts to 10% of the mainscheme hydrography acquired. Crossline soundings agreed to within 2 feet of the mainscheme soundings.

Mainscheme hydrography and crosslines were run with two sounding vessels. No discrepancies were observed in sounding agreement between the two vessels. CONCUR

J. JUNCTIONS SEE SECTION 5. OF THE EVALUATION REPORT.

This sheet junctions to the south with sheet "D", ~~H-10292,~~ D-100 (1988-89) also completed in 1989. The northern, eastern, and western edges of hydrography are enclosed by shoreline.

Junctions with ~~H-10292~~ D-100 (1988-89) agreed within two feet.

K. COMPARISON WITH PRIOR SURVEYS SEE ALSO SECTION 6.9. OF THE EVALUATION REPORT.

Soundings from this sheet were compared with the following survey:

Registry #	Scale	Year Surveyed
H-5869	1:20,000	1935

Representative soundings from the above prior surveys were transferred to the master sheet and checked against soundings from this survey. Depths were found to be in good agreement with no more than 2-foot differences noted between prior survey depths and current survey soundings.

In common areas, the soundings acquired from the current survey are recommended for updating the existing charts.

AWOIS 4655

AWOIS 4655 is listed as visible piles scaled from chart 11385 at latitude 30/27/44.5 N, longitude 86/29/10.0 W by CL 398/48. Survey requirements were verification or disproval by visual search at low water. If not visible, a bottom drag or diver investigation was required for a radius of 100 meters.

Submerged piles were found within the 100-meter circle lying on the bottom in 3-4 feet of water with a least depth of 1.5 feet. The piles were approximately 12 feet long with 8 inch diameters. Detached position #727 was taken on day 086 at the center of the piles at latitude 30/27/43.025 N, longitude 86/29/08.481 W.

~~It is recommended that a "subm piles" symbol from Section O of the Chart No. 1 catalog be charted at the above survey position.~~ IT IS RECOMMENDED THAT THE CHARTED PILE BE DELETED AND SUBM PILES WITH A NOTATION "COV 1 FT MLLW" BE CHARTED IN PRESENT SURVEY LOCATION.

AWOIS 4657

AWOIS 4657 is listed as a platform scaled from chart at latitude 30/27/~~48~~51.0 N, longitude 86/~~28~~29/~~06~~03 W. Survey requirements were verification or disproval by visual search at low water. If

not visible, a bottom drag or diver investigation was required for a radius of 100 meters.

Submerged piles in ruins were located in close proximity to the reported AWOIS position. A least depth of 1.5 feet was measured in 3-4 feet of water within these ruins. Detached positons #737 and #738 were taken on day 089 on the west and east ends of the ruins, respectively. The west end was positioned at latitude 30/27/54.255 N, longitude 86/29/01.642 W and the east end was positioned at latitude 30/27/55.239 N, longitude 86/29/00.985 W.

~~It is recommended that "subm piles" symbols from Section O of the Chart No. 1 catalog be charted at the above survey positions.~~ IT IS RECOMMENDED THAT THE PLATFORM BE DELETED AND SUBM PILES WITH A NOTATION "COV 1 FT AT MLLW" BE CHARTED AS SHOWN ON PRESENT SURVEY.

AWOIS 4658

AWOIS 4658 is listed as a dangerous submerged wreck, frame of a shrimp boat, (Position Approximate) at latitude 30/28/48 N, longitude 86/28/24 W by the 8th CG District in Local Notice to Mariners 49/79. Survey requirements were listed as "none" since this item is located within danger limits of unexploded bombs.

Local knowledge of this item by shrimpers in Boggy Bayou indictate that the majority of the wreck was lifted by a Captain Warren Sweeney of the "LAURA B." in 1987. Divers conducted a 30-meter circle search at the reported AWOIS position (D.P. #742) on day 090, but found no evidence of a wreck. RETAIN AS CHARTED.

It is recommended that this AWOIS item be assigned to a future field unit to fully resolve the item. CONCUR

AWOIS 4659

AWOIS 4659 is listed as a shoal area extending from the shoreline west to approximate latitude 30/28/57 N, longitude 86/26/54 by the 8th Coast Guard District in Local Notice to Mariners 30/86. Survey requirements were to reduce line spacing and insure adequate bottom coverage to fully verify or disprove the shoaling.

On day 080, VESNO 0518 ran 50-meter splits over the reported AWOIS position. Although no shoaling was evident at that position, shoaling did appear a quarter of a mile south-southeast of where that development was run. ~~It is recommended that the survey depths be charted in place of the shoaling area.~~ SEE SECTION 7.9. OF THE EVALUATION REPORT.

No dangers to navigation were located in the survey area.

L. COMPARISON WITH THE CHART SEE ALSO SECTION 7.Q. OF THE EVALUATION REPORT.

Comparisons of data from the present survey were made during the course of data acqusition with a 1:10,000 scale enlargement of small craft chart 11385, 15th edition, dated October 6, 1984. All soundings agreed within 1-2 feet along the shorline areas and within 2-3 feet in the central part of the survey area.

It is recommended that all survey depths supersede charted depths. SEE ALSO SECTION 1.b. OF THE EVALUATION REPORT.

Comparison between the chart and ~~and~~ this survey were made for all nonsounding features. The following changes are recommended:

*1. Six new piers along the eastern shoreline were surveyed as represented on the overlay. The survey positions are listed below:

Position #	Latitude	Longitude
717	30/29/24.~~482~~50N	086/26/49.~~245~~21N
741	30/29/21.857N	086/26/48.368W
719	30/28/56.~~830~~4N	086/26/36.~~808~~76W
721	30/28/50.~~390~~48N	086/26/33.~~881~~84W
740	30/28/51.761N	086/26/34.466W
722	30/28/27.478N	086/26/15.~~251~~28W

*2. One new pier on the southeast edge of Shirk Point was surveyed as represented on the overlay:

Position #	Latitude	Longitude
724	30/29/08.~~235~~25N	086/27/36.~~339~~32W

3. One new anchorage buoy was located with a 2-foot diameter colored yellow and blue with the letter "G" and is represented on the overlay:

Position #	Latitude	Longitude
723	30/27/43.247N	086/26/02.604W

* IT IS RECOMMENDED THAT EACH ITEM DISCUSSED ABOVE BE CHARTED AS SHOWN ON PRESENT SURVEY.

