

10235

Diagram No. 1263-2

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-10-5-86.....
Registry No. H-10235.....

LOCALITY

State Florida.....
General Locality .. St. Andrew Bay.....
Sublocality Sulphur Point to West.....
..... Bay Point.....

1986-88

CHIEF OF PARTY
LCDR K.W. Perrin

LIBRARY & ARCHIVES

DATE June 21, 1988.....

☆U.S. GOV. PRINTING OFFICE: 1985-568-054

10235

ACPB
CAT
N391
N390A+B

TO SIGN OFF,
SEE RECORD OF APPLICATION

HYDROGRAPHIC TITLE SHEET

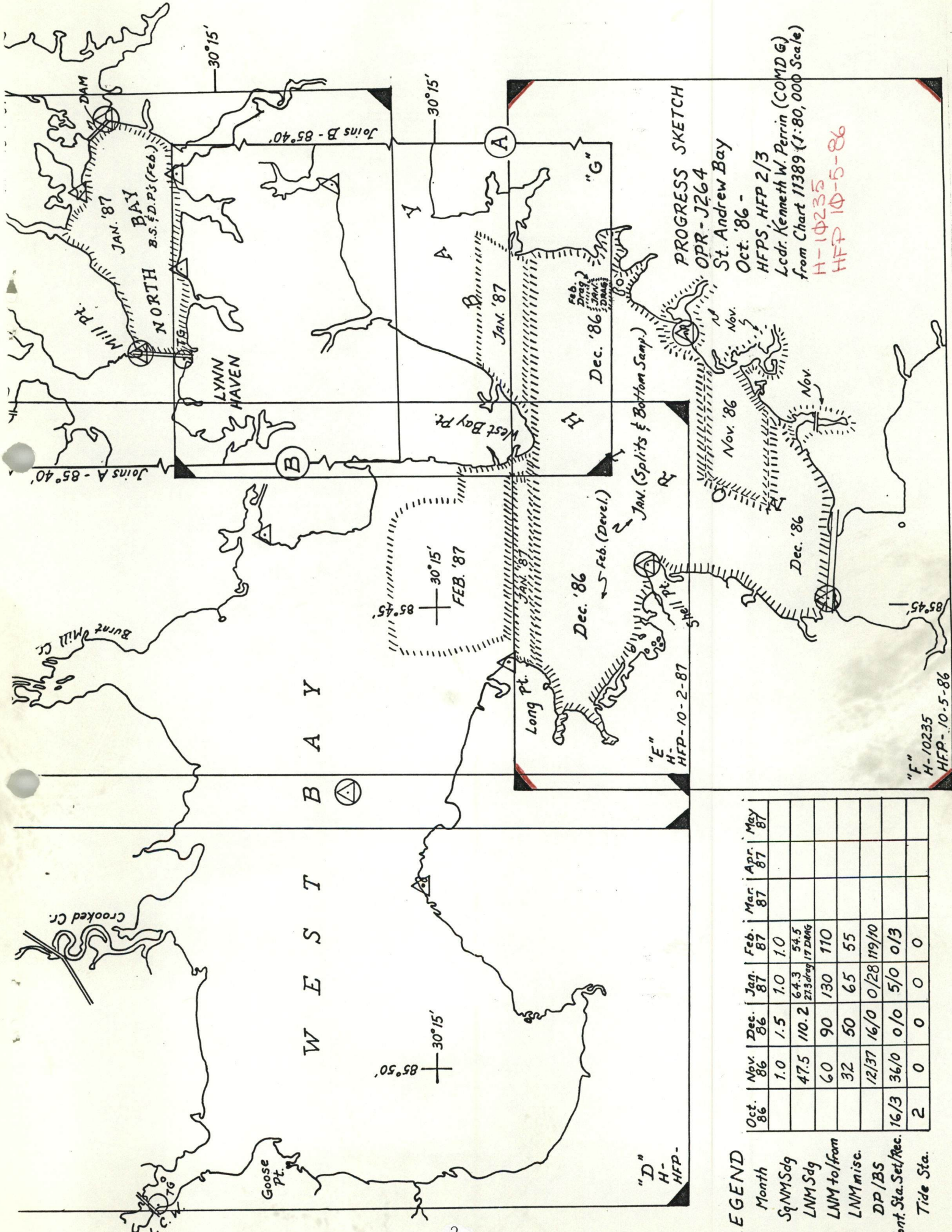
H-10235

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-10-5-86

State FloridaGeneral locality ~~Gulf of Mexico~~ - St. Andrew BayLocality SULPHUR POINT
~~North of Hathaway Bridge~~ to West Bay PointScale 1:10,000Date of survey 11/7/86 - 3/2/87Instructions dated September 8, 1986*Project No. OPR-J264-HFP-86Vessel Hydrographic Field Parties Section - Launches 517, 519, 1020Chief of party LCDR. Kenneth W. PerrinSurveyed by LT. Kenneth P. PetersSoundings taken by echo sounder, hand lead, pole Echo Sounder and PoleGraphic record scaled by KPP, DBE, TMR, JPO, BWR, BAL, MJM, CSW, WDD**Graphic record checked by Same as scaled byProtracted by PDP/8e (Field Sheet)Automated plot by AMC (Smooth Sheet)
XYNETICS 1201 PLOTTERVerification by ~~Atlantic Marine Center~~ HYDROGRAPHIC SURVEYS BRANCH (AMC)Soundings in ~~XXXXXX~~ feet at ~~MLLW~~ MLLWREMARKS: *Change No. 1 - 9/16/86 **KPP-Kenneth P. PetersChange No. 2 - 10/29/86 DBE-David B. ElliottNOTES IN THE DESCRIPTIVE REPORT WERE TMR-Thomas M. RybarskiMADE IN RED DURING OFFICE PROCESSING JPO-John P. OswaldBWR-Robert W. RamseyBAL-Brian A. LinkMJM-Mark J. McMannCSW-Charles S. WeisnerWDD-William D. Davis



LEGEND

Month	Oct. '86	Nov. '86	Dec. '86	Jan. '87	Feb. '87	Mar. '87	Apr. '87	May '87
Sq NMSdg		1.0	1.5	1.0	1.0			
LNM Sdg		47.5	110.2	64.3	54.5			
LNM to/from		60	90	130	110			
LNM misc.		32	50	65	55			
DP/BS		12/37	16/0	0/28	119/10			
Cont. Sta. Set./Rec.	16/3	36/0	0/0	5/0	0/3			
Tide Sta.	2	0	0	0	0			

PROGRESS SKETCH
 OPR-J264
 St. Andrew Bay
 Oct. '86 -
 HFPS, HFP 2/3
 Lcdr. Kenneth W. Perrin (COMDG)
 from Chart 11389 (1:80,000 Scale)
 H-10235
 HFP 10-5-86

"F"
 H-10235
 HFP-10-5-86

"D"
 H-
 HFP-

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

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10235
HFP-10-5-86

Scale: 1:10,000
Chief of Party: Lt. Cdr. Kenneth W. Perrin
Officer in Charge: Lt. Kenneth P. Peters
Hydrographic Field Parties Section
Hydrographic Field Parties 2 and 3
Launch #'s: 0517, 0519, 1020

A. PROJECT

This survey was accomplished under Project Instructions OPR-J264-HFP-86, St. Andrew Bay and Vicinity, Florida, dated 8 September 1986, and amended by:

CHANGE NO. 1, 16 September 1986
CHANGE NO. 2, 29 October 1986

The sheet letter specified in Change No. 2 is "F".

The purpose of this project is to provide contemporary hydrography to revise existing areas adjacent to St. Andrew Bay, FL.

B. AREA SURVEYED

This survey was conducted in St. Andrew Bay north of the Hathaway Bridge to West Bay Point with a northern limit of lat. $30^{\circ}14'12.0''N$ a southern limit of lat. $30^{\circ}09'38.0''N$, an eastern limit of long. $085^{\circ}39'40.53''W$ $21.0''W$ and a western limit of long. $085^{\circ}46'57.0''W$.

Throughout the survey area there are shoals of less than three feet extending several hundred meters from the shoreline. The greatest depths are observed just north of the Hathaway Bridge, where soundings as deep as 45⁹ feet were recorded. Depths elsewhere are generally between 20^φ and 30 feet and contour changes are undramatic.

The bottom is primarily mud or sand. Very little aquatic vegetation was observed during the course of the survey.

The survey was conducted from 7 November 1986 (DN 311) to 02 March 1987 (DN 61).

C. SOUNDING VESSEL

Soundings were obtained with NOAA Launch 0517 (EDP# 0517), NOAA Launch 0519 (EDP# 0519) and NOAA Launch 1020 (EDP# 1020). Launches 0517 and 0519 are 22-foot MonArks and launch 1020 is a 29-foot Jensen. All records are annotated with the vessel number.

Launch 0517 experienced mechanical failure after November 24, 1986 and was not used for the remainder of the survey.

Launch 1020 experienced frequent electronic failures throughout the entire period of the survey.

Due to the shoal nature of the survey area, launch 1020 was used only for mainscheme hydrography beyond the eight-foot curve and for channel lines. Areas inside the eight-foot contour were surveyed with the MonArk launches.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

The following sounding equipment was used on this survey:

MANUFACTURER	MODEL #	SERIAL #	LAUNCH	PERIOD
Raytheon	DSF 6000N	B053N	1020	12/04/86 - 01/12/87
Raytheon	719-C	5799	0517	11/07/86 - 11/10/86
Raytheon	719-C	7881	0517	11/21/86 - 11/24/86
Raytheon	719-C	7881	0519	12/02/86 - 01/06/87
Raytheon	719-C	9221	0519	01/14/87 - 03/02/87

A graduated sounding pole was used for soundings taken in shoal waters (two feet or less) with launch 0517 and 0519. Otherwise, the electronic equipment listed in the table was used to obtain all sounding data.

When using a Raytheon Model 719-C Fathometer, calibration checks were made at frequent intervals on each day of hydrography. Any necessary adjustments were made and noted on the fathogram. Any departure of the trace from the initial zero was corrected during the scanning process.

When using the Raytheon Model DSF 6000N Fathometer, the instrument was operated using manual high and low frequency settings, per instructions from EEB, after problems with the trace using auto gain settings could not be corrected. The problems, skips in the trace and "spike like noise" were alleviated using manual settings. The settings were recorded on the fathogram whenever changed throughout the day. *SEE SECTION 4.F. OF THE EVALUATION REPORT.*

^{FIVE} Four velocity correction tables were generated for this survey. Velocity Table One was generated from bar check data from Fathometer S/N 5799 to be used between DN 311 and 314, 1986. Velocity Table Two was generated from bar check data from Fathometer S/N 7881 to be used between DN 325, 1986 and DN 006, 1987. Velocity Table Three was generated from bar check data from Fathometer S/N 9221 to be used between DN 012, 1987 and DN 61, 1987. Velocity Table Four was generated from an average of TDC cast data for Fathometer B053N (DSF 6000N). Bar checks taken with the DSF 6000N were used to determine the instrument error only. A bar check from DN 029 was used in lieu of one taken on DN 012 which was subsequently rejected for this purpose. Corrections from table four are to be applied to launch 1020 data from Dec. 4, 1986 (DN 338) to Jan. 12, 1987 (DN 012) ³⁵¹ VELOCITY TABLE ³⁴⁹ FIVE WAS GENERATED FOR (JAN. 12, 1987 DEC. 15, (DN 012).

Bar checks were taken on each day of hydrography, two whenever conditions permitted, when using launch 0517 or 0519. Bar check chains for all launches were measured to insure the five-foot interval marks were accurate prior to the start of this project. No corrections were necessary for this survey. SEE ALSO SECTION 4.9) OF THE EVALUATION REPORT:

TDC casts were obtained using a Martek, Mark VII, Model 167, S/N 222, last calibrated in 1986. Two casts were made before the unit failed on DN 012. No NANSEN comparison was made before the failure. The dates and locations of observations are shown on the appended RK 530 printouts. RK530 printouts have been removed and filed with original survey records.

Settlement and squat correctors were determined on Dec. 9, 1986 for launch 0519 and 1020 and on 18 February 1987 for launch 0517 using the level method. A copy of the field data and graphs of the settlement and squat correctors vs. RPM for all the launches are included in the appendix.* These correctors will be applied via the TC/TI tape during processing of the smooth sheet at AMC.* Removed From original Descriptive Report and filed with the survey records.

The final field sheet was plotted using unverified actual heights reduced to Mean Lower Low Water (MLLW) from heights recorded at the Lynn Haven Tide Station (Station Number 872-9102) except for data from 17 February 1987 (DN 48). Soundings on this date (positions 1922-1964) were plotted using predicted tides when a problem was found with the scanned heights for that day. The tide roll for the month of February had already been forwarded to N/OMA121.

Smooth tides were requested from the Sea and Lake Levels Branch, N/OMA12, in a letter dated March 5, 1987.

E. HYDROGRAPHIC SHEETS (FIELD SHEETS)

One boat sheet for the small launches (0517, 0519), one boat sheet for launch 1020 and one rough sheet were prepared in the field office using the PDP/8e and Houston Instrument Complot DP-3 plotter to monitor and evaluate the survey data. Two sheets were prepared by the same method for the final field sheets. One sheet has mainscheme hydrography, signals, and shoreline. The other, an overlay, has detached positions, channel and crosslines, mainscheme splits, aids to

navigation, and bottom samples. Mainscheme hydrography, positions 936 thru 1024, were redundantly plotted on the overlay. Three crosslines (position numbers 1171-1185) run on 16 December 1986 (DN 350) were erroneously plotted with the mainscheme hydrography. Disagreement between crosslines and mainscheme on the smooth sheet and differences between semi-smooth and the smooth sheet plot are seen on DN 350 - 351; which was controlled by Range/Azimuth hydrography in the vicinity of signal 018. Agreement is seen when discrepancies are manually reduced. The problem was determined to be a computer problem reading the tide tape and dropping the draft. The data was replotted by hand.

