

10166

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-10-5-85
Registry No. H-10166

LOCALITY

State Florida
General Locality .. St. Andrews Bay
Sublocality Military Point to
..... Redfish Point
..... 19 84-85

CHIEF OF PARTY

..... LCDR R.W. Jones & LCDR K.W. Perrin

LIBRARY & ARCHIVES

DATE July 1, 1986

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

10166

ACPG
CHTS

11391 }
11390 }
11389 }

TO SIGN OFF SEE:
RECORD OF APPLICATION

HYDROGRAPHIC TITLE SHEET

H-10166

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 10-5-85

State Florida

General locality St. Andrew Bay

Locality Military Point to Redfish Point

Scale 1:10,000

Date of survey 5 Nov 1984 to 11 April 1985

Instructions dated 15 August 1983

Project No. OPR-J264-HFP-83

Vessel Hydrographic Field Party 3, Launch 517 - Zodiac 0031

Chief of party LCDR R.W. Jones (until Jan 85) & LCDR K.W. Perrin (from Jan 85)

Surveyed by LITJG F.W. Rossmann

Soundings taken by echo sounder, hand lead, pole All

Graphic record scaled by F. Rossmann, R. Snow, D. Elliott, T. Rybarski, J. Oswald,
L. Willians, H. Hickman

Graphic record checked by F. Rossmann & R. Snow

Verification by P. Niland

Automated plot by PMC Xynetics Plotter

Evaluation by A.A. Luceno

Soundings in ~~XXXXX~~ feet at ~~MLLW~~ MLLW

REMARKS: Marginal notes in black by Evaluator. Separates are filed with the hydrographic data.

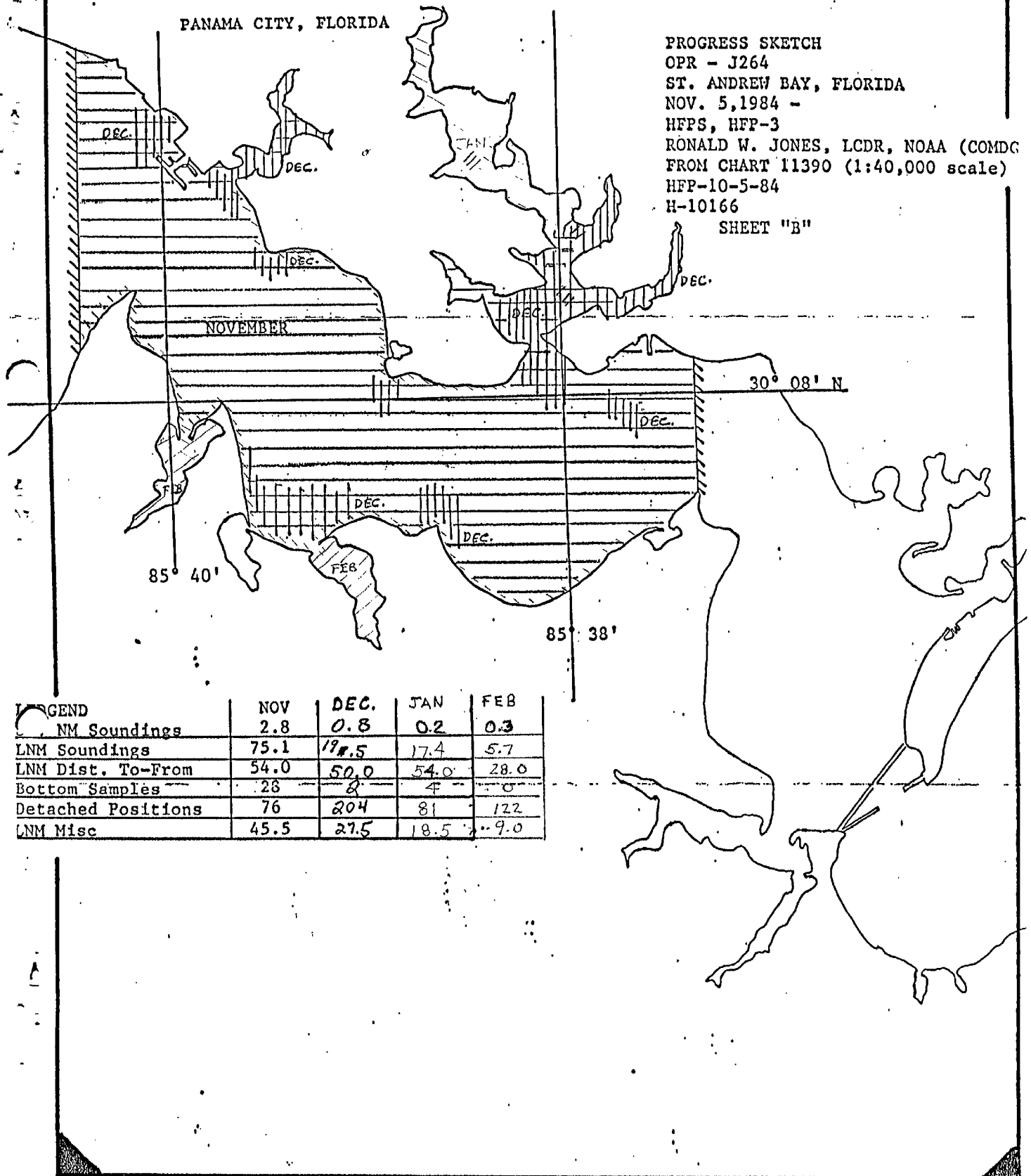
*STANDARDS CK'D 7-2-86
C. Lay*

AWOIS/SURF ✓ 10/13/88 SJJ

SC 4-2-97

PANAMA CITY, FLORIDA

PROGRESS SKETCH
 OPR - J264
 ST. ANDREW BAY, FLORIDA
 NOV. 5, 1984 -
 HFPS, HFP-3
 RONALD W. JONES, LCDR, NOAA (COMDG
 FROM CHART 11390 (1:40,000 scale)
 HFP-10-5-84
 H-10166
 SHEET "B"



LEGEND	NOV	DEC.	JAN	FEB
NM Soundings	2.8	0.8	0.2	0.3
LNM Soundings	75.1	19.5	17.4	5.7
LNM Dist. To-From	54.0	50.0	54.0	28.0
Bottom Samples	28	2	4	0
Detached Positions	76	204	81	122
LNM Misc	45.5	27.5	18.5	9.0

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10166
HFP-10-5-84

Scale 1:10,000

Chief of Party: Lt. Cdr. Ronald W. Jones (until Jan. 85)

Lt. Cdr. Kenneth W. Perrin (from Jan. 85)

Officer-in-Charge: Lt. (jg) Frederick W. Rossmann

Hydrographic Field Party Section, Hydrographic Field Party #3
Launch 0517 and Zodiac (0031)

A. PROJECT

This survey was accomplished under Project Instructions
OPR-J264-HFP-83, St. Andrew Bay, Florida, dated 15 August 1983
and amended by:

Change No. 1, 30 September 1983

Change No. 2, 18 October 1984

Change No. 3, 22 October 1984

B. AREA SURVEYED

The area surveyed was St. Andrew Bay, Florida from ^{long.} ~~lat.~~
85°40'30.00" W, eastward to long. 85°37'20.00" W. The survey
includes Masaalina, Watson, Smack and Freshwater Bayous. The
northern shoreline starts west of Panama City Marina and ends
at the Southwest Forest Industries Pulp and Paper Mill. The
southern shoreline is on Tyndall Air Force Base, starting
southwest of the point of land known as Redfish Point. The
southern shoreline continues eastward to the point of land
known as Military Point. The survey is bounded by the
following points:

Lat. 30°09'45.00" N, Long. 85°40'45.00" W

Lat. 30°09'45.00" N, Long. 85°38'30.00" W

Lat. 30°08'50.00" N, Long. 85°37'20.00" W

Lat. 30°07'30.00" N, Long. 85°37'20.00" W

Lat. 30°06'50.00" N, Long. 85°38'50.00" W

Lat. 30°07'25.00" N, Long. 85°40'13.00" W

Lat. 30°08'00.00" N, Long. 85°40'45.00" W

This survey was conducted from 5 November 1984 to ^{11 April} ~~03 May~~
1985 ~~JP~~ 310 (1984) to ~~123~~ ¹⁰¹ (1985) inclusive.

C. SOUNDINGS VESSEL

All soundings obtained on this survey were obtained from
NOAA Launch 517 (EDP # 0517) or the 13 foot Zodiac (EDP #
0031). All survey records are annotated with the appropriate

vessel number. The Zodiac was used only for pole soundings in the shallow areas of the survey where it was impractical to operate Launch 517.

D. SOUNDINGS EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

A Ratheon DE719C Fathometer, serial number 5881, was used during the entire survey (JD ^{DN} 310 (1984) to JD ^{DN} 123 ¹⁰¹ (1985). No unusual problems were encountered with this equipment. The Fathometer was monitored continuously while sounding and was under constant adjustment to insure that no initial corrections were necessary. ✓

Settlement and squat tests on Launch 0517 were run on 2 November 1984 and 4 April 1985. The tests were conducted at the National Marine Fisheries Lab's pier in Panama City, Florida (lat. 30°08'09.00" N, long. 85°42'07.00" W). The test run on 2 November appears to be in error in the 2400 RPM range. This error is probably due to the test being run in shallow water. The shallow water lift is evident as the RPMs were increased. The second test, run in the 1500 - 3000 RPM range and deeper water, gave a curve that fits the historical curve for the launch. A hybrid settlement and squat curve was drawn from the two test, 0 - 1500 RPM curve from 2 November and 1800 - 3000 curve from 4 April. The lower end of the first test does not appear to be subject to the shallow water lift and fits well with historical data for the launch. The results of these tests are included in the ~~Appendix of this report.~~ ^{hydrographic data.} Settlement and squat correctors were abstracted from the hybrid settlement and squat curve. Settlement and squat corrections will be applied via the TC/TI tape during plotting of the smooth sheet by the Marine Center. Settlement and squat corrections were not applied to the field sheet. ✓

Velocity and instrument corrections were determined by bar checks. A total of 44 bar checks were taken during the survey and reduced to one velocity table. A velocity ^{instrument correction} tape is provided with the survey data for application during smooth plotting of the sheet at the Marine Center. Velocity corrections were not applied to the field sheets. The lengths of the lines on the bar were checked on 25 October 1984 and 27 February 1985. The results of the inspection showed that the lines were accurately marked. ✓

Field soundings were plotted using the static draft corrector and predicted tides for Pensacola, Florida corrected for St. Andrew Bay, Florida. The Project Instructions (Section 5.9) stated "Prediction station numbers 3155 through 3169 found in Table 2 of Tide Table 1983, East Coast of North and South America, shall be used to provide preliminary time and height corrections to the predicted tide at Pensacola." This zoning from the Tide Table was vague and a request for zoning was made ✓

to N/OMA12 in 1984. This zoning based on Table 2 from N/OMA12 was used for tide corrections. A copy of this zoning is included in the Appendix of this report. A copy of the request for smooth tides is included in ~~the Appendix of~~ this report.