M. ADEQUACY OF SURVEY

This survey was conducted in accordance with the Project Instructions, Hydrographic Survey Guidelines, Field Procedures Manual, and the Hydrographic Manual. Due to time constraints and testing of the new HDAPS and POLAR FIX system on HFP 2, the survey area indicated by the Project Instructions was not

completed. However, the survey area was completed from H-10292 to the north at latitude 30/29/00 N where the entrances to Boggy Bayou and Rocky Bayou begin. These Bayou's require range-azimuth survey methods to be completed. This survey is a complete basic hydrographic survey and is adequate to supersede all prior surveys for the area completed. SEE SECTION 1. OF THE EVALUATION REPORT.

N. AIDS TO NAVIGATION SEE SECTION 7.d. OF THE EVALUATION REPORT.

All lighted aids to navigation in the survey area were positioned to third order first class accuracy. Floating aids and day beacons accessible by boat were located with detached positions using multiple lines of position.

All aids to navigation positioned in the survey area were compared with the 1989 Light List (Vol. IV) and chart 11385, 15th edition, dated October 6, 1984. Comparisons on positions and descriptions are listed below:

Floating Aids to Navigation

~~Non~~-Floating Aid	Survey Position	Light List Position
Anchorage Buoy "G"	30/27/43.~~247~~23N 86/26/~~62.604~~02.54W	None

It is recommended that this ~~non~~-floating aid be charted. CONCUR

Non-Floating Aids to Navigation

Non-Floating Aid	Survey Position	Light List Position
Boggy Bayou Entrance LT 1	30/27/~~38.332~~37.98N 86/28/23.865W	30/27/~~48~~36N 86/28/24W
Boggy Bayou LT 3	30/28/44.~~315~~N 86/28/28.~~951~~88W	None
Boggy Bayou Daybeacon 4	30/28/44.~~581~~59N 86/28/21.~~700~~71W	None
Boggy Bayou Daybeacon 5	30/28/52.~~768~~78N 86/28/32.~~824~~84W	None

The survey positions for these non-floating aids to navigation are recommended for charting in place of the published positions. Non-floating Aids to Navigation forms, 76-40, are included with this report and may be found in separate J.

O. STATISTICS

Description	VESNO 0518	VESNO 1292	VESNO 0770	Total
Total Positions	750	98	54	902
Detached Positions	23	0	0	23
Duplicate Positions	13	9	0	22
Total Miles of Hydrography	76	14	5	90
Linear NM of Mainscheme Lines	67	14	0	81
Linear NM of Crosslines	10	0	0	10
Linear NM of Development	7	0	0	7
Linear NM of Range-Azimuth	0	0	5	5
Bottom Samples	47	47	0	47
Bar Checks	0	0	0	0
Digibar Casts	3	0	0	3
Dive Investigations	5	0	0	5
AWOIS Investigations	4	0	0	4
Tide Stations Leveled	3	0	0	3
Days of Production	17	2	1	19

P. MISCELLANEOUS

1. Bottom Samples

Bottom samples were taken for submission to the Smithsonian Institution, as directed in Section 6.7 of the Project Instructions. Fourty-seven bottom samples were transmitted on March 24, 1989. Detached positions were acquired for each bottom sample in latitude/longitude coordinates and converted to Universal Time Meridian (UTM) coordinates in the utilities menu of the HDAPS software. Bottom sample positions were plotted on the overlay with crosslines, channel lines and other detached positions. The bottom samples were listed on the Oceanographic Log Sheet - M, NOAA form 75-44 and may be found in Separate I.
POSITIONS 704 THROUGH 712 WERE ADDED TO JUNCTION SURVEY D-100 (1988-89)

2. Anamalous Currents

No anamalous currents were observed in the survey area.

Q. RECOMMENDATIONS SEE ALSO SECTIONS [redacted] OF THE EVALUATION REPORT.

See sections H, K, L, and N of this report for specific recommendations.

R. AUTOMATED DATA PROCESSING

In addition to the HDAPS system, the following non-HDAPS computer programs were used:

VELOCITY	Velocity Computations (IBM PC)
MTEN	Geodetic Computations

S. REFERRAL TO REPORTS

Title	Transmittal Information
Descriptive Report To Accompany Survey H-10292	Hydrographic Surveys Branch Atlantic Marine Center N/MOA23
Horizontal Control Report for OPR-J259-HFP HC-8711	Photogrammetry Branch Atlantic Marine Center N/MOA22 Written by: C.M. Middleton Jr.
Chart Sales Agent Report	Field Surveys Section N/MOA222 Mr. Kenneth H. Moyer N/CG33
User Evaluation Report	Program Planning & Requirement Atlantic Marine Center N/MOA2x1
Chart Inspection Report	Mr. Rudolph D. Sanocki Atlantic Marine Center N/MOA232
Coast Pilot Report	

Submitted by:

James S. Verlaque, LTJG NOAA

LTJG James S. Verlaque, NOAA

Approved by:

LCDR David A. Waltz, NOAA

STATION NAME LIST

OPR-J259-HFP HFP-10-1-89 H-10294

SHEET "C"