Soundings on the final field sheet are corrected for transducer draft and unverified actual tides. Velocity correctors were not applied. When the velocity tape is used to plot with the PDP/e, erroneous soundings are plotted. When the tape is eliminated soundings are plotted correctly. The velocity tapes are included with the survey data for plotting the smooth sheet at AMC.

Projection parameter tape listings for the field sheets are included in the appendix of this report.* All field records are forwarded to the Atlantic Marine Center for verification and smooth sheet plotting.**Removed from original Descriptive Report and filed with survey records*

F. CONTROL STATIONS

~~Four~~^{THREE} monumented control stations (signals 001, 002, 003, ~~004~~) and three fixed aids to navigation (signals 012, 018, 022) and one landmark (signal 034) were used to control this survey. All control stations meet Third-order, Class I standards. Signals 001, 002, and 034 were established in 1984 by personnel from AMC, Program Services Division and are published NGS stations. Signals 003, ~~004~~, 012, 018, and 022 were established in 1986 by personnel from AMC, Coastal Mapping Division and field party personnel. The geodetic control report for the 1986 work will be submitted by N/MOA2222. The signal list is appended.✓

G. HYDROGRAPHIC POSITION CONTROL

Range/Range, Range/Azimuth, and See Field Sheet methods were used to control this survey. During Range/Azimuth, initial azimuth checks were obtained and recorded at the beginning of each applicable day. An initial azimuth of 000°00'0", used in all cases, was checked and recorded at frequent intervals throughout the day.

The following equipment was used to control this survey:

EQUIPMENT	MANUF.	MODEL #	S/N	VESSEL
RPU	Motorola	Falcon 484	E0146	0519
RPU	Motorola	Falcon 484	E0147	0517
CDU	Motorola	Falcon 484	E0007	0517

EQUIPMENT	MANUF.	MODEL #	S/N	VESSEL
CDU	Motorola	Falcon 484	E0006	0519
R/T	Motorola	Falcon 484	D2123	0517
R/T	Motorola	Falcon 484	C2096	0519
RPU	Motorola	Falcon 484	E0139	1020
CDU	Motorola	Falcon 484	E0003	1020
R/T	Motorola	Falcon 484	C2000	1020
R/S	Motorola	Falcon 484	E2912	Code 2
R/S	Motorola	Falcon 484	E2915	Code 6
R/S	Motorola	Falcon 484	E2913	Code 7
R/S	Motorola	Falcon 484	E2976	Code 8
R/S	Motorola	Falcon 484	C2058	Code 3
Theodolite	Nikon	NT2D-20"	031045	
Total	Hewlett	HP-3808A	723A00727	
Station	Packard			

Motorola Falcon 484 equipment was calibrated over a baseline of 1636 meters in accordance with AMC OpOrder 86, dated 11/20/86.

Daily critical checks of the equipment were performed prior to every day of hydrography and again after hydrography except when precluded by rough seas and/or a long run to the check site. Attachment "12"* reflects the mean corrector of the system checks and is included in the appendix of this report. * Data removed from Descriptive Report and is filed with field survey records.

Daily critical system check correctors were observed within rejection limit tolerances when compared with true distance values and were used on corrector tapes. The daily values agreed well with the baseline correctors obtained during calibration. True distances for both the baseline and daily checks were obtained by inverse computation between Third-order positions.

Attachments "1" and "2" are included in the fan folder for survey H-10235. ** Field survey records.

Failures of Falcon 484 equipment included Reference Station S/N's E2888 (Code 1) and E2907 (Code 5), both of which failed during opening baseline calibrations for survey H-10235 on 11/4/86. Reference Station E2976 (Code 8) was blown over by high winds and subsequently failed on 12/3/86.

Falcon equipment used on launch 1020 (RPU S/N E0139, CDU S/N E0003, R/T S/N C2000) regardless of Reference Stations used, showed a difference between signal strengths shown on the CDU screen and signal strengths printed on the teletype printout. Differences as high as 20 were seen. The problem has not been resolved as of this writing. Signal strength differences were manually recorded in the sounding volume. None of the failures of equipment adversely effected the quality of the hydrographic data.

H. SHORELINE SEE SECTION 2.6. OF THE EVALUATION REPORT.

Shoreline shown on the final field sheet was transferred from TP-00342 and TP-00344, 1:20,000 scale manuscripts enlarged to 1:10,000 scale. The T-sheets did not include the canal at lat. 30°12'00.0"N, long. 085°44'^{58.3}20.5"W. Shoreline for this canal was obtained by manually enlarging a 1:40,000 scale aerial photograph acquired from Environmental Assessment at the National Marine Fisheries Lab in Panama City Beach, Fl. Photo-copies are appended; originals may be obtained from Navigation Chart Division, Photogrammetry Branch, N/CG 2314. The canal was drawn on the final field sheet in dashed red.

The shoreline was verified by detached position or by the junction with shore of mainscheme hydrography. The shoreline is accurately shown on the shoreline manuscript with the following two exceptions located on the southern portion of the sheet just west of the Hathaway Bridge:

--Erosion is occurring on about 200 meters of shoreline between lat. 30°11'^{12.4}13.5"N, long. 085°43'^{55.8}03.0"W and lat. 30°11'13.0"N, long. 085°43'^{44.04}54.0"W. About 25 meters of shoreline has eroded and is shown on the final field sheet as a dashed red line. CONCUR

--Evidence of erosion can be seen over about 50 meters of shoreline centered about lat. 30°11'24.5"N, long. 085°43'26.0"W. The shoreline is now 10 to 15 feet inside the manuscript shoreline. CONCUR

Shoreline details were verified by visual inspection or by detached position. These features were transferred to the final field sheet in black ink when verified, red ink if not shown on the manuscript, and blue ink when manuscript features were nonexistent.

Detail changes to the manuscript are (All changes to the manuscript occur on TP-00344.):

-- There is no evidence of three groins appearing on the manuscript immediately west of the Hathaway Bridge between lat. 30°11'04.5"N, long. 085°44'13.5W and lat. 30°11'04.0"N, long. 085°44'10.7W. SEE ALSO SECTION 4.9. OF THE EVALUATION REPORT.

-- A pier at lat. 30°11'27.04²"N, long. 085°43'26.35²⁷"W is in ruins (pos. 001).

-- A pier with a boat house not shown on the manuscript should be charted at lat. 30°12'09.87⁷¹N, long. 085°42'26.19¹⁶"W (pos. 1910). CONCUR

-- A pier with a boat house not shown on the manuscript should be charted at lat. 30°12'12.32¹⁷"N, long. 085°42'27.21¹⁸"W (pos. 1911). CONCUR

-- A pier with a boat house not shown on the manuscript should be charted at lat. 30°12'13.40"N, long. 085°42'27.49"W (pos. 1912). CONCUR 25 45

-- A private boat ramp belonging to Bay County Airport not shown on the manuscript should be charted at lat. 30°13'02.39"N, long. 085°41'19.96"W (pos. 1186). CONCUR 4 42

Three control stations were located seaward of the shoreline within the limits of the survey. They are:

SIGNAL #	NAME
=====	=====
012	North Bay Lt. 3, 1986
018	Panama City Airport Lt., 1986
022	West Bay Light 9, 1986 LONG POINT

Each of the above stations was utilized to control hydrographic operations on H-10235. Locations are listed on the appended signal list.

I. CROSSLINES SEE SECTION 3.A. OF THE EVALUATION REPORT.

Crosslines constitute 13.8% of the mainscheme hydrography. Comparison shows excellent agreement of crosslines with mainscheme hydrography with no significant discrepancies. All soundings agreed within ± one foot with 90% agreeing exactly.

In some areas crosslines were run using launch 1020 and cross mainscheme arcs obtained with launch 0519. Crossing agreement is excellent with no differences greater than ± one foot.

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

This survey junctions to the south with the following contemporary survey:

Hydrographic Survey Registry Number H-10122
Scale 1:10,000
Conducted Dec. 1983 thru May 1984

This survey junctions to the north with H-10236 and H-10237, both 1:10,000 scale surveys being run concurrently with this survey and scheduled for completion in May 1987.

Comparison of all junction soundings shows good agreement between all four surveys. Continuation of contour lines shows no abrupt changes to contours crossing from one survey to another. Junction soundings are shown on the final field sheet in red ink for survey H-10122; soundings in green ink for survey H-10236; and soundings in violet ink for survey H-10237.

K. COMPARISON WITH PRIOR SURVEYS SEE SECTION 6. OF THE EVALUATION REPORT.

This survey has a common area with the following prior surveys:

SURVEY	YEAR	SCALE
=====		
H-1375	1877	1:20,000
H-5783	1935	1:10,000
H-5812	1935	1:10,000

No AWOIS items originated from any of the listed prior surveys.

Prior survey H-1375 has a common area with the present survey south of lat. 30°13'00"N to the Hathaway Bridge. A change immediately apparent when comparing the two surveys is the construction of the Hathaway Bridge. Also readily apparent are man made changes to shoreline features and the dredging of lagoons and bayous. The greatest activity is observed on the eastern shore of the survey where lagoons have been created that extend inland through housing projects. A general comparison of depths and contours shows very little movement of contour lines and soundings generally agree within ± two feet in the common areas.

Prior survey H-5783 has areas south of lat. 30°12'30.0"N common with the present survey. Examination of the shoreline shows no changes of notable significance not attributable to mans activities. Man-made features not appearing on the prior survey are:

- 1) The construction of a small craft marina on the northwest end of the Hathaway Bridge at lat. 30°11'21.0"N, long. 085°45'08.0"W.
- 2) The construction of a larger bridge immediately north of the original Hathaway Bridge between lat. 30°11'10.0"N, long. 085°44'14.0"W, and lat. 30°11'14.0"N, long. 085°44'14.0"W. Only the center span of the original bridge has been removed.
- 3) Numerous piers and piers in ruins exist on the eastern shore of the present survey from the northeast end of the Hathaway Bridge to Point Anchorage (lat. 30°12'04.0"N, long. 085°42'48.0"W).

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4) The entrance to Posten Bayou (lat. 30°11'35.0"N, long. 085°43'00.0"W) has been widened and dredged to provide access by small craft.

5) Several lagoons have been created inside Pretty Bayou (lat. 30°12'06.0"N, long. 085°42'24.0"W) and provide water access to housing projects.

There are very few changes to the survey area attributable to natural forces. Contour patterns exhibit very little change and soundings generally agree within ± two feet.

Prior survey H-5812 has all areas north of lat. 30°12'00.0"N to the northern limits of the present survey in common. Comparison of the surveys shows very good agreement. There are no apparent shoaling or deepening trends of any significance. Depth contours have changed very little and 90% of the soundings agree within one foot with no differences greater than two feet observed.

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

Seven presurvey review items (No.s 03129, 03152, 04197, 04198, 04199, 04199, 04201, 04205) assigned to OPR-J264 lie within the limits of H-10235 and were resolved during the course of this survey. A complete discussion of these items on the Item Investigation Reports is included in the appendix of this report.

^{16 JULY} A chart comparison was made with Chart 11390, 14th Edition, dated ~~August~~ 1983. Chart 11390 is a 1:40,000 scale chart. For comparison, the chart was photographically enlarged to 1:10,000 scale.

A Danger to Navigation Notice for Local Notice to Mariners was submitted to the Commander, Eighth Coast District, New Orleans, LA and to N/CG222, Chart Information Section. The letter (a copy of which is appended) describes the following uncharted dangers:

-- The channel limits leading into the Marine Transportation Services Facility are currently charted approximately 200 meters southwest of it's actual location, leading into the facility from lat. 30°13'04.5"N, long. 085°41'07.8"W, southeast to lat. 30°12'54.6"N, long. 085°41'51.6"W. This channel, currently charted with "6 ft. rep 1976", was found to have a shoal least depth of three feet at MLLW at lat. 30°12'57.0"N, long. 085°41'55.2"W. The channel is poorly marked with two private markers (five markers are charted) and caution is advised when transitting this channel without local knowledge. With local knowledge five to seven feet of water can be carried into the facility. SEE ALSO SECTIONS 7.A.12) AND 7.B.2) OF THE EVALUATION REPORT.

-- The channel leading into Robinson Bayou, marked with private channel markers, currently charted with "6 ft. rep 1976", was found to have a shoal least depth of three feet at MLLW at lat. 30°12'46.2"N, long. 085°42'10.5"W. SEE ALSO SECTION 7.B.3) OF THE EVALUATION REPORT.

-- The channel shown charted as "3 ft. rep 1976", at lat. $30^{\circ}11'46.2''N$, long. $085^{\circ}42'10.5''W$, was found approximately 75 meters north, leading in from lat. $30^{\circ}11'58.6''N$, long. $085^{\circ}44'49.7''W$, with a shoal least depth of 2 feet at MLLW. CONCUR

IT IS RECOMMENDED THAT THE CHARTED CHANNEL BE MOVED TO PRESENT SURVEY LOCATION AND CHARTED AS SHOWN ON PRESENT SURVEY.

The general agreement between charted soundings and those found on this survey was good and contour lines exhibit similar patterns. With the following exceptions all soundings agreed within \pm two feet:

-- A charted 25-foot sounding at lat. $30^{\circ}12'12.0''N$, long. $085^{\circ}43'28.5''W$ corresponds to an area having surveyed depths between 21 and 22 feet. CONCUR

-- A 25-foot depth charted at lat. $30^{\circ}13'03.0''N$, long. $085^{\circ}43'41.0''W$ has survey soundings of 22 to 23 feet. CONCUR

-- The charted 38-foot depth at lat. $30^{\circ}11'35.5''N$, long. $085^{\circ}44'25.5''W$ lies in an area having depths as great as 45 feet on the present survey. There are 37 to 38-foot depths adjacent to the charted position at lat. $30^{\circ}11'29.5''N$, long. $085^{\circ}44'29.0''W$ and lat. $30^{\circ}11'32.5''N$, long. $085^{\circ}44'32''W$.