E. SURVEY SHEETS

The field sheets were prepared in the field using a PDP8/e computer and a DP-3 complot plotter. Work sheets, semi-smooth sheets, smooth field sheets, and overlay sheets are included with this survey. All sheets are 1:10,000 scale except the blow-up of the chain drag work on JD 44 and JD 85 which are 1:1,000. Mainscheme hydrography is plotted on the smooth field sheet while crosslines, developments, splits, bottom samples, detached positions, presurvey review items, and aids to navigation are shown on the overlay. Three small overlays are included showing the chain drag area, one at 1:10,000 and two at 1:1,000 scale. A projection parameter tape listing for the field sheets is included in the Appendix of this report. The final smooth sheet and verification of this survey will be accomplished at the Pacific Marine Center. ✓

F. CONTROL STATIONS

Control stations used during this survey were established by N/MOA2x1 in 1983 and 1984 to Third-order, Class 1 standards. All stations are referred to the North American 1927 datum. A list of all control stations used during this survey is included in ~~the Appendix of~~ this report.

During the course of the survey stations 156, No Name Rod, and 157, PK Cofer, were lost. Station 156 was searched for using an angle and distance from station 159, station 156 is presumed destroyed. The property owner at station 157 landscaped the area of the mark. A plastic liner and 6 inches of top soil were placed over the mark. The mark is not recoverable without destroying the landscaping. Due to the excellent control placed in Watson Bayou, the loss of these two marks did not affect the hydrography. Hydrography was run from these marks before they were destroyed. ✓

The position for station 124 was found to be in error after the project was completed. The latitude first provided was 30°09'26".8889N, a check of this position by N/MOA2x1 found an error with the correct latitude being 30°09'26".809N. An inverse distance between the two latitudes for the station gives a distance of 2.463 meters. Station 124 was used to control the survey on 14 different days. The error in the position affects work done on ~~JDs~~ ^{JDs} 310, 311, 313, 314, 317, 319, 332, 334, 349, 352, in 1984 and ~~JDs~~ ^{JDs} 28, 29, 45, and 73 in 1985. The station was used as an initial on all the above

H-10166

dates except ^{DN} JD 311. On ^{DN} JD 311, the station was used to set up the theodolite and Del Norte. Inverses were run using the old and new latitude and various stations used with the following results:

STATIONS	ANGLE DIFFERENCE	DISTANCE DIFFERENCE
123 - 124	-6'38"	1.51 Meters
124 - 123	-6'38"	1.51 Meters
140 - 124	-1'29"	2.33 Meters
142 - 124	-1'15"	2.21 Meters
122 - 124	-4'43"	1.60 Meters

A copy of the inverse computation is included in the fanfolder with the survey data.

The latitude was corrected on the Signal Tape provided to the Marine Center for smooth plotting the survey. No attempt was made by the field party to replot the data. Checks made on several detached positions taken during the survey showed that the error caused minor differences in the hundredths of seconds for those positions checked. Some minor changes should be seen when comparing the field and smooth sheet plotted with the different signal list G.P..

G. HYDROGRAPHIC POSITION CONTROL

The survey was done using Range-Azimuth for control. Some dead reckoning was used in the various bayous where control was not available:

JD	POSITIONS
338	902-907
035	1648-1649
042	1684-1687 and 1714-1716
073	1919-1920

The dead reckoning positions are marked "SFS" in the sounding volumes. Pseudo fixes, in the range-azimuth format, were made for these positions

The equipment used to control this survey was either Del Norte Distance Measuring system and a 20" theodolite or an HP3808A, modified to turn horizontal angles to 20" accuracy. A complete list of equipment used is contained in the Appendix of hydrographic data of this report.

The presence of a metal reflecting surface, chain link fence, and the close proximity to the horizontal control station (under 200 meters) eliminated the use of Del Norte for control in the northern end of Massalina Bayou. The HP3808A was used in this area. A fix was taken statically at the start of each line. The boat was grounded at the end of the line so an ending fix could be obtained. This method worked well in the shallow, narrow confines of northern Massalina Bayou.

Daily calibrations were either taken statically between horizontal control stations, by grounding the launch and taking a direct comparison with the HP3808A, or a static comparison with a calibration point established using the HP3808A. On JD 334, the daily corrector was +9 meter from both the daily static calibration and from the baseline. The +9 meter corrector was used because the opening baseline was high, +4 meters, leaving the daily corrector within ± 5 meters of the baseline value. The closing baseline was done before any additional hydrography was run with this unit. The closing baseline was done on JD 335 with a corrector of +9 meters. The daily calibration was rejected on JD 011. An attempt was made to calibrate in the morning but the tide was too low to get close to the station. A loss of battery voltage shut down the Del Norte before an afternoon calibration could be obtained on JD 011. Using the same DMU/Master pair with the same remote during this phase of the survey, the hydrographer felt that the closing baseline and corresponding daily checks would cover the hydrography done on JD 011. On JD 028, two morning calibrations were taken that were in good agreement with the inverse distance to station 124. At the end of the survey, station 124 was found to be in error. All inverse distances used for calibration were corrected in the volumes and the daily and final corrector were checked and adjusted to reflect the new positional information. The morning calibrations from JD 28 when adjusted were -5 and -3 meters. A complete listing of all electronic correctors for this survey are contained in the ~~Appendix of this report~~ ^{hydrographic data}. *Electronic control correctors used for each day were the mean value of the morning & afternoon calibration for that day.* Baseline calibrations were taken between two horizontal control stations randomly during the survey. The baseline calibration forms are contained in the accordion file with the survey data. An abstract of the baseline correctors is included on the abstract for the electronic correctors.

H. SHORELINE

Shoreline details for this survey were obtained from Class I, final review shoreline maps, which had registration pending when issued to the field party in 1983. The ~~three~~ ^{two} sheets used to transfer and compare the shoreline were TP-00345, 00346 and ~~00347~~ from CM-7701, Cape San Blas to Ft. Walton Beach, Florida. The maps were photographically enlarged to 1:10,000 scale so they could be used to transfer the shoreline at the scale of the

survey. The maps were compiled at 1:20,000 scale. Due to the scaling factor, minor man-made features were not included on the map. (See Section L. COMPARISON TO THE CHART)

Three shoreline features from the T-Sheets are no longer present. The features are shown in BLUE ink on the field sheet.

ITEM (Refer to sect. 2 of Eval. Report)

Pier	Lat. 30°09'20.00" N, Long. 85°40'08.00" W	} shown in SS as subm. ruins
Structure/Pier	Lat. 30°09'13.00" N, Long. 85°39'25.00" W	
Pier Groin	Lat. 30°09'03.00" N, Long. 85°39'38.00" W	

Some minor apparent shoreline differences were noted in Smack and Freshwater Bayous. These areas have either overhead foliage or grasslines that conceal the actual shoreline. Two to three meters differences can be found, with the hydrography being inside the mapped shoreline. The hydrographer feels that the mapped shoreline in Smack and Freshwater Bayou represent the best possible shoreline available for charting. No shoreline changes were made in these areas.

A minor shoreline change was noted in Watson Bayou At lat. 30°09'00.00" N, long. 85°38'39.00" W. This shoreline change is shown on the field sheet with a dashed red line. The change represents a shallow water extension of the mapped shoreline that is covered with overhead foliage. The extension is approximately 40 meters long and 10 meters wide. Water in the extension is less than two feet in depth, so a detached position was unobtainable at the extreme western end of the change. The western limit of the shoreline corresponds with the mapped road from TP-00347. This road has an outfall pipe that empties into the extension, making it the head of navigation.

The area around the Panama City Marina at lat. 30°09'10.00" N, lon. 85°39'50.00" W appears to be slightly distorted when compared with the current survey's detached positions for this area. Several of the detached positions were rechecked from an independent set up using the HP 3808A on JD 101. Another area of disagreement is the pier at lat. 30°08'08.74" N, long. 85°37'45.75" W. On JD 353 (1984) a D.P., pos. 1405, was obtained at the center of the offshore end. This D.P. plots 1mm east of the center of the pier as shown on TP-00347. Also hydro run down the face of the pier on JD 44 (1985), Pos. 1783-1784 plots on the pier. If the pier was centered with Pos. 1405 the line down the face would plot in the water. There appears to be a 1mm disagreement between the T-Sheet (TP-00347) and the current survey. The disagreement is carried over to chart 11391. The mapped features, piers, bulkheads, breakwaters, and piles from TP-00347 are still present and verified during the current survey. A review of the compilation should be done because the noted 1mm error does not appear to be coming from the hydrography. Concur. Recommend delineation of shoreline & features based on the results of the reviewed compilation. However, the smooth sheet shows that the hydrography is not in conflict with the shoreline from the TP sheet.