101	COBB - 1987
102	CENTER - 1982
103	JIM - 1987
104	DAWN -1987
105	SHOTGUN - 1988
106	BLUE - 1988
107	SHIRK - 1988
108	MIKE - 1988
109	JACK - 1988
110	CONTRAVES ONE - 1956
111	ANDERSON - 1988
112	VAL. P. SILVER TANK - 1988
113	HIDDEN - 1988
114	VIEW - 1988
115	SMITH - 1988
116	BOGGY BAYOU LT. 9 - 1988
117	BORTHWICK - 1988
118	BYRNE - 1988
119	VAL. P. WHITE TANK - 1988
120	WEEKLEY - 1988
121	DRONE - 1988
122	BOGGY BAYOU LT. 3 - 1988
123	BOGGY BAYOU LT. 1 - 1988
124	CHOCTAWHATCHEE BAY ENT. LT. 15 - 1987
125	DESTIN WEST TANK - 1988
126	JOES BAYOU TOWER - 1987
127	DESTIN NORTH TANK - 1988
128	COLD - 1987
129	BACON - 1987
130	JOES - 1987
131	DESTIN EAST TANK - 1988
132	CHOCTAWHATCHEE BAY LT. 51 - 1988
133	RANDY - 1988
134	BLUEWATER BAY RADIO TOWER - 1988
135	ROCK - 1988
136	PK. POST - 1988
137	COON - 1988
138	BUSTLE - 1988
139	CUDDY - 1988
140	ROCKY BAYOU ENT. LT. 1 - 1988
141	SB 03 - 1988
142	SB 07 - 1988
150	NICEVILLE EGLIN AFB RR RAO mST, 1988
A	EGLIN AFB HOSPITAL WATER TANK, 1988
B	EGLIN FIELD SMALL TANK, 1988

CONTROL STATIONS

No	Type	Latitude	Longitude	H	Cart	Freq	Vel	Code	MM/DD/YY
101	F	030:25:02.037	086:29:18.387	0	250	0.0	0.0	4	12/05/88
102	F	030:23:38.184	086:31:01.152	0	250	0.0	0.0		12/05/88
103	F	030:27:05.543	086:25:16.928	0	250	0.0	0.0		12/05/88
104	F	030:23:12.603	086:21:31.931	0	250	0.0	0.0		12/05/88
105	F	030:28:07.294	086:29:03.318	0	250	0.0	0.0	7	12/05/88
106	F	030:29:21.997	086:26:48.426	0	250	0.0	0.0		12/05/88
107	F	030:29:03.422	086:28:06.254	0	250	0.0	0.0		12/05/88
108	F	030:27:08.822	086:32:26.144	0	250	0.0	0.0		12/05/88
109	F	030:27:20.949	086:30:50.376	0	250	0.0	0.0	2	12/05/88
110	F	030:23:39.055	086:34:09.364	0	250	0.0	0.0	5	12/05/88
111	F	030:31:08.301	086:29:32.497	0	250	0.0	0.0		03/03/89
112	F	030:30:34.424	086:30:05.201	0	139	0.0	0.0		03/03/89
113	F	030:30:12.288	086:30:03.430	0	250	0.0	0.0		03/03/89
114	F	030:30:10.591	086:29:39.091	0	250	0.0	0.0		03/03/89
115	F	030:30:17.284	086:29:06.994	0	250	0.0	0.0		03/03/89
116	F	030:30:15.686	086:29:05.054	0	139	0.0	0.0		03/03/89
1	F	030:29:41.826	086:28:45.237	0	250	0.0	0.0		03/03/89
118	F	030:29:34.263	086:28:42.152	0	250	0.0	0.0		03/03/89
119	F	030:29:53.561	086:29:52.823	0	139	0.0	0.0		03/03/89
120	F	030:29:00.005	086:28:56.707	0	250	0.0	0.0		03/03/89
121	F	030:28:51.209	086:29:11.539	0	250	0.0	0.0		03/03/89
122	F	030:28:44.311	086:28:28.879	0	139	0.0	0.0		03/03/89
123	F	030:27:37.977	086:28:23.866	0	250	0.0	0.0		03/03/89
124	F	030:24:15.749	086:31:11.051	0	139	0.0	0.0		03/03/89
1	F	030:23:41.120	086:29:44.048	0	139	0.0	0.0		03/03/89
126	F	030:24:41.149	086:29:50.940	0	139	0.0	0.0		03/03/89
127	F	030:24:10.032	086:29:10.530	0	139	0.0	0.0		03/03/89
128	F	030:24:21.767	086:29:09.775	0	250	0.0	0.0		03/03/89
129	F	030:24:27.312	086:29:16.508	0	250	0.0	0.0		03/03/89
130	F	030:24:58.958	086:29:24.618	0	250	0.0	0.0		03/03/89
131	F	030:23:31.958	086:28:48.227	0	139	0.0	0.0		03/03/89
132	F	030:25:25.882	086:26:09.116	0	139	0.0	0.0		03/03/89
1	F	030:29:43.730	086:26:43.893	0	250	0.0	0.0		03/03/89
1	F	030:29:56.496	086:26:34.762	0	139	0.0	0.0		03/03/89
135	F	030:30:12.151	086:26:21.906	0	250	0.0	0.0		03/03/89
136	F	030:30:40.317	086:27:15.648	0	250	0.0	0.0		03/03/89
137	F	030:30:26.512	086:27:12.513	0	250	0.0	0.0		03/03/89
138	F	030:30:16.969	086:27:17.471	0	250	0.0	0.0		03/03/89
139	F	030:30:15.272	086:27:21.895	0	250	0.0	0.0		03/03/89
140	F	030:29:02.090	086:27:08.820	0	139	0.0	0.0		03/03/89
141	F	030:29:15.950	086:28:08.341	0	250	0.0	0.0		03/03/89
142	F	030:29:25.008	086:28:05.272	0	250	0.0	0.0		03/03/89
143	F	030:29:29.317	086:28:01.337	0	250	0.0	0.0		03/03/89
144	F	030:29:30.015	086:28:00.156	0	250	0.0	0.0		03/03/89
145	F	030:29:35.004	086:28:07.189	0	250	0.0	0.0		03/03/89
146	F	030:29:30.321	086:28:18.247	0	250	0.0	0.0		03/03/89
147	F	030:29:27.765	086:28:21.532	0	250	0.0	0.0		03/03/89
148	F	030:23:39.984	086:23:19.740	0	250	0.0	0.0		03/13/89
149	F	030:29:19.175	086:28:16.665	0	250	0.0	0.0		03/13/89
15Φ		3Φ:31:33.Φ35	86:29:33.Φ33		139				
A		3Φ:28:48.652	86:3Φ:Φ9.322		139				
B		3Φ:29:17.551	86:29:54.168		139				

ABE 4/3/89

NOAA FORM 76-40 (8-74)

Replaces C&GS Form 567.