THE CHARTED 38-FOOT DEPTH IS IN A CHANNEL.

-- A 44-foot charted depth at lat. $30^{\circ}11'33.0''N$, long. $085^{\circ}44'15.5''W$ has depths of 36 to 41 feet on the present survey. This item was not addressed as a danger to navigation as any approach would require the navigation of water with depths of only 34 feet.

The following significant depths were investigated:

-- A nine-foot charted depth between the twelve and the eighteen-foot contours at lat. $30^{\circ}13'42.0''N$, long. $085^{\circ}42'38.0''W$ was investigated with reduced line spacing. The nine-foot depth was verified at lat. $30^{\circ}13'15.0''N$, long. $085^{\circ}42'29.5''W$. Surrounding depths are ten to fourteen feet.

-- A charted twelve-foot depth between the twelve and eighteen-foot contours at lat. $30^{\circ}13'40.0''N$, long. $085^{\circ}42'38.0''W$ was investigated with reduced line spacing. Surveyed soundings over the shoal area were between 14 and 15 feet. 11-FT SHOAL FOUND APPROXIMATELY 250M WEST OF CHARTED 12-FT SHOAL.

-- A charted six-foot depth between the six and twelve-foot contours at lat. $30^{\circ}13'24.0''N$, long. $085^{\circ}44'17.5''W$ was developed with reduced line spacing and arcs not common with the mainscheme. A surveyed depth of six foot was located at lat. $30^{\circ}13'23.0''N$, long. $085^{\circ}44'18.5''W$. The area is characterized by erratic depth variations generally between seven and fifteen feet. CONCUR

Comparison between survey records, Chart 11390, and the manuscripts was made on all non-sounding features. With the exceptions noted in Section H and addressed in the appended Item Investigation Reports, it was found that the manuscript was accurate and all features should be charted. The following recommendations are made for charting of features not discussed elsewhere:

(All positions listed are 30°N, 85°W. The degrees have been dropped from the listing. DNC - Do Not Chart. NE - No Evidence.)

ITEM	POS#	CHART 11390	LAT (N)/LONG (W)	TP-00344	CHARTING RECOMM.
PIER	NE	NO	11'33.0"/43'14.0"	NO	DNC *
PIER	NE	NO	11'34.5"/43'04.5"	NO	DNC *
PILE	1887	NO	13'01.0"/41'59.6"	NO	PILE
PILE	1888	NO	12'58.1"/41'53.4"	NO	PILE

The area of the charted items was searched at MLLW and no sign of the items was found. *INADEQUATE SEARCH PERFORMED IN AREAS. RECOMMEND THAT PIERS BE REVISED TO SURMERGED PIER RUINS IN CHARTED LOCATIONS.*

M. ADEQUACY OF SURVEY

This survey is complete and adequate to warrant its use to supersede prior surveys for charting in the common areas.

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

Two floating aids to navigation lie within the area covered by H-10235. Buoy "4", a red nun with a radar reflector, was located by detached position 1836 at lat. 30°11'26.14"⁶N, long. 085°44'28.14"⁶W. This buoy is charted approximately 30 meters southeast of the surveyed location. Buoy "3", a green can with a radar reflector, was located by detached position 1837 at lat. 30°11'27.63"⁵⁹N, long. 085°44'32.16"⁸W, about 75 meters north of the charted position.

Pretty Bayou Buoy 2, charted at lat. 30°12'05.0"N, long. 085°42'21.0"W, has been discontinued. Mariners were advised of the discontinuance in the Local Notice To Mariners No. 45-85 of 23 October 1985 for the Eighth Coast Guard District, New Orleans, LA. A copy is appended. The symbol should be removed from the chart. *CONCUR*

All non-private fixed aids were located to Third-order, Class I standards by N/MOA2222 and HFP-2/3 except for Day Beacon "1" which was located with a detached position (No. 1978) and an angle and distance with the HP-3808A. The fixed aids and their positions are listed on the appended NOAA Form 76-40 and should supersede charted positions. All non-private aids to navigation serve the apparent purpose for which they were established. *CONCUR*

Numerous privately maintained fixed aids to navigation exist within the survey area. *CONCUR*

Six uncharted piles marking the channel into Posten Bayou were located. With the channel markers, ~~three~~ ^{two} feet of water can be carried into Posten Bayou. They are:

POSITION	DESCRIPTION	LATITUDE (N)	LONGITUDE (W)
002	PVC Pile, White w/ Green & Yellow Bands	30°11'40.39" ⁸	085°43'20.75" ⁶⁷
003	PVC Pile, White w/ Green & Yellow Bands	30°11'40.53" ²	085°43'16.70" ⁶²
004	PVC Pile, White w/ Green & Yellow Bands	30°11'40.54" ³	085°43'08.81" ⁷⁴
005	Wood Pile, Red and Yellow Bands	30°11'35.18" ⁷	085°43'01.80" ⁷²
006	Wood Pile, Green and Yellow Bands	30°11'35.23" ²	085°43'01.20" ¹²
007	Wood Pile, Green Band	30°11'34.38" ⁷	085°43'00.44" ³⁶

Five piles mark the entrance to Pretty Bayou. These channel markers were designated as a pre-survey review item and are discussed on an appended Item Investigation Report.

Eight channel markers delineate the entrance to Robinson Bayou. They are:

POSITION	DESCRIPTION	LATITUDE (N)	LONGITUDE (W)
1895	Pile	30°12'46.47" ³¹	085°42'14.92" ⁸⁴
1896	Pile	30°12'47.96" ⁹	085°42'14.04" ^{13.96"}
1897	PVC Pile	30°12'45.97" ⁸⁰	085°42'08.11" ^{10.76"}
1898	Pile	30°12'45.81" ⁶³	085°42'08.11" ⁰³
1901	Pile	30°12'43.88" ⁷⁴	085°42'01.67" ⁶⁰
1902	Pile	30°12'43.21" ⁰³	085°42'02.30" ²³
1903	Pile	30°12'40.44" ²⁷	085°42'00.59" ⁵²
1904	Pile	30°12'40.65" ⁴⁷	085°41'59.82" ⁷⁵

The approach to Robinson Bayou is addressed in an appended Danger to Navigation Report.

The approach to the ~~W. J. Parish, Jr.~~ ^{HOLIDAY LODGE} Marina (Marine Reference Number 15; see also Section P, Miscellaneous) is marked by six privately maintained beacons. They are:

POSITION	DESCRIPTION	LATITUDE (N)	LONGITUDE (W)
1843	Pile, Square Green Board, #1	30°11'24.39" ³⁶	085°44'54.51" ⁵⁸
1844	Pile, Triangle Red Board, #2	30°11'25.02" ^{24.99}	085°44'54.51" ^{58.95}
1845	Pile, Triangle Red Board, #4	30°11'24.47" ⁴⁶	085°45'02.01" ^{41.97}
1846	Pile, Square Green Board, #3	30°11'23.23" ²²	085°45'02.70" ⁶⁴
1847	Pile, Square Green Board, #5	30°11'22.56" ⁶⁵	085°45'05.45" ⁴⁴
1848	Pile, Triangle Red Board, #6	30°11'23.74" ⁷³	085°45'05.49" ⁴⁵

The following three privately maintained markers identify the channel into Vals Bayside Marina:

POSITION	DESCRIPTION	LATITUDE (N)	LONGITUDE (W)
1871	Private Marker	30°11'55.92" ⁸⁸	085°44'45.64" ⁶⁴
1872	Private Marker	30°11'58.60" ⁵⁷	085°44'49.64" ⁶¹
1873	Private Marker	30°11'59.46" ⁴²	085°44'49.86" ⁸¹

A Danger to Navigation Report was submitted regarding the approach to Vals Bayside Marina. A copy of the report is appended.

Five markers are charted showing the approach to the Marine Transportation Co., Inc. facilities while only the following two were found to actually exist:

POSITION	DESCRIPTION	LATITUDE (N)	LONGITUDE (W)
1855	Private Marker	30°11'33.13" ⁴⁴	085°45'01.07" ⁴³
1856	Private Marker	30°11'32.14" ¹¹	085°45'01.20" ¹⁷

The approach channel to the Marine Transportation facilities are discussed in Section L and in the appended Danger to Navigation Report.

The charted clearances of the Hathaway Bridge were verified as accurate. All other bridges in the survey area were located at the heads of navigation.

There is one overhead power cable in the survey area just north of the Hathaway Bridge. The elevation of the center span was measured and found to be 94 feet above MLLW (predicted tides applied). The charted elevation of the center span is 85 feet (above MHW). *SEE ALSO SECTION 4.d. OF THE EVALUATION REPORT.*

A submerged cable powers a series of 13 airport approach lights set atop dolphin-like structures extending offshore 1100 meters perpendicular to the shoreline. Detached positions 1187-1189 mark the inshore most eleven structures. The two remaining offshore structures

are horizontal control stations: Panama City Airport Lt., 1986 (signal # 018); Panama City Airport Approach Lt., 1986 (signal # 017). The Panama City Airport Approach Light is the offshore most approach light and the termination point of the cable. Depths over the power cable are seven feet or less. Each of the approach light structures bears a submerged cable warning sign.

There are no pipelines or ferry routes within the survey area.

There were no landmarks within the survey area with the exception of the following, which were verified as presently charted:

LANDMARK	LATITUDE (N)	LONGITUDE (W)	POSITION SOURCE	
=====				
Tower	30°11'11.93"	085°45'35.84"	Triangulation	} Not in survey area.
TV Tower	30°11'00.50"	085°46'34.22"	Triangulation	
R Tower	30°11'08.91"	085°43'52.36"	Triangulation	

An aero beacon, listed in the DIPFILE as PMA CITY BAY CO A LT, lat. 30°12'19.200"N, long. 085°40'58.900"W, reported in the September 8, 1978 Weekly Notice to Mariners, is a poor landmark for this survey area. It was not located due to lack of visibility from existing control. The aero beacon should remain charted with the DIPFILE position above. *CONCOR*

O. STATISTICS

Type of Production	LAUNCH> 0517	0519	1020	TOTAL
=====				
Days of Production (Days at Sea)	4	22	5	28
Number of Positions	150	1873	573	2596
Nautical Miles of Sounding Line	7.0	119.1	46.0	172.1
Nautical Miles of Crossline	1.8	0.0	21.9	23.7
Nautical Miles of Development	0.0	11.0	3.7	14.7
Nautical Miles of Wire Drag	0.0	44.2	0.0	44.2
Total Miles of Hydrography	8.8	173.4	71.5	254.7
Number of Detached Positions	12	52	0	64
Number of Bottom Samples	36	28	0	64
Number of Bar Checks	3	30	3	36
Number of TDC Cast	0	0	2	2

Note: Total for days of production does not allow for two boats running the same day and is therefore lower than the sum totals for individual launches.

P. MISCELLANEOUS

As seen on the facilities tabulation on the cover for small craft nautical chart, Chart 11390, Reference No. 15 is listed as the W.J. Parrish, Jr. (Marina). This marina is locally known as the Holiday Lodge Marina and per telephone conversation with Harry Ivy (phone 904-234-2114), manager of the marina, the reference name on the tabulation should be changed to "Holiday Lodge Marina". *CONCUR*

No anomalous currents were observed by field party personnel within the survey area. Knowledgeable local sources were questioned about currents. The Commanding Officer of the U.S.C.G. Cutter POINT LOBOS, Lt. (jg) Paul Wiedenhoeft, U.S.C.G feels that the current in St. Andrew Bay between the area just north of the Hathaway Bridge (lat. 30°12'15"N, long. 085°45'30"W) south to a line between Bear Pt. (lat. 30°09'40"N, long. 085°43'25"W) and Buena Vista Pt. (lat. 30°09'56"N, long. 085°42'11"W) is more than just "weak and variable" as indicated by the Tide and Currents Table. There were no quantitative studies performed and Lt. (jg) Wiedenhoeft's statement was subjective, based on his experience while working in St. Andrew Bay. Currents within the survey area are tidally influenced.

Hydrography could not be run within the canal at lat. 30°11' 34.0"N, long. 085°45'09.0"W because the entrance was blocked by a dredge barge and equipment.

Positions ~~3435~~ and 3436 ^{WAS} were rejected and not reused.

Bottom samples were submitted to the Curator, Dept. of Paleobiology, Natural History Museum, Smithsonian Institution.

Q. RECOMMENDATIONS

See Sections H, K, L, and N for specific recommendations.

R. AUTOMATED DATA PROCESSING

Programs used during field data acquisition and field processing of this survey are as follows:

PROGRAM	DESCRIPTION	VERSION DATE
=====	=====	=====
RK112	R/R and Hyperbolic Real Time Hydroplot	01/15/87
RK201	Grid, Signal, and Lattice Plot	04/18/75
RK211	Range/Range Non-Real Time Plot	03/22/84
RK212	Visual Station Table Load	04/01/74
RK216	Range/Azimuth Non-Real Time Plot	02/24/84

PROGRAM	DESCRIPTION	VERSION DATE
RK300	Utility Computations	02/05/76
RK330	Reformat and Data Check	10/21/80
RA362	RK330 and AM602 combined	08/20/84
RK407	Geodetic Inverse/Direct Computation	09/25/78
AM500	Predicted Tide Generator	11/10/72
RK530	Velocity Correction Computations	05/10/76
AM602	ELINORE - Line Oriented Editor	12/08/82

S. REFERENCE TO REPORTS

The Horizontal Control Report for OPR-J264, St. Andrew Bay is in the process of being prepared and will be submitted by N/MOA222.

The following reports are appended:

Coast Pilot Report
User Evaluation Report.