The following hydrographic control stations are located seaward of the shoreline in St. Andrew Bay:

<u>Station#</u>	<u>Name</u>
120	St. Andrew Bay Entrance Range A Front Light
124	St. Andrew Bay Entrance Range A Rear Light
161	St. Andrew Bay Light 23

(outside sheet limits) ✓

These stations are Aids To Navigation established by the U. S. Coast Guard.

I. CROSSLINES

Crossline constitute 11% of the mainscheme hydrography. 35% of the crossings are in exact agreement, 77% are in agreement by ± 1 feet and 97% are in agreement by ± 3 feet. Differences of ± 2 or greater are found in area of rapid contour change, where these differences are expected. These soundings, ± 2 feet or greater, represent 21% of the sounding comparison. ✓

J. JUNCTIONS

This survey junctions with H-10122 on the western edge. The soundings are in agreement by ± 2 feet with the majority of the soundings being in exact agreement. The contours can be drawn continuous between the two surveys. Sufficient overlap was allowed between the two surveys because the mainscheme hydrography on H-10122 was conducted using Launch 1283.

K. COMPARISON WITH PRIOR SURVEYS (Refer to sect. 6 of Eval. Report)

This survey was previously covered by the following surveys:

- 1) H1375 from 1877, 1:20,000 scale
- 2) H5782 from 1935, 1:10,000 scale

A general comparison was made between the current survey and H1375 due to the difference in scale and the age (107 years) of the prior survey. Specific soundings were not addressed. The following differences were noted during the comparison: ✓

- a) Several man-made changes have occurred since 1877, especially in Massalina and Watson Bayou.

- b) The contours along the southern shoreline continue to show the shoaling of the various points of land on both surveys. These points of land are Redfish Point, Palmetto Point and the point east of Smack Bayou.
- c) The contours along the northern shore show some minor changes but have an overall general agreement between the two surveys.
- d) Soundings over 18 feet are in general good agreement. The sounding density of the current survey makes it appear to be slightly deeper if not in exact agreement. No dangerous shoals or hazards to navigation, other than the shoaling previously mentioned, are present on H1357.

Overall agreement between H5782 and the current survey is good. Some slight offshore shifting of the 18 foot contour is noted on the current survey. The six and twelve foot contours show little or no change. Depths beyond the 18 foot contour generally are slightly shallower on the current survey, varying from exact agreement to 2-3 feet shoaler. The field sheet was not plotted with velocity correctors. When velocity correctors are applied by the Marine Center to the smooth sheet, the differences between the soundings will be reduced. Velocity correctors will increase depths over 30 feet by one foot and depths over 41.5 feet by two feet. Generally, the two surveys are very similar when overlaid for comparison. Several shoals noted on the prior survey are still present:

Latitude	Longitude	Current Depth	Prior Depth
30°08'44"N	85°39'58"W	12 feet	11½ feet
30°07'48"N	85°37'45"W	30 ²⁷ feet	30 feet
30°07'39"N	85°37'44"W	29 ²⁶ feet	30 feet

The prior survey has several dangers to navigation located in Watson Bayou. These dangers will be addressed in Section L since they are currently charted as PSR items.

L. COMPARISON TO THE CHART (Refer to sect. 7 of Eval. Report)

The chart comparison was made with chart 11391, 15th edition, dated 29 October 1983. Chart 11391 is a 1:25,000 scale chart. For comparison the chart was photographically enlarged to 1:10,000 scale.

Soundings in the bay area of the survey are in good agreement overall. The six, twelve, and eighteen foot contours show slight differences, less than 50 meters between the two

surveys. The thirty foot contour has shifted by more than 100 meters in the following areas:

*Refer to sect. 6
of Eval. Report.*

Lat. 30°09'10.00" N, Long. 85°40'20.00" W
 Lat. 30°08'18.00" N, Long. 85°39'50.00" W
 Lat. 30°07'⁴²~~26~~.00" N, Long. 85°39'15.00" W

These areas have shifted the 30 foot contour further offshore than what is currently charted.

The isolated 11 foot charted shoal at lat. 30°08'45.00" N, long. 85°39'53.00" W was developed. The shoal is still present, least depth from the current survey is 12 feet based on ~~predicted~~ ^{actual} tides. *chart according to this survey.*

*Applied
11351*

The charted 26 foot shoal at lat. 30°07'48.00" N, long. 85°37'45.00" W is still present. The shoal has enlarged slightly from what is currently charted. The southern side of the shoal now encompasses a portion of the 30 foot contour directly south of the 26 foot sounding. Least depth from the current survey is 26 feet.

*Refer to
sect. 7 of
Eval. Report
✓ Applied
30ft.*

Shoaling was also noted inside the mouth of Freshwater Bayou. A ^{8.5} crescent shape shoal ^{actual} encloses the mouth with a least depth of ~~1.3~~ feet based on ~~predicted~~ tides. The chart currently shows a two foot depth in this area. The hydrographer recommends that this area be charted as a sand shoal inside the mouth of Freshwater Bayou with a least depth of one foot. (See positions 1636-1644, ^{PN} 25) *concur. Entrance to the bayou nearly closed and dry at low water.*

*✓
✓
✓
✓
ok*

Outside of Freshwater Bayou, a small depression, possibly an old channel, was located. This same deep area was noted on H5782. This deep area is unmarked and extends to within 50 meters of Freshwater Bayou. The depression has a deepest depth of 11 feet. The depression is surrounded by shallow water, ranging from two to four feet. No additional development was done on this depression because of the shallowness of the surrounding water and the shoal that blocks the entrance to Freshwater Bayou.

No soundings were obtained in Sheephead Bayou. Depths across the entrance to the bayou were one foot or less. *Entrance to the bayou nearly closed and dry at low water.*

*ok
✓*

A sand shoal extends east-west across Smack Bayou at lat. 30°07'42.00" N, long. 85°39'58.00" W. The least depth over this shoal is one foot based on predicted tides. This area should remain as currently charted. During a high tide Launch 517 was taken beyond the shoal to conduct hydrography. The soundings south of the shoal are in good agreement.

✓

No soundings were obtained in Johnson Bayou. The area at the entrance to this bayou has shoaled to one foot. *Entrance to the Bayou nearly closed and dry at low water.*

✓

No evidence of the pier in ruins at lat. 30°09'28.00" N, long. 85°40'11.00" W was found during the survey. The inshore area NE of this charted pier in ruins is an oil storage area with a man-made bulkhead/wharf running parallel to shore.

Refer to Sect. H of this report.

Retain on chart as subm. ruins

Two depressions were found during the survey south of Panama City Marina, centered roughly at lat. 30°08'57.00" N, long. 85°39'56.00" W. These depressions have depths ^{up to} over 20 feet. The surrounding area generally ranges in depth from 14² to 16 feet.

The charted jetty at the entrance to Massalina Bayou was observed on the fathogram, ~~FD~~^{BN} 352, positions 1323 - 1336. The jetty is submerged. The offshore end is marked by a U. S. Coast Guard Light No. 1. (*Massalina Bayou Entrance Light 1*)

Massalina Bayou, north of the bascule bridge, is a haven for pleasure boats with numerous private piers. North of the second bridge the water has shoaled to a depth of four to five feet or less. This shoaling is probably due to storm run off carrying sediment into this area. The extreme northern end of the Bayou is an unnavigatable mud flat with a small stream. The charted spit, lat. 30°09'07.00" N, long. 85°39'36.00" W should remain charted. An unmarked and uncharted piling marks the offshore end of the spit, (position 704). This pile, lat. 30°09'06.48" N, long. 85°39'25.41" W should remain charted. The charted submerged piles, lat. 30°09'28.00" N, long. 85°39'20.00" W were visually verified by the field party at an extreme low tide. No detached position was taken on these piles because they are beyond the point of practical navigation with the party's Zodiac. These piles should remain charted. The hydrography does not run completely to the eastern shoreline at the extreme northern end of Massalina Bayou because a large boathouse blocks the line of sight along the shoreline. (This area with its lack of soundings does not represent a shoreline change.)

concur. chart according to this survey.

concur. chart according to this survey

The charted sand spit at lat. 30°09'04.00" N, long. 85°39'42.00" W now has a pier constructed over the top of the spit. (*Pos. 247*)

The sand spit southeast of Massalina Bayou entrance should remain charted. The sand spit at Bunkers Point should remain charted. *Concur. Chart according to this survey.*

A centerline, positions 1297 - 1298, was run out of Lake Claire. With a controlling depth of one foot in the entrance channel no additional hydrography was conducted in Lake Claire. The charted private piers were visually verified by the field party when the centerline was run and appear to be adequately represented on the T-Sheet. *Chart according to the T-sheet. Retain the two piers centered at latitude 30°08'12" N, longitude 85°38'46" W as charted.*

The sand spit at Town Point should remain as charted. *concur. chart according to this survey.*

The hydrographer was surprised by the amount of commercial traffic that enters the narrow entrance to Watson Bayou. Watson Bayou has three oil storage facilities which are serviced by tug and fuel barge. Also located in Watson Bayou is the U. S. Army Corps of Engineers' Panama City Headquarters, a large fishing fleet berthed at the numerous docks, a gravel barge that unloads at the northern end of the bayou, several marine repair facilities, and a commercial boat building industry. Due to the amount of water borne traffic in Watson Bayou, the hydrographer reduced line spacing to 50 meters, treating this bayou as a confined channel. The extreme northern end of Watson Bayou has shoaled. The two foot soundings in this area are the limits of practical navigation. The area north of the hydrography remains covered but is extremely shallow. ✓

The charted piles from H-5782 were chain dragged for on JD 44, positions 1763 - 1782. The drag was plotted on a 1:1,000 scale blow up to check the overlap. Nothing was hung during the chain sweep. The hydrographer recommends that these piles be removed from the chart. The piles are currently charted at lat. 30°09'03.00" N, long. 85°38'24.00" W. *concur*

An uncharted, submerged sewage pipeline crosses Watson Bayou. This pipeline was not observed during survey operations. No signs mark the pipeline crossing area. A request was made to James M. Southall, City Engineer for Panama City, for information on the pipeline. Mr. Southall's information is included in the fanfolder. The information contains a chartlet from which the pipeline could be transferred to the chart. The hydrographer recommends that this buried pipeline across Watson Bayou be charted as a pipeline area. *concur. chartlet attached to this report.* ✓

The charted five foot sounding at lat. 30°09'00.00" N, long. 85°38'17.00" W was not found during the survey. The least depth in this area from the current survey is ^{seven} eight feet. *chart according to this survey.* ✓

The piling at lat. 30°09'03.00" N, long. 85°38'15.00" W were searched for visually. No piling were found in this area. Slightly west of this area, several piling were located. Positions 1615-1618 show the limits of the area that is foul with submerged piling. The area should be charted as foul between the following positions: *concur. chart according to this survey.*

Position No.