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

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY

- [ ] HYDROGRAPHIC PARTY
- [XX] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [ ] COMPILATION ACTIVITY
- [ ] FINAL REVIEWER
- [ ] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

- [ ] TO BE CHARTED
- [XX] TO BE REVISED
- [ ] TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
HFP-2	Florida	White Point to Valparaiso	4/13/89

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

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
OPR-J259-HFP	HFP-10-1-89	H-10294	NAD 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
Light	Fl G 2.5 sec "3" Boggy Bayou Lt. 3	30 28	44.311	86 28	28.88 79		F-3-6-L	11385
Light	Fl 6 sec "1" Boggy Bayou Entrance Light 1	30 27	37.98 77	86 28	23.87 66		F-3-6-L	11385
Light	Fl G 2.5 sec "1" Rocky Bayou Entrance Light 1	30 29	02.09Φ	86 27	08.82Φ		F-3-6-L	11385

Copy sent to Hdq } 9/14/90
8th Dist } AB

***NOTE: Positions are unadjusted and were taken from horizontal control package received from Coastal Surveys Unit at the Atlantic Marine Center, Norfolk, Virginia.

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	**NAME**	**ORIGINATOR**
OBJECTS INSPECTED FROM SEAWARD	LCDR David A. Waltz, Chief, HFP-2	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	Clifford S. Middleton Jr., Coastal Surveys Unit	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.

EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - Visually
V - Verified	
1 - Triangulation	5 - Field identified
2 - Traverse	6 - Theodolite
3 - Intersection	7 - Planetable
4 - Resection	8 - Sextant

A. Field positions* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L
8-12-75

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

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.

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

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

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

☆ U.S.GPO:1975-0-665-080/1155

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

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

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- ☐ HYDROGRAPHIC PARTY
- ☒ GEODETIC PARTY
- ☐ PHOTO FIELD PARTY
- ☐ COMPILATION ACTIVITY
- ☐ FINAL REVIEWER
- ☐ QUALITY CONTROL & REVIEW GRP.
- ☐ COAST PILOT BRANCH

(See reverse for responsible personnel)

☐ TO BE CHARTED
☒ TO BE REVISED
☐ TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office): HFP-2

STATE: Florida

LOCALITY: White Point to Valparaiso

DATE: 4/13/89

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

OPR PROJECT NO.: OPR-J259-HFP

JOB NUMBER: HFP-10-1-89

SURVEY NUMBER: H-10294

DATUM: NAD 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	POSITION LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
Tank	Eglin AFB Hospital Water Tank	30 28	48.652	86 30	09.322		F-3-6-L 1-89	11385
Tank	Eglin Field Small Tank	30 29	17.551	86 29	54.168		F-3-6-L 1-89	11385
Tank	Valparaiso Silver Tank	30 30	34.424	86 30	05.201		F-3-6-L 1-89	11385
Lookout Tower	Niceville Jackson GRD STA. Lot	30 31	29.19	86 29	35.84		F-3-6-L 1-89	11385
Radio Tower	Niceville-Eglin AFB RR Radio Mast	30 31	33.035	86 29	33.033		F-3-6-L 1-89	11385
Tank	Niceville Municipal Tank	30 31	34.38	86 29	45.73		F-3-6-L 1-89	11385
	*** NOTE: Positions are unadjusted and were taken from Horizontal Control					copy sent to	Hdq 5th Dist	5/14/90
	package received from Coastal Surveys Unit at the Atlantic Marine Center, Norfolk, Virginia.							NOS

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	**NAME**	**ORIGINATOR**
OBJECTS INSPECTED FROM SEAWARD	LCDR David A. Waltz, Chief, HFP-2	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	Clifford S. Middleton Jr., Coastal Surveys Unit	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.

EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - Visually
V - Verified	
1 - Triangulation	5 - Field identified
2 - Traverse	6 - Theodolite
3 - Intersection	7 - Planetable
4 - Resection	8 - Sextant

A. Field positions* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L
8-12-75

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

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.

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

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

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

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

439 West York Street
Norfolk, VA 23510-1114

May 15, 1989

MEMORANDUM FOR: Lt. Cdr. William A. Wert
Chief, Hydrographic Surveys Branch

FROM: Lt. Cdr. David A. Waltz, NOAA
Chief, Hydrographic Field Party Two

SUBJECT: Approval Sheet for Survey H-10294

This survey was accomplished with two overall purposes in mind. First was to implement a new data acquisition system (HDAPS) and to train employees on the system in advance of high priority work in the summer season. Second was to perform a complete hydrographic survey of the area.

As noted in section M of the Descriptive Report, this survey is incomplete in area. The Boggy and Rocky Bayou areas required range-azimuth methods, and the HDAPS system was unable to provide that capability. It was left incomplete because of the need to implement HDAPS and to move the party to the A-76 Michigan working area as soon as possible. This action was taken with the concurrence of Lt. Cdr. Kenny of N/CG 24.

This survey is approved for the area actually surveyed.

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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: June 12, 1989

MARINE CENTER: Atlantic

OPR: J259

HYDROGRAPHIC SHEET: H-10294

LOCALITY: Choctawhatchee Bay, Florida

TIME PERIOD: February 24 - April 7, 1989

TIDE STATION(S) USED: 872-9501 Valparaiso, Fl
872-9435 Big Hammock Point, Fl

PLANE OF REFERENCE (MEAN LOWER LOW WATER):
872-9501 3.30 ft
872-9435 1.73 ft

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:
872-9501 0.5 ft
872-9435 0.5 ft

REMARKS: RECOMMENDED ZONING

North of latitude 30° 29′, zone direct on 872-9501.

South of latitude 30° 29′, apply a -0 hr 30 min time correction on 872-9435.