Respectfully Submitted,


Kenneth P. Peters, LT, NOAA
OIC HFP-2/3

CHART #11390

PRESURVEY REVIEW ITEM #04197
Obstruction (Channel Markers)

SOURCE: CL1436/76;CL1312/82 - USPS

INVEST. DATE: 11/7/86 (DN 311) TIME:1835Z-1845Z VESSEL: #0517

OIC: LT(jg) Kenneth P. Peters

REFERENCE: H-10235 (OPR-J264-HFP-86)

POSITION: 008 - 012 VOLUME: 1 PAGE:5-6

CORRECTORS APPLIED: None

VELOCITY: TRA CORRECTORS:

UNVERIFIED ACTUAL TIDE HEIGHTS:

GEODETIC POSITION:	LATITUDE	LONGITUDE
CHARTED:	30°12'05.00"	85°42'32.00"
OBSERVED:	-See Method of Item Investigation-	

POSITION DETERMINED BY: Range/Range (Falcon 484)

METHOD OF ITEM INVESTIGATION: The channel markers were found visually and located with detached positions at the following listed locations:

Lat. 30°12'05.24"N, Long. 85°42'33.28"²¹W (Pos. 008)
 Lat. 30°12'05.15"¹⁹N, Long. 85°42'30.79"¹¹W (Pos. 009)
 Lat. 30°12'05.08"¹⁶N, Long. 85°42'28.87"⁷⁸W (Pos. 010)
 Lat. 30°12'04.97"¹⁷N, Long. 85°42'26.85"⁷⁸W (Pos. 011)
 Lat. 30°12'04.96"¹⁷N, Long. 85°42'25.12"⁴⁵W (Pos. 012)

CHARTING RECOMMENDATIONS: ^{DELETE THE CHARTED "MARKERS PA" AND} Chart private maintained marker symbols at the above listed locations ^{CONCUR}

COMPILATION USE

CHART:

APPLIED AS:

CHART #11390

PRE-SURVEY REVIEW ITEM #04201
Submerged Wreck

SOURCE: LNM5/74

INVEST. DATE: 1/28/87 - 2/4/87 TIME: VESSEL #519

OIC: LT(jg) Kenneth P. Peters

REFERENCE: H-10235 (OPR-J264-HFP-86)

POSITION #: 1419 - 1831 Volume: 7 & 8 PAGE: 7(7) - 45(8)

CORRECTORS APPLIED: None

VELOCITY: TRA CORRECTORS:

UNVERIFIED ACTUAL TIDE HEIGHTS:

GEODETIC POSITION:	LATITUDE	LONGITUDE
CHARTED:	30°13'35.00"N	85°41'52.00"W
OBSERVED:	-----Not Found-----	

POSITION DETERMINED BY: Range/Range (Falcon 484)

METHOD OF ITEM INVESTIGATION: A chain drag was run over the area of a 500 meter radius circle, centered over the charted location. The drag was run at no greater than 10 meter arc spacing, with 60 feet of tow line pulling a 50 foot chain strung between otter boards. The drag was conducted in depths ranging from 2 feet to 20 feet. No snags were incurred, nor were any suspicious spikes seen on the graphic record, with one exception. A spike, which did not break the normal bottom trace (usually an indication of vegetation) was seen between position 1687 and 1688. This appeared on the trace while dragging from deep water to shoal ("uphill") with no snag occurring. Proximity to bottom samples containing grass obtained on this survey support the hydrographers conclusion that this spike is grass.

CHARTING RECOMMENDATIONS: Delete the wreck symbol at the above charted location. *CONCUR*

COMPILATION USE

CHART:

APPLIED AS:

CHART # 11390

PRE-SURVEY REVIEW ITEM # 04198

SOURCE: CL1426/76--COE; LNM36/76; CL1436/76

INVESTIGATION DATE: 17 December 1986

TIME: 172600-175500 UTC VESSEL: Launch 0519

OIC LT Kenneth P. Peters NOAA Corps

REFERENCE

POSITION #: 1187-1199

VOLUME: 6

PAGE: 11-14

CORRECTORS APPLIED:

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

ACTUAL TIDES: Unverified-applied

GEODETIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

30° 13' 28.60" N

085° 41' 35.30" W

OBSERVED: Off-shore most

30° 13' 27.03" N

085° 41' 33.65" W

POSITION DETERMINED BY: Range (Falcon Mini-Range)- Azimuth (T-2 Theodolite)

METHOD OF ITEM INVESTIGATION:

A visual search was performed for this item. The item was found to be eleven (11) timber pile structures supporting approach lights (strobe) to Panama City - Bay County Airport in North Bay. The structures are three-pile dolphin type structures bearing 15 feet at time of survey and lie in 1.1 feet to 7.4 feet of water at the time of the survey. The inshore most of the structures is 10 meters from the shore line at the time of survey and is marked by detached position 1187. The fifth structure to seaward is constructed of three dolphins set perpendicular to the approach scheme with each dolphin supporting an approach light, the center of which is in line with the approach scheme. The three lights on the fifth structure are marked by detached positions 1191 thru 1193. The offshore most of the approach lights is marked by detached position 1191. Two final approach lights were located by Third Order Class I standards and utilized as hydrographic signals 17 and 18 having position Lat 30° 13' 38.287" N, Long 085° 41' 43.700" W and Lat. 30° 13' 28.682" N, Long 085° 41' 35.163" W, respectively. Both have quick flashing lights. Signal 17 is the off-shore most of the approach system.

CHARTING RECOMMENDATIONS: Chart as Surveyed. SHOWN ON PRESENT SURVEY.

COMPILATION USE

CHART

APPLIED AS

CHART #11390

ITEM # 03152

ITEM DESCRIPTION: Visible Piles

SOURCE: Unknown

INVESTIGATION DATE: 10 Dec. 1986 TIME: 172500 UTC VESSEL: Launch 0519

OIC: LT Kenneth P. Peters, NOAA Corps

REFERENCES:

Position No: 739-~~01~~ Volume 4 pg. 11

CORRECTORS APPLIED:

- Velocity
- TRA Correctors
- Predicted or
- Actual Tide Correctors

GEODETIC POSITION:

	Latitude	Longitude
Charted:	30° 11' 26.50" N	85° 43' 27.00" W
Observed:	30° 11' 27.81" N	85° 43' 27.47" W
	^{02"}	^{26.27"}

POSITION DETERMINED BY: Range-Range, Falcon Mini Ranger

METHOD OF ITEM INVESTIGATION: A visual search for this item was performed in water having depths not greater than two feet and having visibility of 25'. Detached Position 739 marks the center of the search area. Nothing was found. A pier, now in ruins, was constructed in the vicinity of the charted pile (marked by detached position 01, Vol. # 1, page 4). The piles may have been removed during construction of the pier or to make less danger while approaching the pier. The current property owner, the U.S.C.G. Auxiliary, and the U.S.C.G., P.C. could not provide additional information. **UNABLE TO DETERMINE THE EXTENT OF THE INVESTIGATION.**

CHARTING RECOMMENDATIONS: ~~Delete subm. Piles symbol and chart the pier in ruins. SEE SECTION T.9.1) OF THE EVALUATION REPORT.~~

Compilation Use Only

CHART

APPLIED AS:

CHART # 11390

PRE-SURVEY REVIEW ITEM # 03129

SOURCE: LNM 25/79; LNM 27/79

INVESTIGATION DATE 14 January 1987 (DN.014) TIME 174000 UTC

VESSEL Launch 0519

OIC LT Kenneth P. Peters

REFERENCE

POSITION #: 1298

VOLUME: 6

PAGE: 42

CORRECTORS APPLIED:

VELOCITY:

TRA CORRECTORS:

PREDICTED TIDES:

X ACTUAL TIDES: (Unverified)

GEODETIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

30° 11' 42.00" N

85° 45' 00.00" W

OBSERVED: (Center of 300m radius search)

30° 11' 41.80" N

85° 45' 00.19" W

POSITION DETERMINED BY: Range-Range (Falcon Mini-Ranger)

METHOD OF ITEM INVESTIGATION: A visual search was performed in with depths not exceeding two feet and in calm seas. Water clarity at the time of the search was excellent. A three hundred meter area was searched for over an hour, centered at the charted location of the wreck. Nothing was found. *BOTTOM DRAG IMPRATICAL. CONSIDERING THE DESCRIPTION OF THE ITEM, IT IS RECOMMENDED THAT THE WRECK BE DELETED FROM THE CHART.*

CHARTING RECOMMENDATIONS: Delete from chart.

COMPILATION USE

APPLIED AS

CHART

CHART #11390

PRE-SURVEY REVIEW ITEM #04199
Obstruction (Fence)

SOURCE: CL646/71

INVEST. DATE: 2/11/87(DN 042) TIME: 200000Z VESSEL #519

OIC: LT. Kenneth P. Peters

REFERENCE: H-10235 (OPR-J264-HFP-86)

POSITION: 1921

VOLUME: 8

PAGE: 65

CORRECTORS APPLIED:

VELOCITY: NO

TRA CORRECTORS: NO

UNVERIFIED ACTUAL TIDE HEIGHTS: NO

GEODETTIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

30°13'31.00"

85°46'07.00"

OBSERVED:

--Not Found--

POSITION DETERMINED BY: Range/Azimuth (Falcon 484/NT2D Theodolite)

METHOD OF ITEM INVESTIGATION: Through normal means, the field unit was not able to make contact with Akima International Inc., referenced in the AWOIS Printout. The area of the charted fence was found too shallow for a bottom drag and was visually searched from shore to shore and at least 100 meters either side of the charted location for evidence of the fence. No evidence of the fence was found. Water depth was 0-3 ft. with good visibility. *BOTTOM DRAG IMPRACTICAL CONSIDERING DEPTH AND AREA VISUAL SEARCH IS SUFFICIENT TO DISPROVE.*

CHARTING RECOMMENDATIONS: Delete *FROM CHART.*

COMPILATION USE

CHART:

APPLIED AS:

CHART #11390

PRE-SURVEY REVIEW ITEM #04205
Obstruction (Fence)

SOURCE: CL646/71

INVEST. DATE: 2/11/87 (DN 042) TIME: 194500Z

VESSEL #519

OIC: LT. Kenneth P. Peters

REFERENCE: H-10235 (OPR-J264-HFP-86)

POSITION: 1920

VOLUME: 8

PAGE: 65

CORRECTORS APPLIED:

VELOCITY: NO

TRA CORRECTORS: NO

UNVERIFIED ACTUAL TIDE HEIGHTS: NO

GEODETTIC POSITION:

LATITUDE

LONGITUDE

CHARTED:

30°13'47.00"

85°46'06.00"

OBSERVED:

--NOT FOUND--

POSITION DETERMINED BY: Range/Azimuth (Falcon 484/NT2D Theodolite)

METHOD OF ITEM INVESTIGATION: Through normal means, the field unit was not able to make contact with Akima International Inc., referenced in the AWOIS Printout. The area of the charted fence was found too shallow for a bottom drag and was visually searched from shore to shore and at least 100 meters either side of the charted location for evidence of the fence. No evidence of the fence was found. Water depth was 0-3 ft. with good visibility. *BOTTOM DRAG IMPRACTICAL. CONSIDERING DEPTH AND AREA-VISUAL SEARCH IS SUFFICIENT TO DISPROVE.*

CHARTING RECOMMENDATIONS: Delete *FROM CHART.*

COMPILATION USE

CHART:

APPLIED AS:

APPROVAL SHEET

For

H-10235

The hydrographic records transmitted with this survey are complete and adequate to supersede prior surveys for charting with no additional field work recommended.

No direct supervision was given by me during the field work.

Approved and forwarded.

Kenneth W. Perrin

Kenneth W. Perrin

LCDR, NOAA

Chief, Hydrographic Field Parties Section

SEE ALSO SECTION 1.9. OF THE EVALUATION REPORT.

H-10235 Additional Work

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

HYDROGRAPHIC TITLE SHEET

H-10235

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-10-5-86

State Florida

General locality St. Andrew Bay

Locality ~~North of Hathaway Bridge to West Bay Point~~ ^{SULPHUR POINT}

Scale 1:10,000 Date of survey 2/22/88 - 3/08/88

Instructions dated _____ Project No. OPR-J264-HFP-86

Vessel HFP-2/3 Launch 519

Chief of party LCDR David A. Waltz

Surveyed by LT(jg) Catherine J. Bradley

Soundings taken by echo sounder, ~~XXXXXXXXXX~~

Graphic record scaled by CJB, BAL, DBE, GDH, CEP, MMO***

Graphic record checked by Same as scaled by

Protracted by PDP/8e (Field Sheet) Automated plot by AMC (Smooth Sheet)

Verification by ~~Atlantic Marine Center~~ HYDROGRAPHIC SURVEY BRANCH (AMC)