1617	Lat. 30°09'02.10" N, Long. 85°38'16.54" W
1616	Lat. 30°09'01.86" N, Long. 85°38'17.06" W
1615	Lat. 30°08' ^{51.13} 50.12" N, Long. 85°38'14. ²⁹ 79" W
1618	Lat. 30°09'01.81" N, Long. 85°38'18.11" W

This area contains numerous six-inch diameter piling varying in depth from awash to ~~4-5~~^{2.0} feet.

A visual search was conducted for the charted submerged piles at lat. 30°08'55.00" N, long. 85°38'05.00" W. No evidence of the pilings were found. Water depth in the area is two to five feet. The search was made on a calm day with good water visibility and the bottom was visible. These piling should be removed from the chart. *concur*

Remove &
✓

Two fishing fleets are moored to the charted piers along the eastern shoreline of Watson Bayou from lat. 30°08'53.00" N, long. 85°37'58.00" W to lat. 30°08'49.00" N, long. 85°37'57.00" W. The charted piers were visually verified, the fishing fleet was moored in a manner that blocked the line of sight from the surrounding horizontal control stations. The piers appear to be accurately charted.

✓

The charted pile at lat. 30°08'45.00" N, long. 85°37'57.00" W should be revised. Two dolphins in ruins are currently located in this area. *chart according to this survey.*

Position No.

1732	Lat. 30°07' ⁸ 44. ⁴⁰ 4" N, Long. 85°37' ⁵ 56. ⁹⁹ 0" W	✓
1733	Lat. 30°08' ⁶⁶ 44. ⁴³ 7" N, Long. 85°37' ⁴³ 54. ⁴³ 4" W	✓

The two dolphins appear to mark the offshore end of the area fouled with wreckage. (See PSR# 2735, 3132 and 3133.)

✓

No evidence was found of the dolphin, charted as "PA" at lat. 30°08'44.00" N, long. 85°37'49.00" W during the survey. The hydrographer recommends that the charted dolphin be deleted from the chart. *Do not concur. Retain & revise as submerged dolphin on chart.*

Refer to sect. 9 of Eval. Report.

The charted "WKS" at lat. 30°08'52.00" N, long. 85°37'43.00" W were not observed during the survey. The area is currently being used to berth tugboats and barges. The hydrographer recommends the "WKS" be deleted from the chart.

chart according to this survey.

A dolphin was found in the vicinity of the charted submerged pile at lat. 30°08'28.00" N, long. 85°37'45.00" W. The dolphin, position 914³, should be charted at lat. 30°08'27.50" N, long. 85°37'45.45" W. *concur.*

No evidence of the pile/dolphin at lat. 30°08'23.00" N, long. 85°37'38.00" W was noted during the survey. The hydrographer recommends that this piling be charted as submerged, Existence Doubtful (ED), since it was not disproven by the field party. *concur. Retain on chart as a subm. pile without the ED annotation.*

Refer to sect. 9 of Eval. Report

This ends the items noted in Watson Bayou during the survey and chart comparison. Continuing clockwise from the mouth of Watson Bayou these following items were noted in St. Andrew Bay.

The charted pier at lat. 30°08'08.00" N, long. 85°37'45.00" W is in ruins. Detached position 1410 is the offshore end of the wooden finger pier in ruins at lat. 30°08'08.7" N, long. 85°37'45.8" W. This pier should be recharted as pier in ruins. *concur*

The charted dolphins "PA" at lat. 30°08'04.00" N, long. 85°37'44.00" W are charted south of their actual positions. Two dolphins were located during the survey at:

Position No.

1408	Lat. 30°08'09.20" N, Long. 85°37'45.20" W
1409	Lat. 30°08'08.40" N, Long. 85°37'45.40" W

These positions should replace the dolphins that are currently charted as Position Approximate (PA). One additional dolphin was located west of the others at lat. 30°08'08.60" N, long. 85°37'46.80" W and should be charted.

No evidence of the two charted piles at lat. 30°08'03.00" N, long. 85°38'13.00" W was found during the survey. Water depth in this area is three feet or less with excellent water clarity and the bottom was visible. These pilings should be removed from the chart. *concur.*

*concur.
Delete PA
annotation &
chart according
to this survey.*

The sewer should remain charted at lat. 30°07'29.00" N, long. 85°37'48.00" W. No evidence of the sewer pipe was observed during sounding operations or inspection of the shoreline for the survey. Tyndall Air Force Base's Office of Water and Wastewater Management was contacted (Phone # 904-283-2246) about the sewer. The Air Force reported the pipe is still present but its use has been discontinued. The hydrographer recommends that "ABANDONED" be added to the charted feature. *concur*

Only the remains of one charted pier ruins was found along the southern shoreline of the survey. Position 5100 at lat. 30°07'09.44" N, long. 85°38'26.37" W was the only remaining ruins in this area. *Delete other piers in the area in accordance with the TP-sheet.*

The field party took numerous detached positions on man-made features along the shoreline. Numerous items were observed that were not on the chart or T-Sheet, possibly due to the scaling factor used when compiling a T-Sheet at 1:20,000 or the chart at 1:25,000. Starting at Redfish Point and continuing counterclockwise through the survey area the following items were noted :

(All positions listed are 30°N, 85°W. The degrees have been dropped from the listing. DNC - Do not Chart. RAC - Remain as Charted.)

ITEM	POSITION #	CHART 11391	TP-00347	RECOMM.
Cable Area	5053 7246	Yes	Yes	RAC
Pier Ruins	5100	Yes	Yes	RAC
Pier Ruins	No evidence	07'08"N,38'21"W	No	DELETE <i>concur</i>
Pier	No evidence	07'07"N,38'18"W	No	DELETE <i>concur</i>
Pier	No evidence	07'06"N,38'14"W	No	DELETE <i>concur</i>
Pier Ruins	No evidence	07'14"N,37'56"W	No	DELETE <i>concur</i>
Pier	1802	Ruins	Ruins	PIER
Pier	1803	Yes	Yes	RAC
Pier	No evidence	08'03"N,38'23"W	No	DELETE <i>concur</i>
Groins	No evidence	No	08'03"N,38'27"W	DNC <i>concur</i>
Pier Ruins	No evidence	08'03"N,38'29"W	No	DELETE <i>concur</i>
Pier	1804	Yes	Yes	PIER
Pier Ruins	1805	Yes	Yes	PIER RUINS
Pipe	1806	No	No	PIPE
Pier	1807	Yes	Yes	PIER
Pier Ruins	No evidence	08'04",38'43"W	No	DNC <i>concur</i>
Pier	1808	Yes	Yes	PIER
Pier	1809	Pier Ruins	Pier Ruins	PIER
Pier	1814	No	No	PIER
Rock Jetty	1815/1816	Yes	Rk Groin	RAC
Pier	1817	No	Yes	PIER
Pier	Possibly 1817	08'18"N,38'55"W	No	DELETE <i>chart according to T-sheet</i>
Pile/Pier Ruins	No evidence	08'20"N,38'55"W	No	DELETE <i>concur</i>
Pier	1818	No	Pier ruins	PIER <i>chart according to survey</i>
Pier Ruins	Possibly 1818	08'22"N,38'55"W	No	DNC
Pier Ruins	1819	Yes	Yes	PIER RUINS
Pier	1820	No	No	PIER
Pier	No evidence	08'27"N,38'55"W	No	DNC <i>chart according to T-sheet</i>
Pier	1821	No	Yes	PIER
Pier	1822	Yes	Yes	PIER
Pier	1823	Yes	Yes	PIER
Pier	1824	No	Yes	PIER
Pier	1825	No	Yes	PIER
Pier	1826	No	No	PIER
Pile	No evidence	08'38"N,39'10"W	No	DNC <i>concur</i>
Pier	1827	Yes	Yes	PIER
Piles in Ruins	1828	Yes	Yes	RAC
Pier	1829	No	No	PIER
Pier	1830	Yes	Yes	PIER
Pier	254	Yes	Yes	PIER
Pier	248	No	No	PIER
Pier	No evidence	No	09'03"N,39'38"W	DNC <i>chart as subm grain according to survey</i>
Pier	No evidence	09'03"N,39'39"W	No	DNC <i>concur</i>
Stranded Wreck	No evidence	No	09'04"N,39'14"W	DNC <i>chart according to survey</i>
Dolphins	236 - 244	No	No	DOLPHINS
Pile	146	Pier	No	PILE
Piles in Ruins	147	Pier	No	PILE
Pile	No evidence	08'10"N,37'33"W	No	DELETE <i>concur</i>

H-10166

The following items were compared in Massalina Bayou:

ITEM	POSITION #	CHART 11391	TP-00347	RECOMM.
Pier	252	No	Yes	PIER
Pier	976	Yes	Yes	PIER
Piling	975	No	No	PILING
Pier	974	Yes	Yes	PIER
Marine R.W.	972	Pier	Pier	MARINE R.W.
T Pier	705 - 706	Yes	Yes	RAC
Pier	707	No	Yes	PIER
Pier	708	No	NO	PIER
Pier	709	No	Yes	PIER
Covered Pier	969 and 710	No	Yes	PIER
Pier	711	No	Yes	PIER
Pier	No evidence	09°17'N, 39°21'W	No	DNC <i>No pier plotted on chart</i>
Pier	697	No	No	PIER
Pier	696	No	No	PIER
Pier	692	No	No	PIER
Pier	689	No	No	PIER
Pier	690	No	No	PIER
Pier	687	No	No	PIER
Pier	686	Yes	Yes	PIER
Pier	684	No	Pier Ruins	PIER
Pier	685	No	No	PIER
Pier	688	Yes	Yes	PIER
Pier	691	Yes	Yes	PIER
Pier	693	No	Yes	PIER
Pier	694	No	Yes	PIER
Pier	695	No	Yes	PIER
Pier	698	No	Yes	PIER
Pier	699 - 700	Yes	Yes	PIER
Pier	701 - 702	No	No	PIER
Pier	703	No	Pier Ruins	PIER
Cable Crossing	1149 & 1160	No	Yes	CABLE CROSSING
Pier	1150	No	Yes	PIER
BOAT HOUSE	1151 - 1152	Yes	Yes	RAC
Pier	1159	No	No	PIER
Stranded Wreck	1153	No	No	STRANDED WRECK
Piles in Ruins	1154	No	No	Pile
Pier in Ruins	1155	No	No	PIER IN RUINS
Pier in Ruins	1156	Pier	No	PIER IN RUINS
Pier in Ruins	1157	No	Yes	PIER IN RUINS
Outfall Pipe	1158	No	No	OUTFALL PIPE
Pier	No evidence	09°14'N, 39°25'W	Structure	DNC <i>chart according to survey</i>
Pier	988 & 990	No	Yes	PIER
Pile	989	No	No	PILE
Pier	991 - 992	Yes	Yes	RAC
Boat Ramp	993	No	No	RAMP
Culvert	994	No	No	OUTFALL PIPE
Pier	995 - 1000	No	Yes	PIER
Dolphin	985	No	No	DOLPHIN

H-10166

ITEM	POSITION #	CHART 11391	TP-00347	RECOMM.
Pier	986	Yes	Yes	PIER
Pier	987	No	Yes	PIER
Piles	979 - 984	No	No	PILES
Bridge	250-251, 997-998	Yes	Yes	RAC FROM T-SHEET
Fenders				
Pier	Visually verified	No	Pier Ruins	PIER
Pier	No evidence	09'08"N, 39'36"W	No	DNC <i>concur</i>

WATSON BAYOU

Pier	956	No	Yes	PIER
Pier	955	No	Yes	PIER w/BOATSHED
W/boatshed				
Pier	954	No	No	PIER w/BOATSHED
P/Boatshed				
Pier	953	No	No	PIER
Pier	952	No	Yes	PIER
Bulkhead	950 - 951	No	No	BULKHEAD
Pier	949	No	Yes	PIER
Pier	948	No	Yes	PIER

Piers in Lake Van Vac visually verified with good agreement with the T-Sheet. Chart this area from T-Sheet.

Pile	945	No	No	PILE
Pile	946	No	No	PILE
Pier	947	No	Yes	PIER
Pier	944	No	No	PIER
Pier	943	Yes	Yes	PIER
Pile	942	No	No	PILE
Pier	941	No	Yes	PIER
Pier	940	No	Yes	PIER
Pier	939	No	No	PIER
Pier	938	No	Yes	PIER
Pier	937	Yes	Yes	PIER
Pier	936	Yes	Yes	PIER
Pier	935	No	Yes	PIER
Pier/Boatshed	934	No	Yes	PIER w/BOATSHED
Pier	933	Yes	Yes	PIER
Pier	932	No	No	PIER
Pier	931	No	No	PIER
Pier	930	No	No	PIER
Pier	929	No	No	PIER
Piles	927 - 928	No	No	PILES
Pier	926	No	No	PIER
Pier	925	No	No	PIER
Piles	921 - 923	No	Pier	PILES
Pier/Boatshed	920	No	Yes	PIER w/BOATSHED
Pier/Boatshed	919	No	No	PIER w/BOATSHED
Pile	918	No	No	PILE
Pier	917	Yes	Yes	PIER

H-10166

ITEM	POSITION #	CHART 11391	TP-00347	RECOMM.
Piles	916	No	No	PILES
Pier	915	Yes	Yes	PIER
Pier	1445	No	No	PIER
Pier	1444	No	Yes	PIER
Pier	1492	No	Yes	PIER
Pier	Visually verified	Yes	08'43"N, 38'03"W	PIER
Pier	1491	No	Yes	PIER
Pier	1490	No	Yes	PIER
Pier	1489	Yes	Yes	PIER
Pier Ruins	1488	No	Yes	PIER IN RUINS
Pier	1456	No	Yes	PIER
Pier	Visually verified	No	08'52"N, 38'08"W	PIER
Pier	Visually verified	No	08'53"N, 38'08.5"W	PIER
Pier	1457	No	Yes	PIER
Pier	1458 - 1459	Yes	Yes	PIER
Pier	1460	No	No	PIER
Pier/ Boathouse	1461	No	Yes	PIER w/ BOATHOUSE
Pier Ruins	1462	No	No	PIER IN RUINS
Pier	1463	No	Yes	PIER
Pier	1464	No	Yes	PIER
Pier	1465	No	No	PIER
Pier	1466	No	Yes Pier/Boathouse	PIER
Pier	1467	No	Yes (inshore)	PIER
Pier	1468	Yes	Yes (inshore)	PIER
Pier	1469	No	No	PIER
Pier	1470	Yes	Yes	PIER
Pier	1471	Yes	Yes	PIER
Pier	1473	No	Yes	PIER
Pier	1474	No	Yes	PIER
Pier	1475	No	No	PIER
Outfall Pipe	1476	No	No	SEWER
Pier	1477	No	Yes	PIER
Pier u/Const	1479	No	Pier Ruins	PIER u/CONST
Pier	1480	No	Pier Ruins	PIER
Pier Ruins	1481	Pier	Pier	PIER RUINS
Boatshed	1482	No	No	BOATSHED
Pier w/ Boatshed	1483	No	Yes	PIER
Boatshed	1484	No	No	BOATSHED
Pile	1545	No	No	PILE
Cable Crossing	1162 & 1192	No	Yes	CABLE CROSSING
Boatshed	1190 & 1191	No	Yes	BOATSHED
Ramp(Private)	1189	No	No	DNC <i>concur</i>
Boatshed	1187 & 1188	No	Yes	BOATSHED
(Note: The above three items are in an abandoned marina.)				
Boatlip	1185	No	No	PIER
Boatlip	1184	No	No	PIER
Pier	1183	No	No	PIER
Pier	1182	No	No	PIER
Pier w/ Boathouse	1181	Yes	Yes	PIER w/ BOATHOUSE

H-10166

ITEM	POSITION #	CHART 11391	TP-00347	RECOMM.
Pier	1180	No	Yes	PIER
Pier Ruins	1176	Pier	No	PIER IN RUINS
Pier Ruins	No evidence	No	09'33"N,38'43"W	DNC <i>concur</i>
Pier	1175	No	No	PIER
Ovhd Cable	1174	Yes	Yes	OVHD CABLE
Pier	1171	No	Yes	PIER
Pier Ruins	1170	Yes	Yes	PIER
Pier	1169	Yes	Yes	PIER
Piles	1168	No	No	PILES
Pier Ruins	1167	No	No	PIER RUINS
Pier	1166	No	No	PIERS
Outfall Pipe	1163	No	No	OUTFALL PIPE
Boat Ramp	1596	No	Yes	RAMP
Piles	1597	No	No	PILES
Piers	1598 - 1600	No	Yes	PIERS
Pier	1601	No	Yes	PIER
Dolphin	1603	No	No	DOLPHIN
Dolphin	1604	No	No	DOLPHIN
Pier	1605	Yes	Yes	PIER
Dolphin	1606	No	No	DOLPHINS
Piles in Ruins	1543	Pier	No	PILES IN RUINS
Stranded Wreck	1542	Pier Ruins	No	STRANDED WRECK
Piles in Ruins	1539	No	No	PILES IN RUINS
Pipe Crossing	1538	No	No	SUBMERGED PIPE
Foul area	1615 - 1618	Piling		FOUL w/PILING
Piles in Ruins	1619 - 1620	Yes	Yes	FOUL w/PILING
Pier w/Piles	1621 - 1623	No	No	PIER w/PILING
Dolphin	1537	No	No	DOLPHIN
Pier	1536	No	Yes	PIER
Dolphin	1535	No	No	DOLPHIN
T Pier	1534	Yes	Yes	PIER
Dolphin	1533	No	No	DOLPHIN
Pier Ruins	No evidence	Pier	08'55"N,38'03"W	DNC <i>concur</i>
Piers	Visually verified	Yes	08'53"N,37'57-59"W	PIERS
Pier	Visually verified	Yes	08'49"N,37'59"W	PIER
Marine R.R.	Visually verified	No	08'49"N,37'56"W	MARINE R.R.
Pier	Visually verified	Yes	08'48"N,37'58"W	PIER
Dolphins in Ruins	1732 & 1733	32-Yes/33-No	No	DOLPHINS IN RUINS
Wreck	1731	Yes	Foul w/Wreck	FOUL w/WRECKS
Wreck	1734 - 1735	Yes	Foul w/Wreck	FOUL w/WRECKS
Piles in Ruins	1737	No	No	PILES IN RUINS
Pier	1738	No	No	PIER
Marine R.R.	No evidence	No	08'52"N,37'46"W	DNC <i>concur</i>
Pier	1739	No	No	PIER
Stranded Wreck and Piles	1740	No	Foul Piles	FOUL
Pier	1741 & 1742	No	No	PIER
Pier	Visually verified	No	08'57"N,37'45"W	PIER
Pier	Visually verified	No	08'58"N,37'44"W	PIER
Pier	Visually verified	No	08'57"N,37'43"W	PIER
Pier	1743	Yes	No	PIER