James R. Hubbard
CHIEF, TIDAL DATUM QUALITY
ASSURANCE SECTION

NOAA FORM 76-155
(11-72)

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

GEOGRAPHIC NAMES

SURVEY NUMBER

H-10294

Name on Survey	A ON CHART NO.	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	
BOGGY BAYOU	X									1
BOGGY POINT	X									2
CHOCTAWHATCHEE BAY	X									3
FLORIDA (title)	X									4
GRASS LAKE	X									5
JOHN BAYOU	X									6
POSTIL	X									7
POSTIL LAKE	X									8
ROCKY BAYOU	X									9
SHIRK BAYOU	X									10
SHIRK POINT	X									11
TOMS BAYOU	X									12
WEEKLEY BAYOU	X									13
WHITE POINT	X									14
VALPARAISO	X									15
										16
										17
										18
				Approved:						19
										20
				Charles E. Harrington						21
				Chief Geographer - N/CG2x5						22
				JAN 19 1990						23
										24
										25

NOAA FORM 76-155 SUPERSEDES C&GS 197

NOAA FORM 61-29
(12-71)

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

LETTER TRANSMITTING DATA

REFERENCE NO.
N/CG244-35-90

DATA AS LISTED BELOW WERE FORWARDED TO YOU BY *(Check)*:

☐ ORDINARY MAIL ☐ AIR MAIL
☑ REGISTERED MAIL ☐ EXPRESS
☐ GBL *(Give number)* _____

DATE FORWARDED
22 May 1990

NUMBER OF PACKAGES
Three (3)

TO:

Chief, Data Control Branch, N/CG243
Room 151, WSC-1
National Ocean Service - NOAA
Rockville, MD 20852

NOTE: A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate cover. The copy will be returned as a receipt. This form should not be used for correspondence or transmitting accounting documents.

H-10294 (HFP-10-1-89)
OPR-J259-HFP, Florida,
Choctawhatchee Bay,
White Point to Boggy Bayou

PKG. 1 (TUBE)

1 FINAL SMOOTH SHEET
1 FINAL POSITION OVERLAY
1 FINAL EXCESS OVERLAY
2 FINAL FIELD SMOOTH SHEETS
1 ORIGINAL DESCRIPTIVE REPORT

PKG. 2 (BOX)

1 CAHIER containing FINAL POISITON PRINTOUT, FINAL SOUNDING PRINTOUT, and L-FILE
1 ENVELOPE containing SUPPLEMENTAL DATA FROM PRINTOUTS
1 BINDER containing DATA REMOEVED FROM ORIGINAL DESCRIPTIVE REPORT
1 BINDER containing DATA ABSTRACTS

FROM: *(Signature)*
NORRIS A. WIKE Norris A. Wike

RECEIVED THE ABOVE
(Name, Division, Date)
D. S. Clark
6/13/90

Return receipted copy to:

Chief, Atlantic Hydrographic Section,
N/CG24411
Atlantic Marine Center
439 W. York Street
Norfolk, VA 23510-1114

NOAA FORM 61-29 SUPERSEDES FORM C&GS 413 WHICH MAY BE USED.

★U.S.GPO:1983-0-664-008/1192

NOAA FORM 61-29
(12-71)

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

REFERENCE NO. N/CG244-35-90

LETTER TRANSMITTING DATA

DATA AS LISTED BELOW WERE FORWARDED TO YOU BY *(Check)*:

☐ ORDINARY MAIL ☐ AIR MAIL

☑ REGISTERED MAIL ☐ EXPRESS

☐ GBL *(Give number)* _____

TO:

Chief, Data Control Branch, N/CG243
Room 151, WSC-1
National Ocean Service - NOAA
Rockville, MD 20852

DATE FORWARDED
22 May 1990

NUMBER OF PACKAGES
Three (3)

NOTE: A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate cover. The copy will be returned as a receipt. This form should not be used for correspondence or transmitting accounting documents.

H-10294 (HFP-10-1-89)
OPR-J259-HFP, Florida,
Choctawhatchee Bay,
White Point to Boggy Bayou

PKG. 2 (BOX) CONT:

1 ENVELOPE containing ADDITIONAL SHEET OVERLAYS
1 NOTEBOOK containing LAUNCH 0518 DESCRIPTIONS SHEET C
1 BINDER containing AWOIS LISTINGS
1 ACCORDION FILE containing FATHOGRAMS, DATA PRINTOUTS for following days of year (DOY): 55, 58-59, 68-69, 73,75-76, 80-882, 86-87, 89-90, 96-97

FROM: *(Signature)*

NORRIS A. WIKE

RECEIVED THE ABOVE
(Name, Division, Date)

Return receipted copy to:

Chief, Atlantic Hydrographic Section,
N/CG24411
Atlantic Marine Center
439 W. York Street
Norfolk, VA 23510-1114

★U.S.GPO:1983-0-864-006/1192

05/15/90

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NUMBER: H-10294

NUMBER OF CONTROL STATIONS	13
NUMBER OF POSITIONS	804
NUMBER OF SOUNDINGS	3555

	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	24	06/12/89
VERIFICATION OF FIELD DATA	200	12/21/89
QUALITY CONTROL CHECKS	41	
EVALUATION AND ANALYSIS	51	03/06/90
FINAL INSPECTION	19	02/15/90
TOTAL TIME	350	

MARINE CENTER APPROVAL 03/09/90

OFFICE OF CHARTING AND GEODETIC SERVICES
ATLANTIC HYDROGRAPHIC SECTION
EVALUATION REPORT

SURVEY NO.: H-10294 FIELD NO.: HFP-10-1-89

Florida, Choctawhatchee Bay, White Point to Boggy Bayou

SURVEYED: 24 February through 7 April 1989

SCALE: 1:10,000 PROJECT NO.: OPR-J259-HFP

SOUNDINGS: RAYTHEON DE-719 Echo Sounder

CONTROL: MOTOROLA Falcon 484 Mini-Ranger (Range/Range), KRUPP ATLAS POLAR FIX (Range/ Azimuth), HP-3810B (Range/Azimuth)

Chief of Party.....D. A. Waltz

Surveyed by.....J. S. Verlaque
.....G. D. Hendrix
.....D. B. Elliott
.....J. P. Oswald
.....B. A. Link
.....M. J. McMann