Soundings in ~~fathoms~~ feet at ~~MLW~~ MLLW _____

REMARKS: ***CJB- Catherine J. Bradley

BAL- Brian A. Link

David B. Elliot

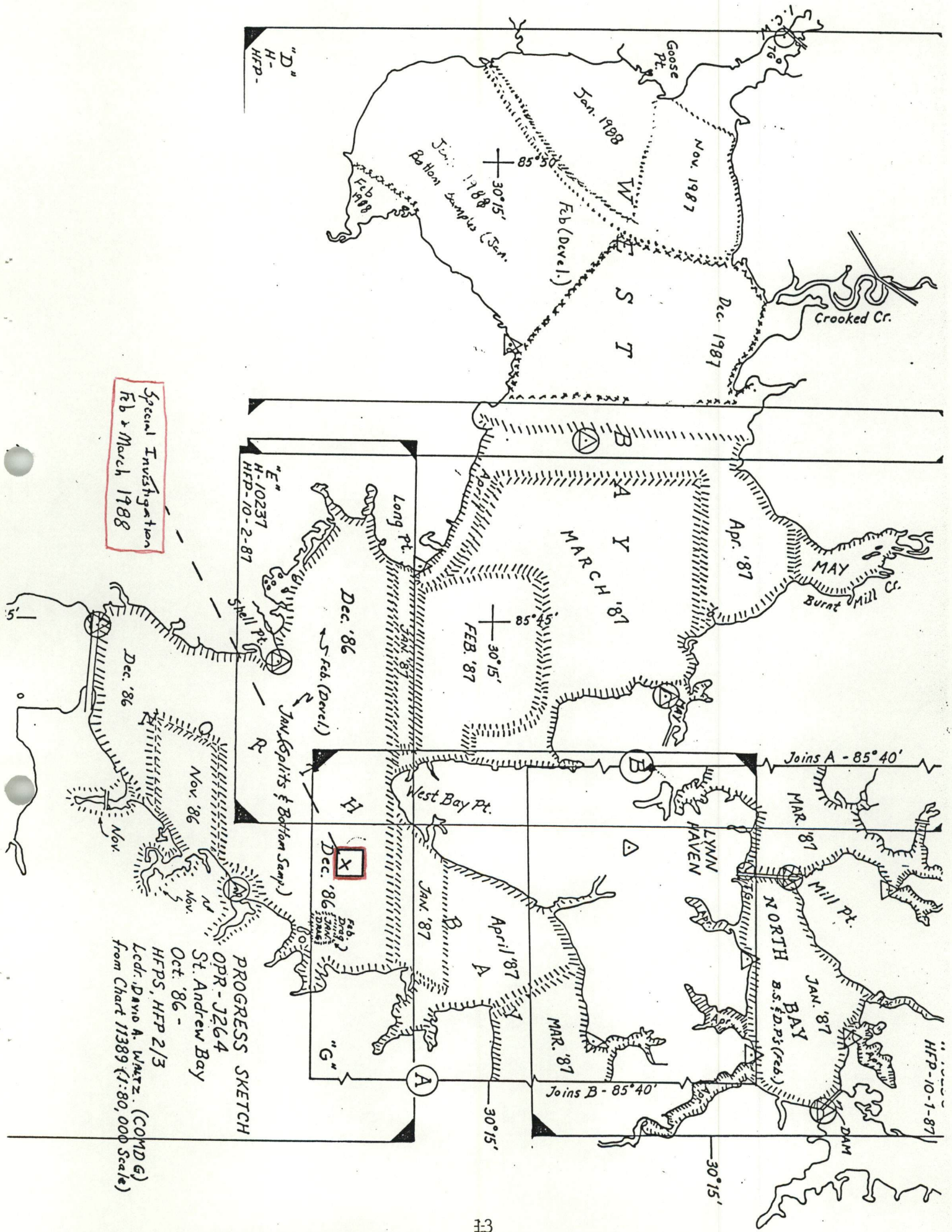
Glenn D. Hendrix

Castle E. Parker

Maria Mangual-Ortiz

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

PROCESSING.



Special Investigation
Feb & March 1988

PROGRESS SKETCH
OPR - J264
St. Andrew Bay
Oct. '86 -
HFPs, HFP 2/3
Lcdr. David A. Wartz. (COMD G)
from Chart 11389 (1:80,000 Scale)

Addendum to Descriptive Report
Hydrographic Survey H-10235
HFP-10-5-86

Scale: 1:10,000

Chief of Party: LCDR. David A. Waltz
Officer in Charge: Lt(jg) Catherine J. Bradley
Hydrographic Field Parties Section
Hydrographic Field Party 2/3
Launch 0519

A. PROJECT

This survey was informally requested by MOA23, on February 12, 1988, during the discussion of surveys at the Field Operations Workshop. Additional field work was required on Survey H-10235.

The purpose of this special investigation was to investigate DSF6000N graphic record "strays", verify or disprove a prior survey sounding, and to run a small amount of hydrography in two areas to better delineate contours.

The sheet letter designation is "F".

B. AREA SURVEYED

The survey was conducted in St. Andrew Bay, North of the Hathaway Bridge to West Bay Point, centered at the following geographic areas:

30°13'45.0"N Lat., 85°42'15.0"W (Graphic Record Strays)
30°11'25.0"N Lat., 85°44'54.0"W (Hydro to fill holiday)
30°11'22.0"N Lat., 85°44'15.0"W (Hydro Development splits)
30°11'56.0"N Lat., 85°43'21.0"W (Prior Survey Sounding)

The survey was conducted on February 22 (DN 053), March 3 (DN 062), March 7 (DN 067) and March 8 (DN 068), 1988.

C. SOUNDING VESSEL

All soundings were obtained and all chain dragging was done with NOAA Launch 0519, a 21 ft. MonArk.

D. Sounding Equipment and Corrections to Echo Soundings

A Raytheon Fathometer Model 719-C (S/N 7881), was used to collect all soundings.

One bar check was taken on each day of hydrography (except DN 062). One velocity correction table was generated from the bar check data for application to all hydrography.

Settlement and squat correctors were determined on January 12, 1988 for Launch 0519. Soundings on the field sheets are not corrected for velocity or settlement and squat. Data for these corrections is appended. DATA REMOVED FROM DESCRIPTIVE REPORT AND FILED WITH FIELD DATA.

When applied (refer to Section E.), predicted tides were based on Tide Station No. 872-9197, West Bay Creek. The ADR tape for the days of hydrography in March was pulled and forwarded to N/OMA12 along with the request for smooth tides letter, on March 9, 1988.

E. HYDROGRAPHIC SHEETS (FIELD SHEETS)

Two 8½ x 11" sheets and one 8½ x 16½" sheet were prepared to evaluate the survey data. One of the small sheets, labeled north overlay, has the drag area plotted, as well as the dive investigation sites, and the shoal bottom sample. The other small sheet, labeled north mainscheme, has the hydrographic developments plotted. This north mainscheme sheet was plotted with vessel draft corrector only (no tides), due to plotter problems, which were corrected by the time the larger south sheet was plotted, which has tides applied.

Projection parameter listings as well as predicted tide tape printouts are appended. DATA REMOVED FROM DESCRIPTIVE REPORT AND FILED WITH FIELD DATA.

F. CONTROL STATIONS

Two monumented control stations (001,002), two fixed aids to navigation (012 018), and one landmark (034) were used to control this survey. All control, except signal 002, meets Third-Order, Class I standards.

As seen on the smooth sheet control station block, station 002 is listed as destroyed, but was still used to control this survey. This is explained by the fact that the slab of concrete the mark was set in was tipped, and thereby "technically destroyed" by Third-Order standards, but still usable as an hydrographic signal. The signal list is appended.

See Section 2. a. of the Evaluation Report.

G. HYDROGRAPHIC POSITION CONTROL

Range/Azimuth and Range/Range methods were used to control this survey. The following equipment was used to control this survey:

Equipment	S/N
Motorola Falcon 484 RPU	E0146
Motorola Falcon 484 CDU	E0006
Motorola Falcon 484 RT	C2096
Motorola Falcon 484 RS (Code 4)	C2091
Motorola Falcon 484 RS (Code 6)	E2915
Motorola Falcon 484 RS (Code 8)	F3237
Nikon NT2D Theodolite	031033

Motorola Falcon equipment was baselined in accordance with AMC OpOrder 86 dated 11/20/86, for survey H-10260, the current survey for CY 88 Operations. Daily Critical System check values were observed within rejection limit tolerances when compared with the baseline values, and used on the corrector tapes. True distances for the daily checks were obtained by inverse computation between Third-Order Positions.

Attachment 12 is appended. *DATA REMOVED FROM DESCRIPTIVE REPORT AND FILED WITH FIELD DATA.*
FINDINGS

With regard to the area centered at Lat. 30°13'45.0"N, Long. 85°42'15.0"W (DSF6000N Graphic Record Strays and isolated shoals): The area was developed using the 719-C Fathometer at no greater than 25 meter line spacing, over the shoals contoured on the smooth sheet for H-10235, listed below:

Site 1) Lat. 30°13'40"N, Long. 85°42'16"W
Site 2) Lat. 30°13'38"N, Long. 85°42'25"W
Site 3) Lat. 30°13'41"N, Long. 85°42'27"W
Site 4) Lat. 30°13'42"N, Long. 85°42'29"W
Site 5) Lat. 30°13'41"N, Long. 85°42'46"W

SITE No. 1

The Fathometer trace showed grass or fishlike strays throughout the area. While the strays certainly appeared to be fish, the coincidence of fish in the same area a year later, indicated the possibility of something on the bottom attracting them.

Three of the more prominent areas of "fish" were chosen as dive sites. Nothing was found at any of the three sites. The bottom, however, contained numerous two to eight inch diameter holes, possibly creating springlike influences throughout the area. Refer to the appended Dive Investigation Report for a complete discussion of the diving activities.

With the relatively poor visibility for diving, a chain drag was run at no greater than 10 meter spacing over the entire area where the strays were seen. No snags were encountered. A slight pull on the chain was felt on one arc which was subsequently rerun in the opposite direction, with no evidence of a snag. A recommendation is made to remove the twelve foot contour from the smooth sheet and chart representative depths. *CONCUR*

Site No. 2

This site, developed at 25 meter line spacing, was found to have least depths of 11 and 12 feet. (Corrected for predicted tides.) Retain shoal with representative depths. *CONCUR*

Site No. 3 and 4

These sites were developed at 25 meter spacing and found to have least depths of from 10 to 12 feet (corrected for predicted tides). There are three isolated shoals, rather than the two shown on the smooth sheet. The Fathometer trace over these sites showed evidence of the same type of strays found over site 1. A chain drag over the area at no greater than 10 meter line spacing encountered no hard snags. Characteristics of the the bottom sample requested for site 4 were fine brown sand, weeds, and broken shell.

Site No. 5

This site was developed at 25 meter line spacing, and found to have a least depth of 11 feet (corrected for predicted tides), as shown on the smooth sheet.

With regard to the additional work requested to fill holidays, delineate contours, and verify or disprove the prior survey sounding: 1) Hydrography run should adequately fill the holiday adjacent to signal 001. 2) Three arcs of hydrography were run at 25 meter line spacing, to better delineate the contour in the vicinity of Lat. 30°11'23"N, Long. 85°44'13"W. 3) No evidence of the prior 5 foot sounding at Lat. 30°11'56"N, Long. 85°43'20"W, was seen in the development run in that area. Recommend removing this prior sounding. *CONCUR*

O. STATISTICS

Type of Production	Total
=====	
Days of Production	4
Number of Positions	199
Naut. Miles of Sounding Line	9.0
Naut. Miles of Crossline	1.0
Naut. Miles of Chain Drag	8.75
Total Miles of Hydrography	10.0
Number of Bottom Samples	1
Number of Bar Checks	3

P. MISCELLANEOUS

Sections of a standard Descriptive Report, not applicable to this Special Investigation (Additional Field Work) Survey were omitted.

The bottom sample sediment taken on this survey was not retained.

The drag, which was all redundant depth record was not scanned.

Q. Recommendations

Recommendations are made in the "FINDINGS" section of this report.

R. AUTOMATED DATA PROCESSING

<u>PROGRAM</u>	<u>DESCRIPTION</u>	<u>VERSION DATE</u>
RK 201	Grid, Signal, and Lattice Plot	04/18/75
RK 211	Range/Range Non-Real Time Plot	03/22/84
RK 212	Visual Station Table Load	04/01/74
RK 216	Range/Azimuth Non-Real Time Plot	02/24/84
RK 300	Utility Computations	02/05/76
RA 362	RK330 and AM602 Combined	08/20/84
RK 407	Geodetic Inverse/Direct Computation	09/25/78
AM 500	Predicted Tide Generator	11/10/72

Respectfully Submitted,



Catherine J. Bradley, LT(jg), NOAA
OIC HFP-2

DIVE INVESTIGATION REPORT
PROJECT NUMBER OPR-J264
SURVEY H-10235
FIELD NUMBER HFP-10-5-86

DIVE NUMBER 1, 2, 3,

DIVE DATE MARCH 2, 1988

I. AREA OF INVESTIGATION

A. State/Country FLORIDA

Sub-Locality NORTH OF HATHAWAY BRIDGE
TO WEST BAY POINT.

B. Position: Latitude ° ' " Longitude ° ' "

* SEE SKETCH (Dive site or center of search area)
ATTACHED:

C. Method of Positioning R/AZ - MINI RANGER I T2

II. PURPOSE OF INVESTIGATION

A. AWOIS item number: _____

B. Source of item being investigated (if other than AWOIS listing): ECHOGRAM

C. Contacts (e.g. USCG, C of E, Harbor Masters, Owners, etc.):

D. Names, Addresses and Phone Numbers etc. of contacts:

III. SURVEY PROCEDURES

A. Determination of dive site (e.g. wire drag, side scan, development): SPLIT ARC DEVELOPMENT

B. Search Procedure (e.g. following a groundwire, circle search, sweep along known feature, etc.) BASELINE SWIM ALONG A GROUNDWIRE SET WITH BUOYS AT EACH END OF QUESTIONABLE AREA. 3-INDIVIDUAL CIRCLE SEARCHS AT DESIGNATED POINTS WITH ANGLE AND DISTANCE ON CENTER OF PATHOGRAM SAKES,

C. Known reference to features nearby: PANAMA CITY AIRPORT APPROACH LIGHTS.

D. Area and depths covered:

THREE 50 METER DIAMETER CIRCLES EACH 20 FOOT DEEP.

IV. DIVE DATA

- A. Divers: CATHERINE BRADLEY / DAVID ELLIOTT
- B. Time of Dive (in UTC) - Real #1 1600 #2 1700 #3 1745
Elapsed 1630 1725 1820
- C. General Bottom Depths (units and method of determination):
20 FEET ECHO SOUNDER, DEPTH GAUGE
- D. Current and conditions: LIGHT CHOP 1/2 TO 1'
- E. Visibility (number of feet - horizontally and vertically):
5 FOOT HORIZONTALLY / 5 FOOT VERTICALLY.
- F. Bottom type (mud, sand, rocks, etc.): SOFT MUD (SILT)

IV. RESULTS

- A. Detached Positions Number(s): _____
Time of D.P.'s (UTC): Describe if other time zone: _____
Least Depth and Fix Numbers (raw depth): _____
Method of determining depth (The raw sounding should be recorded. The reduced least depth should be plotted on the field sheet.) _____
- B. Description of findings:
VARIOUS HOLES ON BOTTOM RANGING FROM 2" DIAMETER TO 8" DIAMETER. POSSIBLY SPRING INFLUENCE CREATING BUBBLES THAT APPEAR ON ECHOGRAM AND DISAPPEAR AT OTHER TIMES.
- C. Dimensions of item or feature (attach sketch if appropriate):
SEE SKETCH ATTACHED
- D. Unusual Conditions:
NO UNUSUAL CONDITIONS AND NO EVIDENCE OF ANY FEATURE OR DEBRIS THAT COULD INTERFERE WITH NAVIGATION.