ITEM	POSITION #	CHART 11391	TP-00347	RECOMM.
Pier	1744	No	Yes	PIER
Pier in Ruins	1745	Yes	Yes	PIER IN RUINS
Boatshed	Visually verified	No	08'52"N,37'42"W	BOATSHED
Piers (4)	Visually verified	Yes	08'51"N,37'43"W	PIERS
Stranded Wreck	No evidence	Yes	08'54"N,37'42"W	DNC <i>concur</i>
Ramp	No evidence	No	08'54"N,37'41"W	DNC <i>concur</i>
Pier	No evidence	No	08'48"N,37'43"W	DNC <i>concur</i>
Pier	1746	Yes	Yes	PIER
Pier	1747	Yes	Yes	PIER
Dolphin	1748	No	No	DOLPHIN
Pier	1749	No	Yes	PIER
Dolphin	1750 - 1751	No	No	DOLPHINS
Pier	Signal # 169	Yes	08'39"N,37'52"W	PIER
Foul Area	No evidence	Pier	08'35"N,37'57"W	DNC <i>chart according to survey</i>
Piles in Ruin (3)	914	Pier	No	PILES IN RUINS
Dolphins	908 - 911, 913	No	No	DOLPHINS
Pier	912	Yes	No	PIER
Pier	Visually verified	Yes	08'28"N,37'38"W	PIER
Marine R.R.	No evidence	No	08'28"N,37'37"W	DNC <i>concur</i>
Subm. Pile	913/Dolphin	Yes	No	DOLPHIN
Dolphin/Pile	No evidence	08'23"N,37'38"W	No	SUBM PILE ED <i>Refer to sect. 7 of Eval. Rep.</i>
Pier	1749(possibly)	08'42"N,37'47"W	No	DNC
Subm. Piles	No evidence	08'55"N,38'04"W	No	DNC <i>concur</i>
Pier	No evidence	09'07"N,38'19"W	No	DNC <i>concur</i>
Stranded Wreck	No evidence	No	09'04"N,39'45"W	DNC <i>concur</i>
Subm. Piles	C/D 1763-1782	09'03"N,38'24"W	No	DNC <i>concur (chain dragged)</i>
Pier	No evidence	08'37"N,38'17"W	No	DNC <i>plots on land area</i>

Visual verification was done on items that were blocked by moored vessels or where there was no line of sight from the existing horizontal control network that would give an accurate hydro graphic position. No evidence means the area in the general area of the item was visually searched at mean low water and no sign of the item was found.

PSR ITEMS

The following six PSR items were investigated during the survey: *(Refer also to item investigation forms attached to this report)*

PSR #2735 - An unknown submerged wreck from H-5782 at lat. 30°08'43.16" N, long. 85°37'54.36" W in 12 to 14 feet of water. One end was reported as bearing two feet at MLW. A visual search of the area showed no sign of the wreck. An attempt was made to chain drag the area on JD 85, positions 1952-1966. Nothing was observed on the fathogram or hung by the chain. The required 50 meter sweep radius was not complete on the northern end of the search area because of two obstruction (positions 1732 and 1733, dolphins in ruins) in this area and the shoaling that has occurred. No additional work was done

because the two dolphins in ruins represent the offshore edge of a foul area with PSR 3132 and 3133. The hydrographer recommends that this item be deleted from the chart. A 1:1000 scale overlay of the chain drag is included with the survey sheets.

concur

PSR #2736 - An unknown wreck from H-5782 at lat. 30°08'25.79" N, long. 85°37'59.40" W which bares two feet at MLW. No evidence of the wreck was found during a Chart Adequacy Survey, OPR-515-PE-76. A chain drag was conducted on JD 35 and the item was hung. A diving investigation of this item was conducted by LT. (jg) Rossmann and ST Elliott on JD 85. The remains of a wooden vessel were found settled on the bottom. Positions were taken at the ends of the remains, positions 1968 and 1969, lat. 30°08'25.96" N, long. 85°37'59.60" W and lat. 30°08'25.20" N, long. 85°38'00.00" W. The depth over the wreckage varies from 11⁰ to 13² feet. The wreckage is not a danger to surface navigation. This item should be revised from "Sunken Wreck ED" to "Submerged Wreckage". *chart as 10 WK.*

Charting note:
When surveyed as 10 WK
in chart was enclosed
for citation by corrections & perf.
Revise to 10 WK when
Survey is fully applied.
KMB
10-24-88

PSR #3132 - Unknown submerged wreck from H-5782 located at lat. 30°08'45.00" N, long. 85°37'55.62" W. SEE PSR 3133.

PSR #3133 - Unknown submerged wreck from H-5782 at lat. 30°08'46.50" N, long. 85°37'55.50" W. No chain drag was done for either item, the area is shallow or foul with the remains of two wrecks. During the field work positions 1734 and 1735 were assigned to PSR #3132. Position 1731 was assigned to PSR #3133. During the field processing of data, a review of H-5782 was made with the following conclusion:

- 1) Position 1731, lat. 30°08'45.08"⁷ N, long. 85°37'55.97"W, is PSR #3132. The unknown wreck is a steel barge that has shoaled in with sand. The wreck is covered with water but does not raise above the surrounding sand. The area of the wreck is shallow and unnavigable.
- 2) Positions 1734, lat. 30°08'45.50"⁴⁵ N, long. 85°37'53.50"⁴ W, and 1735, lat. 30°08'46.10"⁰⁸ N, long. 85°37'53.50"²⁷ W, is not a PSR item. Positions 1734 and 1735 represent the inshore and offshore ends of a wooden barge in ruins. The inshore end bares at all stages of the tide (See Photo #1). The offshore end is covered and flush with the bottom.
- 3) PSR #3133 was not evident during the search of the area. The plotted sunken wreck on H-5782 is now shallow water (one foot or less). The hydrographer recommends that the area of the two PSR items be charted foul. The foul area should encompass PSR #3133, positions 1732 and 1733 (dolphins in ruins) and positions 1734 and 1735 (the inshore and offshore ends of the wooden barge). Geographical limits of the foul area should be:

Lat. 30°08'46.50" N, Long. 85°37'55.50" W
 Lat. 30°08'44.40" N, Long. 85°37'55.99" W
 Lat. 30°08'44.46" N, Long. 85°37'54.43" W
 Lat. 30°08'45.45" N, Long. 85°37'53.53" W
 Lat. 30°08'46.05" N, Long. 85°37'53.46" W

The wreck symbol for PSR #3133 should be deleted.

concur. chart wrecks as described above.

No "Notice to Mariners" was issued^d by the hydrographer because of the shallow water surrounding the wrecks and these items are charted.

PSR 3134 - This item is pier piles in ruins from H-5782. The seaward end of the pier was located at lat. 30°08'59.40" N, long. 85°38'10.32" W and extends to the HWL on a bearing of 356°. The pier piles in ruins were visually verified on JD 23, positions 1619 and 1620. The offshore end of the ruins, position 1619, is located at lat. 30°09'00.68" N, long. 85°38'10.12" W. The inshore end, position 1620, is located at lat. 30°09'07.11" N, long. 85°38'10.61" W. The pilings vary from a least depth of one foot in three feet of water to being exposed four feet. The bottom is foul with planks from the pier. The hydrographer recommends the area be charted foul between positions 1619 and 1620 with a width of four meters.

concur. chart according to survey

PSR #3148 - A dolphin that was visually verified during OPR-511-PE-76, Chart Adequacy Survey. The dolphin was positioned approximately at lat. 30°08'27.00" N, long. 85°37'39.00" W during OPR-511-PE-76. The area was searched visually on JD 338 with the following results:

ITEM	POSITION #	LATITUDE	LONGITUDE
Dolphin	908	30°08'26.65" N	85°37'40.18" W
Dolphin	909	30°08'25.90" N	85°37'41.60" W
Dolphin	910	30°08'25.29" N	85°37'42.67" W
Dolphin	911	30°08'25.84" N	85°37'43.54" W
Dolphin	913	30°08'27.50" N	85°37'45.45" W

Position 908 is the closest dolphin to PSR #3148. The hydrographer recommends that the above listed dolphins be charted. No chain drag was done in this area. No danger to navigation was noted during the survey in this vicinity that merited a "Notice To Mariners".

concur. chart according to this survey.

M. ADEQUACY OF THE 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

All floating and fixed aids to navigation in the survey area were located and comparisons between their charted, Light List (Vol. 2, 1984), and surveyed positions and descriptions were made.

AID	LIGHT LIST	LATITUDE	LONGITUDE
Light #28	30°07.7'N,85°37.3'W	30°07'36.338" N,	85°37'14.987"W
Light #27	No Position	30°08'00.730" N,	85°37'55.272"W
Light #24	30°07.6'N,85°38.6'W	30°07'35.623" N,	85°38'36.168"W
Light #23	No Position	30°08'01.655" N,	85°38'54.363"W
Light #19	No Position	30°08'35.037" N,	85°39'31.230"W
Light #1	No Position	30°08'56.558" N,	85°39'47.914"W
Light #18	30°08.6'N,85°40.1'W	30°08'34.248" N,	85°40'03.343"W

All lights were located to Third-order, Class I accuracy.

AID	SURVEY DESCRIPTION	LATITUDE	LONGITUDE	Pos.
Buoy #17	Green Can w/green light	30°08'40.19"N,	85°39'59.71"W	397
Buoy #R20	Red Buoy w/red light	30°08'19.11"N,	85°39'29.43"W	395
Buoy #C21	Green Can	30°08'01.30"N,	85°39'04.33"W	1918
Buoy #C25	Black Can	30°07'52.32"N,	85°37'54.54"W	1801

Buoys #17 and #C21 are described as black cans in the Light List. No positional data is published in the Light List for these buoys.