Automated Plot by.....XYNETICS 1201 Plotter (AHS)

1. INTRODUCTION

a. The field unit did not perform basic hydrography to the northern sheet limits prescribed in the Project Instructions. The hydrographer was unable to complete a basic hydrographic survey to the northern sheet limits because of time constraints and the testing of the PC-DAS and POLAR FIX systems. The hydrography was "squared off" to the north in the vicinity of Latitude 30°29'00"N. The hydrography shown on the smooth sheet is basic.

b. Range-azimuth data acquired using the POLAR FIX equipment was not smooth plotted by the field unit. The data was verified during office processing and is shown on a 1:10,000 scale page size plot included in the Descriptive Report. The page size plot is labeled "POLAR FIX TEST DATA". The hydrography is not considered basic because crosslines were not run, AWOIS items were not investigated, shoreline verification was not completed, and bottom samples were not taken. This data is considered adequate to supplement the charted hydrography in the common area.

c. The present survey contains a large holiday in the vicinity of Latitude 30°29'15"N, Longitude 86°28'45"W. The area was omitted by the field unit because no control was

available in the area at the time of the survey. It is recommended that the area in the vicinity of Latitude 30°29'15"N, Longitude 86°28'45"W be surveyed at an opportune time. This does not degrade the overall quality of the survey data acquired by the field unit.

d. No unusual problems were encountered during office processing.

e. Notes in the Descriptive Report were made in red during office processing.

2. CONTROL AND SHORELINE

a. Control is adequately discussed in sections F., G., and S. of the Descriptive Report.

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1927 (NAD 27). Office processing of this survey is based on these values. The smooth sheet has been annotated with ticks showing the computed mean shift between the survey datum and the North American Datum of 1983 (NAD 83).

To place this survey on the NAD83 datum move the projection lines 0.711 seconds (21.9 meters or 2.19 mm at the scale of the survey) south in latitude, and 0.183 seconds (4.9 meters or .49 mm at the scale of the survey) west in longitude.

b. Shoreline originates with 1:10,000 scale enlargement of 1:20,000 scale registration copy of Coastal Zone Map TP-00337 of 1977-78. Revisions to ruins or to submerged features alongshore are shown in dashed black.

3. HYDROGRAPHY

a. Soundings at crossings are in excellent agreement and comply with the criteria found in sections 4.6.1 and 6.3.4.3. of the HYDROGRAPHIC MANUAL.

b. The standard six (6), twelve (12), and eighteen (18) foot depth curves could be drawn in their entirety. The supplemental twenty-four (24) foot curve was drawn to show additional bottom relief. Some brown and dashed curves were also drawn to delineate bottom relief.

c. The development of the bottom configuration and determination of least depths is considered adequate with the following exceptions:

The following shoals should have been developed during field operations:

Depths	Latitude	Longitude	Surrounding Depths
2	30°28'58"N	86°28'15"W	3-4
2	30°28'55"N	86°28'18"W	4-5
11	30°27'55"N	86°27'11"W	12-13

Additional lines of hydrography should have been run to adequately delineate the shoals. It is recommended that the items discussed above be charted as shown on present survey.

4. CONDITION OF SURVEY

The smooth sheet and accompanying overlays, hydrographic records and reports conform to the requirements of the HYDROGRAPHIC MANUAL. The following should be noted:

The field unit indicated a shoreline change in the vicinity of Latitude 30°28'27"N, Longitude 86°26'15"W. During office processing of the present survey the shoreline change was not applied to the smooth sheet. It was determined that the field unit performed a very poor transfer of the shoreline from TP-00337 (1977-78) onto the smooth field sheet. The entire shoreline on the east side of the survey was transferred to the field smooth sheet incorrectly. It is apparent that the field unit did not perform an adequate shoreline verification of the present survey. The problem was corrected during office processing of the present survey. The field unit should accurately transfer shoreline to the field sheets as discussed in section 1.6.1. of the HYDROGRAPHIC MANUAL.

5. JUNCTIONS

D-100 (1988-89) to the south

A standard junction was effected with D-100 (1988-89) which junctions to the south. Disregard - Junctions are not required with "D" surveys KLW 6/13/90

There are no contemporary junctional surveys to the north, east, or west of the present survey. Charted hydrography in the northern junctional area is in harmony with the present survey.

6. COMPARISON WITH PRIOR SURVEYS

a. Hydrographic

H-5869 (1935) 1:20,000

Prior survey H-5869 (1935) covers the present survey

area in its entirety. H-5869 (1935) compares favorably with the present survey and shows a general trend of being plus or minus (±) one (1) to two (2) feet.

The present survey is adequate to supersede the prior survey within the common area.

b. Topographic

T-5502 (1934) 1:20,000

A direct comparison between copies of TP-00337 (1977-78) and T-5502 (1934) revealed the following:

1) Along the western shoreline south of Latitude 30°29'51"N the present shoreline has receded from 10 to 75 meters. The shoreline south of Latitude 30°29'00"N on the eastern side of the survey area has remained stable; north of Latitude 30°29'00"N the shoreline has receded up to 60 meters. In the vicinity of Boggy Point, approximate Latitude 30°29'00"N, Longitude 86°28'45"W, present shoreline has accreted approximately 80 meters. From Shirk Point, approximate Latitude 30°29'02"N, Longitude 86°28'06"W, north to the northern limit of hydrography the eastern side of Boggy Bayou has receded up to approximately 40 meters. To the east of Shirk Point along the western shoreline of Rocky Bayou the shoreline has receded up to approximately 60 meters; additionally, the entrance to John Bayou, approximate Latitude 30°29'12"N, Longitude 86°27'35"W, has enlarged considerably.

2) A pier shown on T-5502 (1934) in the vicinity of Latitude 30°29'02"N, Longitude 86°28'56"W is not shown on the present shoreline manuscript. The pier is charted as a dashed line. No change in charting status is recommended; additional work is recommended to determine the status of the pier ruins. The pier ruins has been brought forward to supplement the present survey.