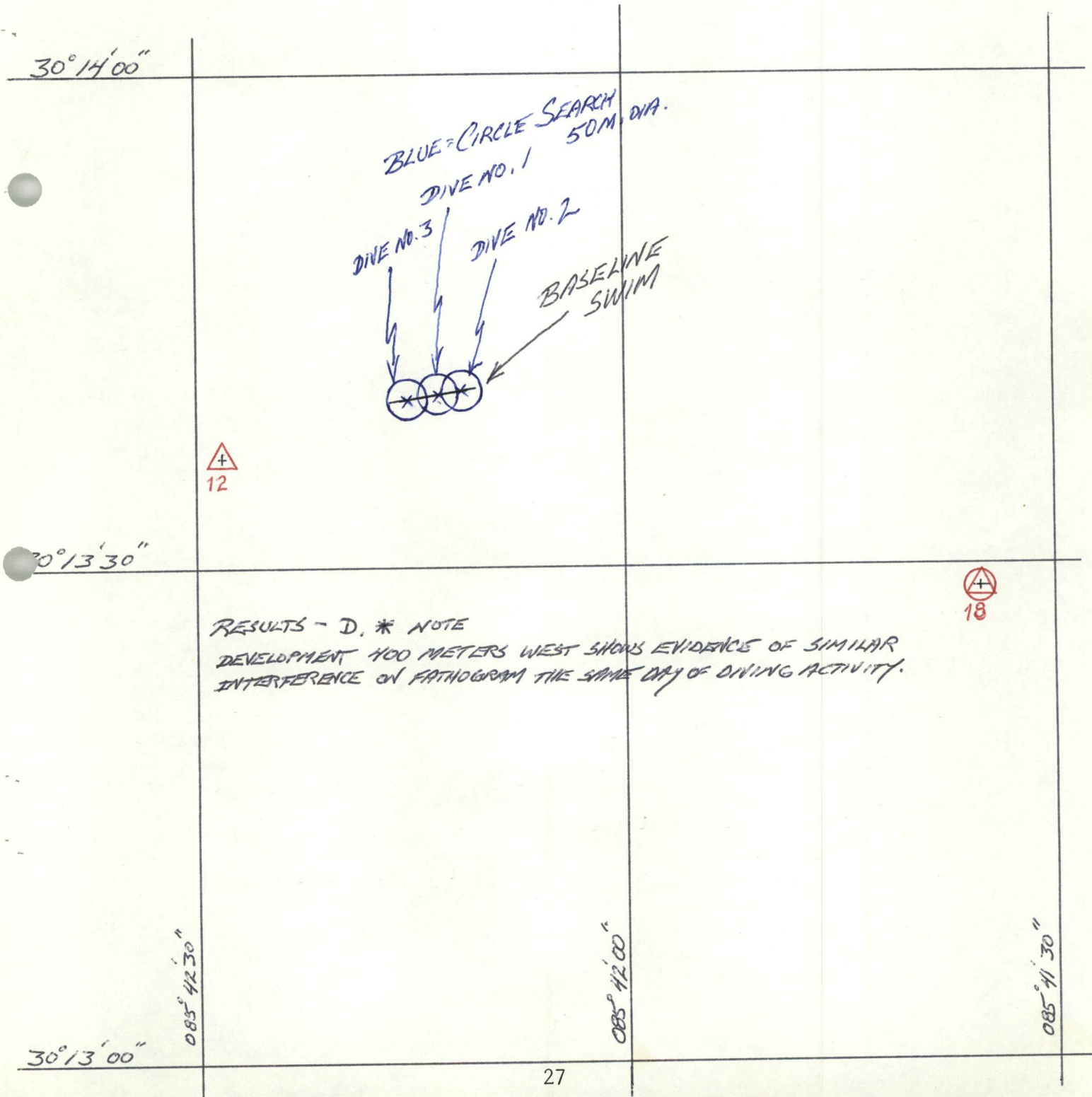
NOTE ON SKETCH * (DEVELOPMENT 400 METERS WEST SHOWS EVIDENCE OF SIMILAR INTERFERENCE ON ECHOGRAM THE SAME DAY OF DIVING ACTIVITY.)

VI. CHARTING RECOMMENDATIONS

Position Lat. _____ Long. _____
Reduced Depth _____
Type of Feature (Reference Chart No.1) _____

OPR - J264
HFP - 10-5-86
H - 10235

DIVER INVESTIGATION OF INTERMITTENT SPIKES,
EAST OF WEST BAY POINT. MARCH 2, 1988



Signal List
H-10235 * HFP-10-5-86 * OPR-J264-HFP-86
St. Andrew Bay, Florida

001	6	30	11	16110	085	44	52117 ⁸	250	0000	000000	Hathaway, 1984
002	6	30	12	54623 ²	085	41	51610	250	0000	000000	Marine, 1984
003	6	30	12	57294	085	44	32381 ⁹	250	0000	000000	West Bay Pt. 2, RM 1, 1986
004	6	30	14	56239 ³⁰	085	40	47539	250	0000	000000	Bar, 1986
005	6	30	15	24571	085	39	30694	250	0000	000000	Haven-2, 1986
006	6	30	15	41867	085	38	47242	250	0000	000000	Mill-2, 1986
007	6	30	16	01002	085	40	23331	250	0000	000000	Alfred-E, 1986
008	6	30	16	16033	085	37	07481	250	0000	000000	Hodges, 1986
009	6	30	15	10241	085	38	15524	250	0000	000000	Ireland, 1986
010	6	30	16	01046	085	36	16758	250	0000	000000	Dam, 1986
011	6	30	15	15218	085	37	14739	250	0000	000000	Dead-Cat, 1986
012	6	30	13	36775 ⁶	085	42	28131 ²	139	0000	000000	North Bay Light 3, 1986
013	6	30	12	42272 ³⁹	085	44	00704 ¹⁰	139	0000	000000	Shell Point Light 5, 1986
014	6	30	13	36743 ⁸	085	44	11060 ⁷	139	0000	000000	Shell Point Light 7, 1986
015	6	30	15	04459	085	40	57723	139	0000	000000	North-Bay-Light-6, 1986
016	6	30	14	43069	085	41	31182	139	0000	000000	North-Bay-Light-5, 1986
017	6	30	13	38287 ⁹	085	41	43700 ⁶⁹	139	0000	000000	Panama City Airpt Appr Lt, 1986
018	6	30	13	28682 ³	085	41	35163 ¹	139	0000	000000	Panama City Airpt Lt., 1986
019	6	30	15	18779	085	36	44389	250	0000	000000	College, 1986
020	6	30	16	46122	085	38	44455	250	0000	000000	Southport, 1986
021	6	30	15	32203	085	46	29403	139	0000	000000	West-Bay-Light-1, 1986
022	6	30	14	20025 ³³	085	44	59936 ⁴¹	139	0000	000000	West Bay Light 9, 1986
023	6	30	14	17679	085	45	33160	250	0000	000000	Crabby, 1986
024	6	30	15	09573	085	47	55718	250	0000	000000	Breakfast, 1986
025	6	30	13	46521	085	50	42318	250	0000	000000	Quickie, 1986
026	6	30	16	34223	085	50	45420	250	0000	000000	Goose-West, 1986
027	6	30	16	34630	085	44	13005	250	0000	000000	Warren, 1986
028	6	30	17	11357	085	46	40362	250	0000	000000	Wall, 1986
029	6	30	15	59014	085	49	06046	139	0000	000000	West-Bay-Light-15, 1986
030	6	30	15	46889	085	47	59787	139	0000	000000	West-Bay-Light-7, 1986
031	6	30	16	33162	085	50	15050	139	0000	000000	West-Bay-Light-24, 1986
032	6	30	11	22822	085	44	20902	139	0000	000000	Gulf Power Light A, 1986
033	6	30	11	23522	085	44	38466	139	0000	000000	Gulf Power Light B, 1986
034	6	30	11	08963 ¹	085	43	52324 ⁵⁵	139	0000	000000	Florida State Hwy Dept Twr, 1984

Note: All signals listed were located to Third Order, Class I standards in the year shown, by personnel from the Atlantic Marine Center and/or HFP-2/3.

Stations on the signal tape, but not used for this survey are lined out on this listing.

Signal List
H-10235 (Additional Field Work)

001	6	30	11	16110	✓085	44	52117	8	250	0000	000000	Hathaway, 1984
002	6	30	12	54623	2085	41	51610	✓	250	0000	000000	Marine, 1984
012	6	30	13	36775	6085	42	28131	20	139	0000	000000	North Bay Light 3, 1986
018	6	30	13	28682	3085	41	35163	1	250	0000	000000	^{Panama} Pan City Airport Lt, 1986
034	6	30	11	08963	085	43	52324		139	0000	000000	Pan Cty St Hwy Pat R Mast, 1953

10

55

~~Panama~~
Florida State Hwy Dept Tower, 1986

Replaces C&GS Form 567.

**U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NONFLOATING AIDS OR LANDMARKS FOR CHARTS**

<input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED		REPORTING UNIT (If field Party, Ship or Office) HFP-2/3	LOCALITY St. Andrew Bay	DATE 2/87	ORIGINATING ACTIVITY <input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)
The following objects HAVE <input type="checkbox"/> HAVE NOT <input type="checkbox"/> been inspected from seaward to determine their value as landmarks.	JOB NUMBER H-10235	STATE Florida			
OPR PROJECT NO. J264-HFP-86	SURVEY NUMBER H-10235	DATUM North American 1927			

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION *		LONGITUDE //	OFFICE	FIELD	CHARTS AFFECTED
		LATITUDE ° /	LONGITUDE ° /				
Light STA #13	Shell Point Light 5 1987 USCGLL, Vol. 4, No. 29440	30 12	85 44	01.060 CC.704		F-3-6-L 11/86	11390
Light STA #14	Shell Point Light 7 1987 USCGLL, Vol. 4, No. 29445	30 13	85 44	11.060		F-3-6-L 11/86	11390
Light STA #32	Gulf Power Co. Structure Lt. A 1987 USCGLL, Vol. 4, No. 29410	30 11	85 44	20.909		F-2-6-L 12/86	11390
Light STA #33	Gulf Power Co. Structure Lt. B 1987 USCGLL, Vol. 4, No. 29415	30 11	85 44	38.465		F-2-6-L 12/86	11390
Light STA #12	North Bay Light 3 1987 USCGLL, Vol. 4, No. 2950	30 13	85 42	28.131		F-3-6-L 11/86	11390
Light STA #18	Panama City Airport Light 1987 USCGLL, Vol. 4, No. 2955	30 13	85 41	35.163		F-3-6-L 11/86	11390
Light STA #17	Panama City Airport Approach Lt. 1987 USCGLL, Vol. 4, No. 2960	30 13	85 41	43.700		F-3-6-L 11/86	11390
Daybeacon	North Bay Daybeacon No. 1 1987 USCGLL, Vol. 4, No. 2945	30 13	85 43	04.41		F-2-6-L 3/87	11390
*Positions are from unadjusted field computations							

*Copy of this page attached to 01-31187
for correction of DTP FILE - No change charts
JES*

RESPONSIBLE PERSONNEL

TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	LT. Kenneth P. Peters	<input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	M. Johnson, MOA2222/B.Link, MOA233	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		OFFICE ACTIVITY REPRESENTATIVE <input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'
 (Consult Photogrammetric Instructions No. 64.)

OFFICE	FIELD (Cont'd)
<p>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</p>	<p>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</p>
<p>FIELD</p> <p>I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant</p> <p>A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75</p> <p>*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.</p>	<p>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</p> <p>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V+Vis.' and date. EXAMPLE: V-Vis. 8-12-75</p> <p>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</p>



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

NATIONAL OCEAN SERVICE

Atlantic Marine Center
439 W. York St.
Norfolk, Va. 23510
N/MOA233

March 6, 1987

To: Commander, Eighth Coast Guard District
New Orleans, LA

From: *Kenneth P. Peters*
LT. Kenneth P. Peters, OIC-HFP 2/3

Subject: Danger to Navigation Notice for inclusion in the
Local Notice to Mariners, Chart 11390, 14th Ed.,
I.C.W., East Bay to West Bay, FL

The following Dangers to Navigation were found while conducting a basic hydrographic survey of St. Andrew Bay, (Registry No. H-10235), between the Hathaway Bridge and West Bay Point and constitute corrections to information shown on Chart 11390:

-- The channel limits leading into the Marine Transportation Services Facility are currently charted approximately 200 meters southwest of it's actual location, leading into the facility from lat. 30°13'04.5"N, long. 085°42'07.8"W, southeast to lat. 30°12'54.6"N, long. 85°41'51.6"W. This channel, currently charted with "6 ft. rep 1976", was found to have a shoal least depth of ~~3~~³⁶ft. at MLLW at lat. 30°12'57"N, long. 085°41'55.2"W. The channel is poorly marked with two private markers, and ⁵⁸caution is advised when transitting this channel without local knowledge. With local knowledge, 5-7 ft. of water can be carried into the facility. *SEE ALSO SECTION 7.b.5) OF THE EVALUATION REPORT.*

-- The channel leading into Robinson Bayou, marked with private channel markers, currently charted with "6 ft. rep 1979", was found to have a shoal least depth of ~~3~~^{36.47} ft. at MLLW at lat. 30°12'46.2"N, long. 085°42'10.5"W. ^{41'59.82"W} *SEE ALSO SECTION 7.b.3) OF THE EVALUATION REPORT.*

-- The channel shown charted as "3 ft. rep 1976", at lat. 30°11'56"N, long. 085°44'48"W, was found approximately ^{45'45.6"W} 75 meters north, leading in from lat. 30°11'56"N, long. 085°44'45.6"W to lat. 30°11'58.6"N, long. 085°44'49.7"W, with a shoal least depth of ~~2~~²³ft. at MLLW. *SEE PAGE 12 OF HYDROGRAPHERS REPORT.*

THIS IS ADVANCE INFORMATION
SUBJECT TO OFFICE VERIFICATION



Subject: Danger to Navigation Notice, Chart 11390

These dangers to navigation were located using Range/Range or Range/Azimuth positioning methods, from Third Order, Class I, geodetic control stations. Motorola Falcon 484 electronic positioning system was used to obtain distances and a Nikon NT2D 20" Theodolite was used for azimuth determination. Depths were recorded using a Raytheon 719C Survey Fathometer. Depths were reduced to Mean Lower Low Water (MLLW) using unverified actual tide heights obtained from Tide Station No. 872-9102 at Lynnhaven, Florida.