All aids were found to adequately serve the apparent purpose for which they were established.

Cable and bridge clearances were visually checked and appear to be adequately charted.

O. STATISTICS

Number of positions.....	2148 ⁰⁰⁷
Nautical miles of sounding Line.....	94.1
Nautical miles of crossline.....	10.0
Nautical miles of developments.....	19.7
Total miles of hydrography.....	117.8
Number of bottom samples.....	34
Number of bar checks.....	44
Number of detached positions.....	495 384

P. MISCELLANEOUS

The following positions were rejected during the survey: 253, 387, 388 and 390. These position numbers were not reused. Positions 1970 and 1971 are pseudo fixes in range azimuth format from the Third-order, Class I positions obtained on the lights.

The following positions should not be smooth plotted:

Position 1670 - PSR 2736 (better positions were obtained during diving investigation).
Position 1972 - Check on position 145
Position 1973 - Check on position 143
Position 1974 - Check on position 142
Position 1975 - Check on position 141
Position 1976 - Check on position 140
Position 1977 - Check on position 148
Position 1978 - Check on position 149

Tides were incorrectly applied to the soundings on JD's 333, 334, 335, 338, 341, 342, 346, 352, and 353. An improper longitude entry was made to AM500 - Predicted Tide Generator. Tide data based on 90° longitude time zone rather than UTC was generated and used for plotting. An error of 1.5 feet or less occurs on the plotted soundings for the listed days. Tide curves based on UTC and 90° longitude for the various JDs are shown in Figure 1. The application of smooth tides will correct this error.

No anomalous currents were observed in the survey area.

Q. RECOMMENDATIONS

A review of the requirements to conduct a basic survey for the remaining area of St. Andrew Bay, OPR-J264, should be made. Little change was noted between this survey and the prior surveys. The remaining inshore areas of the bay have no highly dynamic factors that would affect the bottom contour. Either a Chart Evaluation Survey or a basic survey at a smaller scale, 1:20,000, would provide adequate information for the area at the current charting scale.

For specific recommendations for this survey see Section H, J, L, and M.

R. AUTOMATED DATA PROCESSING

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

H-10166

PROGRAM	DESCRIPTION	VERSION DATE
RK201	Grid, Signal, and Lattice Plot	4/18/75
RK212	Visual Station Table Load	4/01/74
RK216	Range/Azimuth Non-Real Time Plot	2/04/76
RK300	Utility Computations	2/05/76
RK330	Reformat and Data Check	5/04/76
RK407	Geodetic Inverse/Direct Computation	9/25/78
AM500	Predicted Tide Generator	11/10/72
AM602	Elinore-Line Oriented Editor	5/20/75

S. REFERENCE TO REPORTS

Descriptive Report H-10122, 1983-84, 1:10,000
Control Report for OPR-J264, dated 1984

Respectfully submitted,

Frederick W. Rossmann

Lt. (jg) Frederick W. Rossmann, NOAA
OIC, HFP-3

APPROVAL SHEET
SURVEY H-10166 (HFP-10-5-84)

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

No direct supervision was given by me or the former Chief of Party, Lt. Cdr. Ronald W. Jones.

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


Kenneth W. Perrin
Lt. Cdr., NOAA
Chief, Hydrographic Field Parties Section

CHART # 11391
11390

ITEM # 2735

ITEM DESCRIPTION: UNKNOWN - CHARTED AS A SUBM. WRECK.

SOURCE: H 5782/1935

INVESTIGATION DATE: 26 MAR 85 TD: 85 TIME: 180900
190700 VESSEL: LAUNCH 517

OIC: LTJG ROSSMANN

REFERENCES:

Position No: 1952-1967

Volume 8

PG. 14-17

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETIC POSITION:

	Latitude	Longitude
Charted:	30° 08' 43.16 N	85° 37' 54.36 W
Observed:	NOT OBSERVED.	

POSITION DETERMINED BY: RANGE-AZIMUTH - DELNORTE AND 20" THEODOLITE.

METHOD OF ITEM INVESTIGATION: CHAIN DRAG - LOWER PORTION OF 50M RADIUS WAS CHAIN DRAGGED.
UPPER HALF OF 50 METER RADIUS IS SHOAL AND FILL WITH WRECKAGE (SEE PSR # 3132-3133)
NOTHING WAS HUNG DURING THE DRAG.

CHARTING RECOMMENDATIONS: DELETE FROM CHART. CONCUR

Compilation Use Only

CHART

APPLIED AS

CHART # 11390 + 11391

ITEM # 2736

ITEM DESCRIPTION: *SUBMERGED WRECK*

SOURCE: *H-5782/35 + CL 1813/76*

INVESTIGATION DATE: *26 MARCH 85*

TIME: *204000*
204100

VESSEL: *LAUNCH 517*

OIC: *LTCG ROSSMANN*

REFERENCES:

Position No: *1968-1969*

Volume *8*

pg. *17*

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETIC POSITION:

	Latitude	Longitude	
Charted:	<i>30° 08' 25.79" N</i>	<i>85° 37' 59.40" W</i>	
Observed:	<i>30° 08' 25.78" N</i>	<i>85° 37' 59.54" W</i>	<i>POS. 1968</i>
	<i>30° 08' 25.78" N</i>	<i>85° 38' 00.04" W</i>	<i>POS. 1969</i>
	<i>04</i>	<i>15</i>	

POSITION DETERMINED BY: *RANGE-AZIMUTH, DEL NORTE AND 20" THEODOLITE*

METHOD OF ITEM INVESTIGATION: *C/D WAS USED TO HANDLE WRECKAGE, DIVERS CIRCLE SEARCHED THE LENGTH OF THE WRECKAGE. DIVERS FOUND THE WRECK HAS SETTLED TO THE BOTTOM. THE WOODEN VESSEL IS NOW LONGER INTACT. THE WOODEN REMAINS OF THE WRECK COVER AN AREA 25 METERS LONG AND 6 METERS WIDE. NO PROMINENT HIGH SPOTS WERE NOTED BY THE DIVERS DURING THE CIRCLE SEARCHES.*

CHARTING RECOMMENDATIONS: *CHANGE CHARTED TO WRECKAGE. REVISE CHARTED WRECK SYMBOL WITH ED ANNOTATION TO SUBM. WRECK "10 WK" AT OBSERVED POSITION.*

Compilation Use Only

CHART

APPLIED AS

CHART # 11390 + 11391

ITEM # 3132

ITEM DESCRIPTION: *SUBMERGED WRECK*

SOURCE: *H 5782/35*

INVESTIGATION DATE: *13 FEB 85 / JD 44*

TIME: *153700*
154000

VESSEL: *LAUNCA 517*

OIC: *LTC Rossmann*

REFERENCES:

Position No: *1734-1735*

Volume *7* pg. *36*

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETIC POSITION:

	Latitude	Longitude	
Charted:	<i>30° 08' 45.00" N</i>	<i>85° 37' 55.20" W</i>	
Observed:	<i>30° 08' 45.45" N</i>	<i>85° 37' 53.54" W</i>	<i>POS. 1734</i>
	<i>30° 08' 46.05" N</i>	<i>85° 37' 53.46" W</i>	<i>POS. 1735</i>

POSITION DETERMINED BY: *RANGE-AZIMUTH, DEL NORTE + 20" THEODOLITE*

METHOD OF ITEM INVESTIGATION: *VISUALLY VERIFIED AND DETACHED POSITIONS TAKEN WRECK IS THE REMAINS OF A WOODEN BARGE. THE OFFSHORE END IS SUBMERGED, INSHORE END BARES 2 FEET. 2+ MHW.*

CHARTING RECOMMENDATIONS: *REMAIN AS CHARTED - ADD FOL WITH WRECKS*
SEE PSR 3133 *REVISE CHARTED WRECK SYMBOL WITH WK ANNOTATION*
TO WRECK HULK SYMBOL BARS 2 FT ABOVE MHW. (2)
at observed position.

Compilation Use Only

CHART

APPLIED AS

CHART # 11390 + 11391

ITEM # 3/33

ITEM DESCRIPTION: SUBMERGED WRECK

SOURCE: H-5782 / 35

INVESTIGATION DATE: 13 FEB 85 / JD 44 TIME: 150600 VESSEL: LAUNCH 0517

OIC: LTJG ROSSMANN

REFERENCES:

Position No: 1731 Volume 7 pg. 36

CORRECTORS APPLIED:

- Velocity TRA Correctors
- Predicted or Actual Tide Correctors

GEODETIC POSITION:

	Latitude	Longitude	
Charted:	30° 08' 46.50" N	85° 37' 55.50" W	
Observed:	30° 08' 45.08" N	85° 37' 55.97" W	Pos. 1731

POSITION DETERMINED BY: RANGE- AZIMUTH, DEL NORTE + 20" THEODOLITE

METHOD OF ITEM INVESTIGATION: VISUALLY VERIFIED AND DETACHED POSITION TAKEN.
 WRECK IS A SUNKEN STEEL BARGE 100 FT. LONG AND 25 FT. WIDE. THE DETACHED POSITION WAS TAKEN
 DURING LOW TIDE WHEN THE WRECK WAS EXPOSED 0-2 FT. AWASH.
 THE AREA AROUND THE WRECK IS SHOAL.

CHARTING RECOMMENDATIONS: ~~REMAIN CHARTED~~ - FOUL WITH WRECK
 (SEE PSR # 3132) Revise charted wreck symbol to wreck awash symbol
 # (e) at observed position.