3) In the area of the POLAR FIX test two (2) points have formed in the vicinity of Latitude 30°29'34"N, Longitude 86°29'03"W and Latitude 30°29'33"N, Longitude 86°28'42"W. These points have accreted approximately 60 to 100 meters, respectively. The remainder of the shoreline in this area has remained relatively stable.

7. COMPARISON WITH CHART 11385 18th Edition, Aug. 8/87

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in section K., pages 10-11, and section L., page 12 of the Descriptive Report. The following should be noted:

1) Automated Wreck and Obstruction Item System (AWOIS) item #4656, charted submerged piles, in Latitude 30°27'48.00"N, Longitude 86°28'06.00"W originates with Chart Letter 1130 of 1980 (CL 1130/80). The submerged piles were neither verified nor disproved during present survey operations. It is recommended that the submerged piles be retained as charted. It is also recommended that the submerged piles be investigated at an opportune time.

2) AWOIS item #4659, charted notation shoaling in Latitude 30°28'57.00"N, Longitude 86°26'54.00, originates with Local Notice to Mariners 30 of 1986 (LNM 30/86). The present survey shows no shoaling within the area. Soundings within the area of the charted shoaling range from 20 to 21 feet. It is recommended that the notation shoaling be deleted and depths from the present survey be used to supersede the charted soundings within the common area.

3) AWOIS item #4661, charted piling, in Latitude 30°29'01.00"N, Longitude 86°28'49.00"W, originates with Chart Letter 255 of 1961 (CL 255/61). The piling were neither verified nor disproved during present survey operations. The piling does not appear on TP-00337 (1977-78). It is recommended that the piling be charted as submerged piles in the charted location.

4) A charted cable area in the vicinity of Latitude 30°28'48"N, Longitude 86°28'00"W was neither verified nor disproved during present survey operations. On TP-00337 (1977-78) a submerged cable line is shown heading SSE. On the chart the cable area is shown heading NNE. No determination can be made by this evaluator as to which direction the cable area is running. It is recommended that the chart complier determine the direction of the submerged cable before the next edition of the chart is complied. compiled.

Except as noted above the present survey is adequate to supersede the charted hydrography within the common area.

b. Dangers to Navigation

There were no Dangers to Navigation submitted by the field unit on this survey. No dangers were deleted during office processing.

c. Aids to Navigation

The hydrographer located four (4) nonfloating aids and one (1) floating aid to navigation in the survey area. These aids appear adequate to serve their intended purpose.

8. COMPLIANCE WITH INSTRUCTIONS

This survey complies with the Project Instructions.

9. ADDITIONAL FIELD WORK

This is a good basic survey. Recommendations for additional work are found in sections 1.a., 6.b., and 7.a. of this report.

Franklin L. Saunders
Cartographic Technician
Verification of Field Data

Norris A. Wike
Cartographer
Evaluation and Analysis

Robert R. Hill
Senior Cartographic Technician
Verification Check

Inspection Report
H-10294

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. The digital data have been completed and all revisions and additions made to the smooth sheet during survey processing have been entered in the magnetic tape record for this survey. Final control, position, and sounding printouts of the survey have been made. The survey complies with National Ocean Service requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected

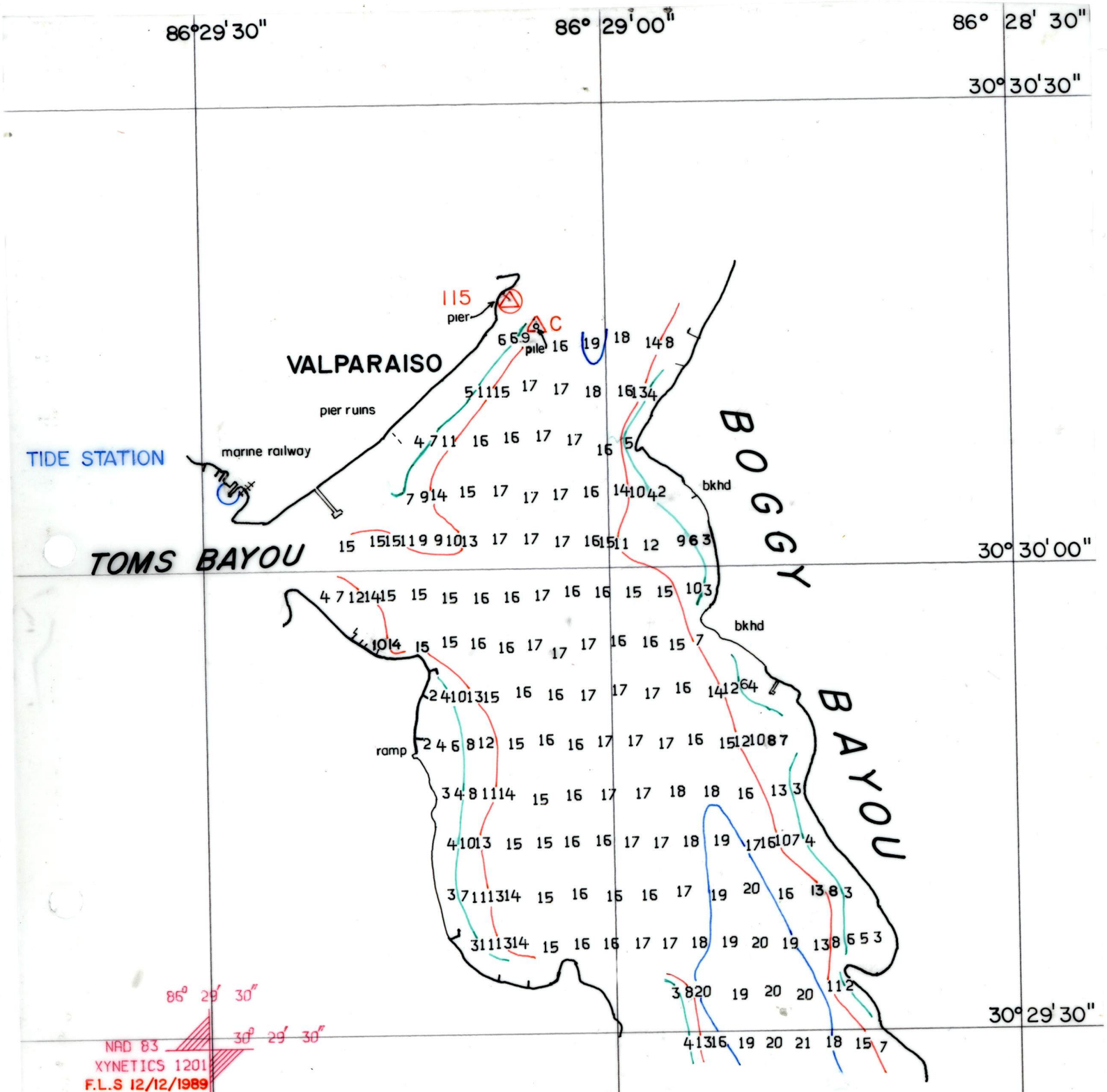
Robert. G. Roberson
Chief, Evaluation and Analysis Group