A chart section from Chart 11390, 14th ed., showing the location of these dangers, is attached.

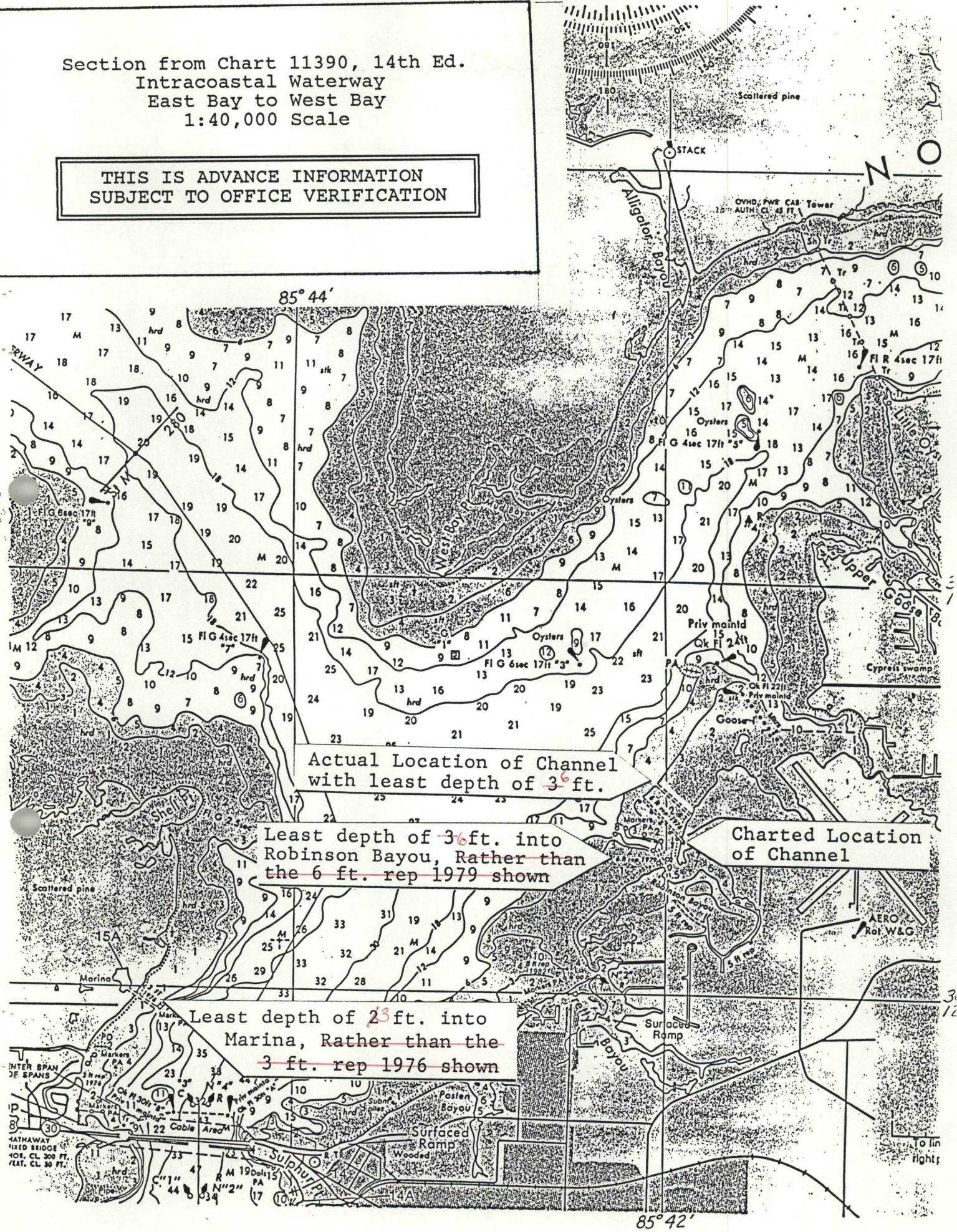
SEE SECTION 7.C. OF THE EVALUATION REPORT.

THIS IS ADVANCE INFORMATION
SUBJECT TO OFFICE VERIFICATION

cc: MOA233
MOA2X1
N/CG222

Section from Chart 11390, 14th Ed.
 Intracoastal Waterway
 East Bay to West Bay
 1:40,000 Scale

THIS IS ADVANCE INFORMATION
 SUBJECT TO OFFICE VERIFICATION



Actual Location of Channel
 with least depth of ~~3~~⁶ ft.

Least depth of ~~3~~⁶ ft. into
 Robinson Bayou, Rather than
 the ~~6 ft. rep 1979~~ shown

Charted Location
 of Channel

Least depth of ~~3~~²³ ft. into
 Marina, Rather than the
~~3 ft. rep 1976~~ shown

APPROVAL SHEET
SURVEY H-10235 ADDENDUM HFP-10-5-86

The hydrographic records transmitted with this report are complete and adequate.

No direct supervision was given by me during the field work.

This survey is complete and adequate with no additional field work recommended.



David A. Waltz
LCDR, NOAA

Chief, Hydrographic Field Parties Section

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

DATE: June 5, 1987

Marine Center: Atlantic

OPR: J264

Hydrographic Sheet: H-10235

Locality: St. Andrews Bay, Florida

Time Period: November 7, 1986 - March 2, 1987

Tide Station Used: 872-9108 Panama City, FL

Plane of Reference (Mean Lower Low Water): 3.23 Ft.

Height of Mean High Water Above Plane of Reference: 1.3 Ft.

Remarks: Recommended Zoning.

1. Apply a + 0 hr 15 minute time correction to all heights.

for Brick L. Conroy

Chief, Tidal Datum Quality
Assurance Section

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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: May 16, 1988

MARINE CENTER: Atlantic

OPR: J264

HYDROGRAPHIC SHEET: H-10235

LOCALITY: St. Andrews Bay, North of Hathway Point to West Bay
Point, Florida

TIME PERIOD: February 22 - March 8, 1988

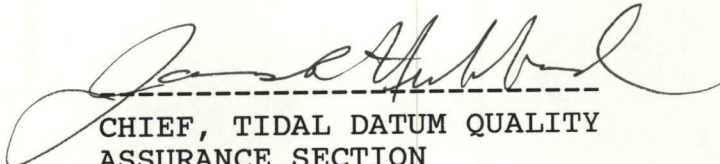
TIDE STATION(S) USED: 872-9108 Panama City, FL

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 3.23 ft.

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.3 ft.

REMARKS: RECOMMENDED ZONING

1. Apply a +0hr 15 minute time correction to all heights.



CHIEF, TIDAL DATUM QUALITY
ASSURANCE SECTION

GEOGRAPHIC NAMES

Name on Survey											
	A	B	C	D	E	F	G	H	K		
	ON CHART NO.	ON PREVIOUS SURVEY NO.	ON U.S. QUADRANGLE MAPS	FROM LOCAL INFORMATION	ON LOCAL MAPS	P.O. GUIDE OR MAP	RAND McNALLY ATLAS	U.S. LIGHT LIST			
BAYVIEW										1	
FLORIDA (title)										2	
GOOSE BAYOU										3	
GOOSE ISLAND										4	
HARRISON BAYOU										5	
NORTH BAY										6	
POSTEN BAYOU										7	
PRETTY BAYOU										8	
ROBINSON BAYOU										9	
SHELL POINT										10	
ST. ANDREW BAY										11	
SULPHUR POINT										12	
UPPER GOOSE BAYOU										13	
WEST BAY										14	
WEST BAY POINT										15	
POINT ANCHORAGE										16	
										17	
										18	
										19	
										20	
										21	
										22	
										23	
										24	
										25	

Approved:

Charles E. Harrington
Chief Geographer - N/CG2x5

DEC 15 1987

REFERENCE NO.

MOA23-63-88

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

13 JUNE 1988

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-10235 (HFP-10-5-86)
OPR-X264-HFP-86, Florida, St Andrew Bay,
Sulphur Point to Wesdt Bay Point

PKG. 1 (TUBE)

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

PGK. 2 (BOX)

- ~~1~~ CAHIER containing FINAL POISITON PRINTOUT
- ~~1~~ CAHIER containing FINAL SOUNDING PRINTOUT
- ~~11~~ NOAA FORM 77-44 (SOUNDING VOLUMES)
- ~~1~~ ENVELOPE containing SUPPLEMENTAL DATA FROM PRINTOUTS
- ~~1~~ ENVELOPE containing DATA REMOEVED FROM DESCRIPTIVE REPORT
- ~~1~~ ENVELOPE containing FIELD SOOUNDING CALIBRATION DATA
- ~~1~~ ENVELOPE containing ADDITIONAL DATA
- ~~1~~ ENVELOPE containing BASELINE CALIBRATION DATA

FROM: (Signature)

NORRIS A. WIKE

Norris A. Wike

RECEIVED THE ABOVE
(Name, Division, Date)

Dwayne S. Clark
June 21, 1988
N/CG243

Return receipted copy to:

Chief, Hydrographic Surveys Branch,
 N/MOA23
 Atlantic Marine Center
 439 W. York Street
 Norfolk, VA 23510-1114

REFERENCE NO.

MOA23-63-88

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
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H-10235 (HFP-10-5-86)
OPR-J264-HFP-86, Florida, St Andrew Bay,
Sulpur Point to West Bay Point

PKG. 3 (BOX)

- 1 ACCORDION FILE containing MASTER TAPE PRINTOUTS, CORRECTOR TAPE PRINTOUTS, and FATHOGRAMS for following VESNO 517: JD's:
 (1986) 311, 314, 325, 328
 VESNO 519: JD's:
 (1986) 329-330, 336, 342, 344, 346, 349-351
 (1987) 6, 12, 14, 23, 28-30, 34-35, 42, 48, 58, 61,
 (1988) 53, 62, 67-68
 VESNO 1020: JD's:
 (1986) 338-339, 342, 349
)1987) 12

FROM: (Signature)

NORRIS A. WIKE

Norris A. Wike

RECEIVED THE ABOVE

(Name, Division, Date)

Return receipted copy to:

Chief, Hydrographic Surveys Branch,
 N/MOA23
 Atlantic Marine Center
 439 W. York Street
 Norfolk, VA 23510-1114

Dwayne S. Clark
June 21, 1988
N/CG243

06/02/88

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NUMBER: H-10235

NUMBER OF CONTROL STATIONS		6
NUMBER OF POSITIONS		2169
NUMBER OF SOUNDINGS		9039
	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	49	04/24/87
VERIFICATION OF FIELD DATA	278	11/05/87
QUALITY CONTROL CHECKS	113	
EVALUATION AND ANALYSIS	104	05/27/88
FINAL INSPECTION	55	05/27/88
TOTAL TIME	599	
MARINE CENTER APPROVAL		05/31/88

ATLANTIC MARINE CENTER
EVALUATION REPORT

SURVEY NO.: H-10235

FIELD NO.: HFP-10-5-86

Florida, St. Andrew Bay, Sulphur Point to West Bay Point

SURVEYED: 7 November 1986 through 2 March 1987, and 22 February through 8 March 1988

SCALE: 1:10,000

PROJECT NO.: OPR-J264-HFP-86

SOUNDINGS: RAYTHEON DSF-6000N Fathometer, RAYTHEON DE-719C Fathometer, Pole

CONTROL: MOTOROLA Mini-Ranger Falcon 484 (Range/Range), NIKON NT2D-20 Theodolite and HP-3808A (Range/Azimuth), See Field Sheet

Chief of Party.....K. W. Perrin
.....D. A. Waltz

Surveyed by.....K. P. Peters
.....C. J. Bradley
.....W. D. Davis
.....D. B. Elliott
.....G. D. Hendrix
.....B. A. Link
.....M. Mangual-Ortiz
.....M. J. McMann
.....J. P. Oswald
.....C. E. Parker
.....R. W. Ramsey
.....T. M. Rybarski
.....C. S. Weisner

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

1. INTRODUCTION

a. Additional work was requested for several areas of the present survey. The data was forwarded to the marine center and incorporated with the present survey. A discussion of each item can be found on page 7 and 8 of the Addendum to the hydrographer's report.

b. No unusual problems were encountered during office processing.

c. 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.

Control station MARINE, 1983 was recovered in 1987 as destroyed. The station was used in 1988 to collect hydrographic data. An office examination of baseline calibrations and daily critical system checks for the two (2) days that the station was used determined that there was a residual error of approximately two (2) meters for the electronic positioning equipment used at the "destroyed" station. The actual difference between the established position and the "destroyed" position could not be determined. After a thorough office examination of all available data, it has been determined that the overall quality of the data collected was not significantly affected.

b. Shoreline originates with 1:10,000 scale enlargements of 1:20,000 scale registration copies of Coastal Zone Maps TP-00342, TP-00343, and TP-00344 of 1977-78. Shoreline revisions originating with the field survey for alongshore MHW line features are shown in red on the smooth sheet. Revisions to ruins or to features now submerged alongshore are shown in dashed black.