Christopher B. Lawrence CDR, NOAA
Chief, Atlantic Hydrographic Section

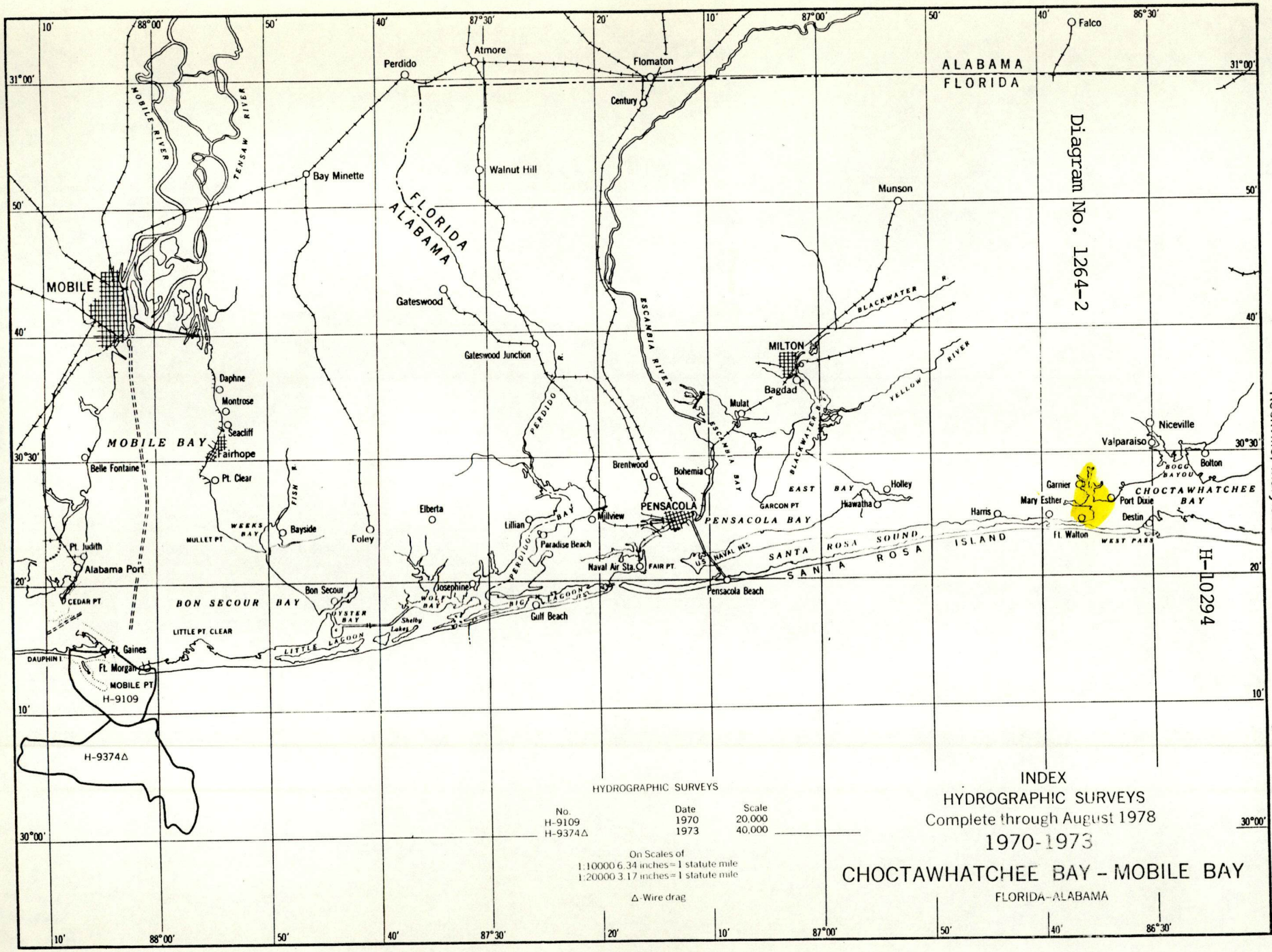
Approved: 2 March 1990

Ray E. Moses, RADM, NOAA
Director, Atlantic Marine Center

Wesley V. Hull, RADM, NOAA
Director, Office of Charting and Geodetic Services



H-10294
FLORIDA
CHOCTAWHATCHEE BAY
WHITE POINT TO BOGGY BAYOU
FEB 23-APRIL 15, 1989
SCALE 1:10,000
SOUNDINGS IN FEET AT MLLW
HORIZONTAL DATUM: NAD 1983
SHEET 1 OF 1
POLAR FIX TEST DATA



DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Survey
Rockville, Maryland

Hydrographic Index No. 85 F

NOAA FORM 75-96
(10-83)

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

EXAMINED FOR NM
GDBU
John Brent Macek 9-7-90

MARINE CHART BRANCH

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10294

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
11385	2/22/91	ALMACEN	Full ~~Part Before~~ After Marine Center Approval Signed Via full application of
			Drawing No. sndgs. from SS.
			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.