Photogrammetric manuscript surveys in this area were compiled at a scale of 1:20,000. The present survey was conducted at a scale of 1:10,000. The shoreline manuscripts were enlarged to a scale of 1:10,000. The enlargements of the shoreline manuscripts provided were not at a 1:10,000 scale, and as a result the transfer of the shoreline and alongshore features to the smooth sheet and the resolution of hydrography and shoreline proved to be a formidable task requiring additional time and effort by the office personnel. In the future, shoreline mapping projects in support of hydrographic surveys of similar areas should be compiled at survey scale with aerial photography of an appropriate scale.

c. Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1927. 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 NAD83. To place this survey on the NAD83 datum move the projection lines 0.724 seconds (22.3 meters or 2.23 mm at the survey scale) south in latitude, and 0.251 seconds (6.7 meters or 0.67 mm at the survey scale) west in longitude.

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), eighteen (18), and thirty (30) foot depth curves could be drawn in their entirety. The standard zero (0) curve was not delineated because of vessel safety. The supplemental three (3) and thirty-six (36) foot curves were drawn to show additional bottom relief. Dashed curves were also drawn to delineate bottom relief.

c. The development of the bottom configuration and determination of least depths is considered adequate.

4. CONDITION OF SURVEY

The smooth sheet and accompanying overlays, hydrographic records and reports are adequate and conform to the requirements of the HYDROGRAPHIC MANUAL with the following exceptions:

a. The field unit visually verified features from shoreline manuscripts seaward of the MHW line. Three (3) groins in the vicinity of Latitude 30°11'16"N, Longitude 85°44'11"W were inked in blue on the smooth field sheet. A note in the hydrographer's report, section H., page 8, states items inked in blue on the final field smooth sheet were nonexistent. No investigations were performed on the groins during survey operations. It is recommended the three (3) groins be charted as submerged groins as shown on present survey.

b. The field unit did not verify or disprove charted features seaward of the MHW line as required by section 4.1.2.3. of the Project Instructions. Section 4.1.2.3. states that all charted features seaward of the MHW line and not on the shoreline manuscript be verified. Two piers were not investigated. See section 7.a.4) of this report for a discussion and charting recommendations for these items.

c. The field unit did not submit raw data for the determination of the elevation of the Hathaway Bridge center span cable crossing. In section N., page 15 of the Descriptive Report the hydrographer states that an elevation of 94 feet was determined. During office processing personnel were not able to verify the elevation because of the lack of field data. The charted elevation is 85 feet. It is recommended the notation authorized clearance 85 feet center span be retained as charted.

d. Sounding spacing in the vicinity of Latitude 30°13'00"N, Longitude 85°43'00"W and Latitude 30°12'05"N, Longitude 85°43'02"W exceed the maximum distance cited in the HYDROGRAPHIC MANUAL of six (6) mm. The amount that the distance exceeds varies and does not effect the overall quality of the survey. The hydrographer should be mindful of the sounding spacing requirement found in sections 1.4.6. and 4.5.6. of the HYDROGRAPHIC MANUAL.

e. On day 053 (22 February 1988) the field unit did not perform an additional critical system check on the second station used for that day. AMC OORDER 86 discusses the requirements for a critical systems check when electronic control stations are moved. This does not significantly degrade the overall quality of this survey.

f. As required in section 4.9.5.1.1. of the HYDROGRAPHIC MANUAL bar checks must be taken at the gain settings survey operations are being performed. Even though the field unit attempted to take bar checks each day of hydrography no bar checks were taken at the time the fathometer was switched over from automatic gain to manual gain. A bar check is required each time gain is changed. It would appear that manual gain is more difficult to maintain because of this requirement.

g. The hydrographer located the center of the search area for Automated Wreck and Obstructions Information System (AWOIS) item #3152 with a detached position but did not say how far the search area extended from the point of origin. This makes it difficult to make charting recommendation. See also section 7.a.1) of this report.

5. JUNCTIONS

H-10122 (1983-84) 1:10,000 to the south
H-10236 (1987) 1:10,000 to the northeast
H-10237 (1987) 1:10,000 to the northwest

Standard junctions were effected between surveys H-10236 (1987 and H-10237 (1987)).

A standard junction could not be effected with junctional survey H-10122 (1983-84). The junctional survey is archived at National Ocean Service (NOS) Headquarters, Rockville, Maryland. Survey H-10122 (1983-84) is in substantial agreement with the present survey. Depths generally agree to within one (1) foot. Junctional differences between depth curves occur between the adjoining surveys; those differences will have to be resolved on the nautical chart during compilation.

6. COMPARISON WITH PRIOR SURVEYS

H-5783 (1935) 1:10,000
H-5812 (1935) 1:20,000

The two (2) prior surveys listed above cover the present survey area in its entirety.

Prior survey depths from H-5783 (1935) compare favorably and show a general trend of being one (1) to two (2) feet deeper than present survey depths. Three (3) to five (5) foot depths from prior survey H-5783 (1935) in the vicinity of Latitude 30°11'19.8"N, Longitude 85°44'09.2"W are seven (7) to

fifteen (15) feet shoaler than present survey depths. These differences may be attributed to a borrow area formed during the new bridge construction. A new Hathaway Bridge has been constructed since the prior survey creating extensive shoreline changes in the vicinity of the bridge. The entrance to Posten Bayou in the vicinity of Latitude 30°11'30"N, Longitude 85°43'00"W has changed since the prior survey. Several canals, marinas, and lagoons have been formed or developed along the shoreline since the prior survey. The entrance to Pretty Bayou has changed and canals have been dug on the east and west sides of the bayou. All shoreline changes listed above are shown on chart 11390 (14th Ed., July 16, 1983).

Prior survey depths from H-5812 (1935) compare favorably and show a general trend of being one (1) foot deeper than present survey depths. Shoreline on prior survey H-5812 (1935) in the vicinity of Latitude 30°13'06"N, Longitude 85°41'18"W has accreted 150 meters to the northwest. Two deep areas on the present survey in the vicinity of Latitude 30°13'09.0"N, Longitude 85°41'25.8"W, and Latitude 30°13'18.2"N, Longitude 85°41'12.3"W are not present on prior survey H-5812 (1935). Differences in depths between the two surveys range between fifteen (15) to twenty-nine (29) feet. These differences may be attributed to borrow areas formed during airport construction. A seven (7) foot sounding in Latitude 30°13'36.7"N, Longitude 85°44'12.5"W was neither verified nor disproved during present survey. Surrounding depths from present survey range from nine (9) to eighteen (18) feet. The seven (7) foot sounding was brought forward to supplement the present survey.

Differences between the above prior surveys and the present survey depths may be attributed to natural changes, improved hydrographic surveying methods and equipment, and cultural development.

Except as noted above the present survey is adequate to supersede the above prior surveys within the common area.

7. COMPARISON WITH CHART 11390 (14th. Ed., July 16/83)

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys. The previously discussed prior surveys require no further consideration. The hydrographer makes adequate chart comparisons in section L. and pages 82-88 of the Descriptive Report. In addition to the recommendations in the Descriptive Report the following should be noted:

1) AWOIS item #3152, charted submerged piles, in Latitude 30°11'26.5"N, Longitude 85°43'27.0"W was investigated by the field unit. A visual search was performed in the areas with negative result. The center of the area searched was

located in the vicinity of Latitude 30°11'27.81"N, Longitude 85°43'27.62"W. The limits of the search were not defined. A charted T-shape pier in the vicinity of Latitude 30°11'27.0"N, Longitude 85°43'26.2"W was verified as being in ruins by the field unit. It is recommended that the charted submerged piles be retained as charted. It is also recommended that the charted T-shape pier be deleted and a pier ruins be charted as shown on present survey.

2) A charted marina in the vicinity of Latitude 30°12'03"N, Longitude 85°44'56"W has been enlarged. It is recommended the charted marina be revised to depict the area as shown on present survey.

3) The field unit did not verify or disprove charted piers in the vicinity of Latitude 30°11'15.0"N, Longitude 85°43'45.0"W, and Latitude 30°11'32.2"N, Longitude 85°43'13.7"W. It is recommended the piers discussed above be retained as charted.

4) Two charted piers in Latitude 30°11'49.8"N, Longitude 85°42'51.4"W, and in Latitude 30°11'51.0"N, Longitude 85°42'50.3"W were neither verified nor disproved by the field unit. The two (2) piers are shown on TP-00344 (1977-78) as piers ruins. It is recommended the charted piers be deleted and two (2) pier ruins be charted as shown on present survey.

5) A charted pier ruins in Latitude 30°11'30.5"N, Longitude 84°43'19.3"W was neither verified nor disproved during the present survey. Source of origin unascertainable. It is recommended the pier ruins be revised to submerged pier ruins.

6) A charted pier in Latitude 30°11'51.9"N, Longitude 85°42'48.9"W was neither verified nor disproved during the present survey. Source of origin unascertainable. It is recommended the pier be revised to submerged pier ruins.

7) A charted pier in Latitude 30°11'53.6"N, Longitude 84°42'47.0"W was neither verified nor disproved during the present survey. It is recommended the pier be revised to submerged pier ruins and charted as shown on present survey.

8) A marker is charted at the offshore end of a channel to Vals Bayside Marina. Three (3) markers were located by the field unit. It is recommended the charted marker be deleted and the three (3) markers be charted in present survey locations.

9) Two (2) charted markers with a notation Markers, PA in the vicinity of Latitude 30°11'40"N, Longitude 85°45'06"W were disproved during present survey operations. A visual search was performed in the charted area with negative results.

It is recommended the charted markers be deleted from the chart.

10) Three (3) charted markers with a notation Markers, PA in the vicinity of Latitude $30^{\circ}11'23''N$, Longitude $85^{\circ}45'04''W$ were located during present survey along with three (3) other markers. It is recommended the charted notation Markers, PA be deleted, the markers and surrounding area be charted as shown on present survey.

11) The five (5) markers that mark the channel to the Marine Transportation Services Facility are in error. As discussed in section L., page 11, of the hydrographer's report the channel is charted 200 meters southwest of it's actual location and there are only two (2) markers that mark the channel. It is recommended the charted channel be revised to the present survey location and area be charted as shown on present survey. It is also recommended the five charted markers be deleted from the chart.

12) Seven (7) charted markers with a notation Markers, PA in the vicinity of Robinson Bayou channel were located during present survey. It is recommended the charted notation Markers, PA be deleted, the markers and surrounding area be charted as shown on present survey.

13) Five (5) charted markers with a notation Markers, PA in the vicinity of Pretty Bayou channel were located during present survey. It is recommended the charted notation Markers, PA be deleted, and the markers be charted as shown on present survey.

14) The charted notation oysters in the vicinity of Latitude $30^{\circ}13'44.4''N$, longitude $85^{\circ}42'38.0''W$ was neither verified nor disproved during present survey. It is recommended the notation oysters be retained as charted.

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

b. Controlling Depths

1) A lagoon in the vicinity of Latitude $30^{\circ}11'30.5''N$, Longitude $85^{\circ}45'18.0''W$ has a notation 3 feet reported, 1976. The present survey depths range from four (4) to seven (7) feet. It is recommended the notation 3 feet reported, 1976 be deleted and the area be charted as shown on present survey. A channel is apparent on the present survey with depths of six (6) to seven (7) feet and then to four (4) feet at the entrance to the lagoon.

2) A channel leading into Pretty Bayou has a notation of 8 feet reported, 1982. The present survey depths range from seven (7) to eight (8) feet in this channel. It is recommended

the channel notation 8 feet reported, 1982 be deleted, and the area be charted as shown on present survey.

3) A channel leading into Robinson Bayou has a notation of 6 foot reported, 1979. The present survey depths range from six (6) to seven (7) feet. No change in charting status is recommended.

4) In the Robinson Bayou lagoon areas there are two notations, 5 feet reported. The present survey depths range from one (1) to four (4) feet. It is recommended the two (2) notations, 5 feet reported be deleted, and the area be charted as shown on present survey.

5) A channel leading into Marine Transportation Services Facility has a notation of 6 feet reported, 1976. The present survey depths range from five (5) to eight (8) feet in this channel. It is recommended the channel notation 6 feet reported, 1976 be deleted, and the area be charted as shown on present survey.

c. Dangers to Navigation

The hydrographer identified three (3) dangers to navigation and submitted information for inclusion in a Local Notice to Mariners to the Commander, Eighth Coast Guard District, New Orleans, Louisiana. A copy of the letter was forwarded to N/CG222, Chart Information Section. During office processing it was determined that the information in the first two (2) paragraphs sent by the field unit and suggested for inclusion in the Local Notice to Mariners be rescinded. Contact has been made with Mr. Kevin Shaw, Aids to Navigation Unit, N/CG2221 at NOS headquarters concerning this situation.

d. Aids to Navigation

The hydrographer located two (2) floating aids to navigation and eight (8) fixed aids 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 except as noted in sections 4. and 7.a. of this report.

9. ADDITIONAL FIELD WORK

This is an adequate basic survey.

Douglas V. Mason
Douglas V. Mason
Cartographic Technician
Verification of Field Data

Norris A. Wike
Norris A. Wike
Cartographer
Evaluation and Analysis

Robert R. Hill
Robert R. Hill
Senior Cartographic Technician
Verification Check

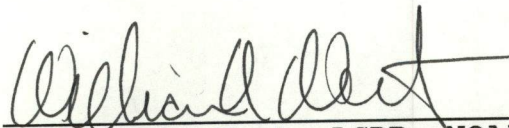
Inspection Report
H-10235

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

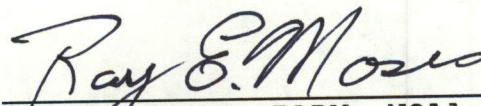


Robert G. Roberson
Chief, Evaluation and Analysis Group
Hydrographic Surveys Branch



William A. Wert, LCDR, NOAA
Chief, Hydrographic Surveys Branch

Approved: 31 May 1988



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

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

Hydrographic Index No. 84 E