Compilation Use Only

CHART

APPLIED AS

CHART # 11390 & 11391

ITEM # 3134

ITEM DESCRIPTION: PIER PILLS IN RUINS

SOURCE: H-5782/35

INVESTIGATION DATE: 23 JAN 1985 / JD23

TIME: 194400 + 195300

VESSEL: LAUNCH 517

OIC: LTJG ROSSMANN

REFERENCES:

Position No: 16204/1619

Volume 7 PG. 5

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETIC POSITION:

Charted:

Latitude

Longitude

Observed:

30° 08' 59.40" N

85° 38' 10.32" W

30° 09' 00.68" N

85° 38' 10.12" W - SUBMERGED OFFSHORE END

30° 09' 07.11" N

85° 38' 10.61" W - INSHORE END BARS 1 FT

POSITION DETERMINED BY: RANGE-AZIMUTH DEL NORTE AND 20" THEODOLITE.

METHOD OF ITEM INVESTIGATION: VISUALLY VERIFIED - DETAILED POSITIONS TAKEN AT INSHORE AND OFFSHORE ENDS OF PIER RUINS. THE OFFSHORE END WAS DETERMINED BY PHYSICALLY WADING THE LENGTH OF THE PIER RUINS, THE SUBMERGED PILES WERE OBSERVED. THE WOODEN REMAINS OF THE PIER FLOOR HAVE SETTLED TO THE BOTTOM BETWEEN THE SUPPORT PILING. THE PILING ON THE OFFSHORE END HAVE A LEAST DEPTH OF 1 FOOT TO BEING EXPOSED 4 FEET. UNCOVERS 1 foot to 6 MLLW to bars 2 feet at MHW.

CHARTING RECOMMENDATIONS: ~~REMAIN AS CHARTED.~~
chart pile bars 2 ft. at MHW at observed position.
chart pier ruins with offshore end at observed position
(see smooth sheet)

Compilation Use Only

CHART

APPLIED AS

DIVE INVESTIGATION REPORT
PROJECT NUMBER J264
SURVEY _____
FIELD NUMBER HFP-10-5-84

DIVE NUMBER 1

DIVE DATE 26 MARCH 1985

I. AREA OF INVESTIGATION

- A. State/Country FLORIDA / BAY Sub-Locality ST. ANDREW BAY, ROAD SIGN TO MILITARY POINT
- B. Position: Latitude ° ' " Longitude ° ' "
(Dive site or center of search area)
- C. Method of Positioning RANGE - AZIMUTH

II. PURPOSE OF INVESTIGATION

- A. AWOIS item number: 2736
- B. Source of item being investigated (if other than AWOIS listing): _____
- 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): CHAIN DRAG TO HANG WRECKAGE
- B. Search Procedure (e.g. following a groundwire, circle search, sweep along known feature, etc.)
CIRCLE SEARCHES ALONG LONG AXIS TO DETERMINE HIGH POINT.



- C. Known reference to features nearby: _____
- D. Area and depths covered: DEPTHS 12-14 FEET
30m x 6m

IV. DIVE DATA

- A. Divers: LTC ROSSMANN, ST. DAVID ELLIOTT
- B. Time of Dive (in UTC) - Real IN-1940 OUT 2045
Elapsed 65 MIN
- C. General Bottom Depths (units and method of determination):
FEET - FATHS AND C/D SWEEP. 12 - 14 FEET
- D. Current and conditions: NO CURRENT
- E. Visibility (number of feet - horizontally and vertically):
HORIZONTAL - 2-3 FEET, VERTICALLY - 3-4 FEET
- F. Bottom type (mud, sand, rocks, etc.): MUD/SILT

IV. RESULTS

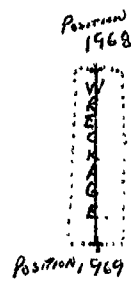
- A. Detached Positions Number(s): 1968 AND 1969
Time of D.P.'s (UTC): Describe if other time zone: 204000/204100
Least Depth and Fix Numbers (raw depth): 1968-11.3 FT, 1969-12.8
Method of determining depth (The raw sounding should be recorded. The reduced least depth should be plotted on the field sheet.) LEADLINE
- B. Description of findings: REMAINS OF WOODEN VESSEL SCATTERED ON THE BOTTOM. THE WRECKAGE HAS SETTLED TO THE BOTTOM AND IS SILTING OVER. NO PRONOUNCED HIGH SPOTS WERE FOUND. THE BOW-STEERN AXIS CAN BE DETERMINED, FROM THE REMAINS OF THE WOODEN TIMBERS.
- C. Dimensions of item or feature (attach sketch if appropriate):
25M LONG - 6 METER WIDE
- D. Unusual Conditions:

VI. CHARTING RECOMMENDATIONS

Position Lat. _____ Long. _____

Reduced Depth _____

Type of Feature (Reference Chart No.1) 029 WRECKAGE





CITY OF PANAMA CITY

POST OFFICE BOX 1880
PANAMA CITY, FLORIDA 32402

May 6, 1985

Mr. Fred Rossman
OIC HFP-3
C/O NMFS
3500 Delwood Beach Road
Panama City Beach, FL 32407

RE: 20-inch Force Main Crossing Watson Bayou
Panama City, Florida

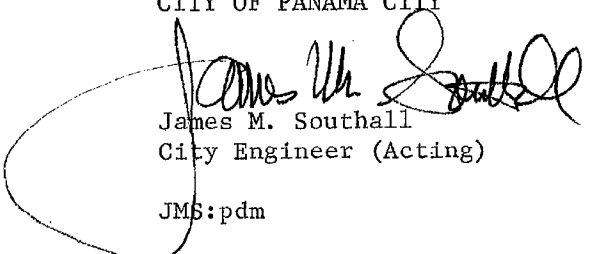
Dear Mr. Rossman:

Attached are the permit sketches of our new 20-inch polyethylene sanitary sewer force main crossing Watson Bayou, as requested. Unfortunately the survey is illegible, but it is the best copy we have on file.

If we may be of further service, please advise.

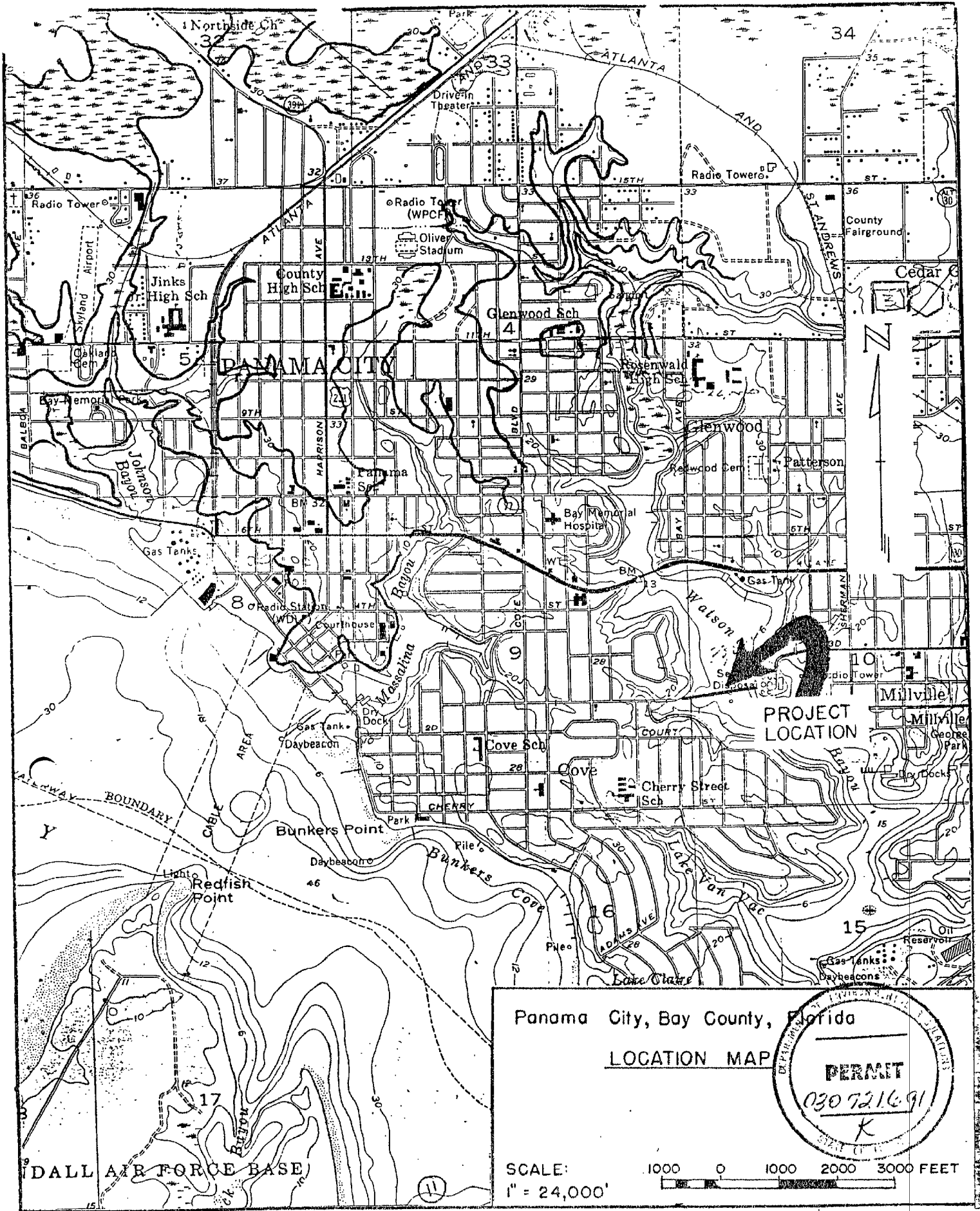
Sincerely,

CITY OF PANAMA CITY



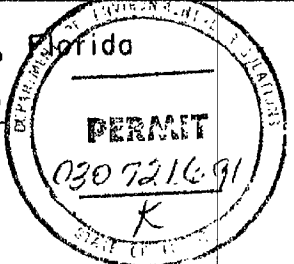
James M. Southall
City Engineer (Acting)

JMS:pdm



Panama City, Bay County, Florida

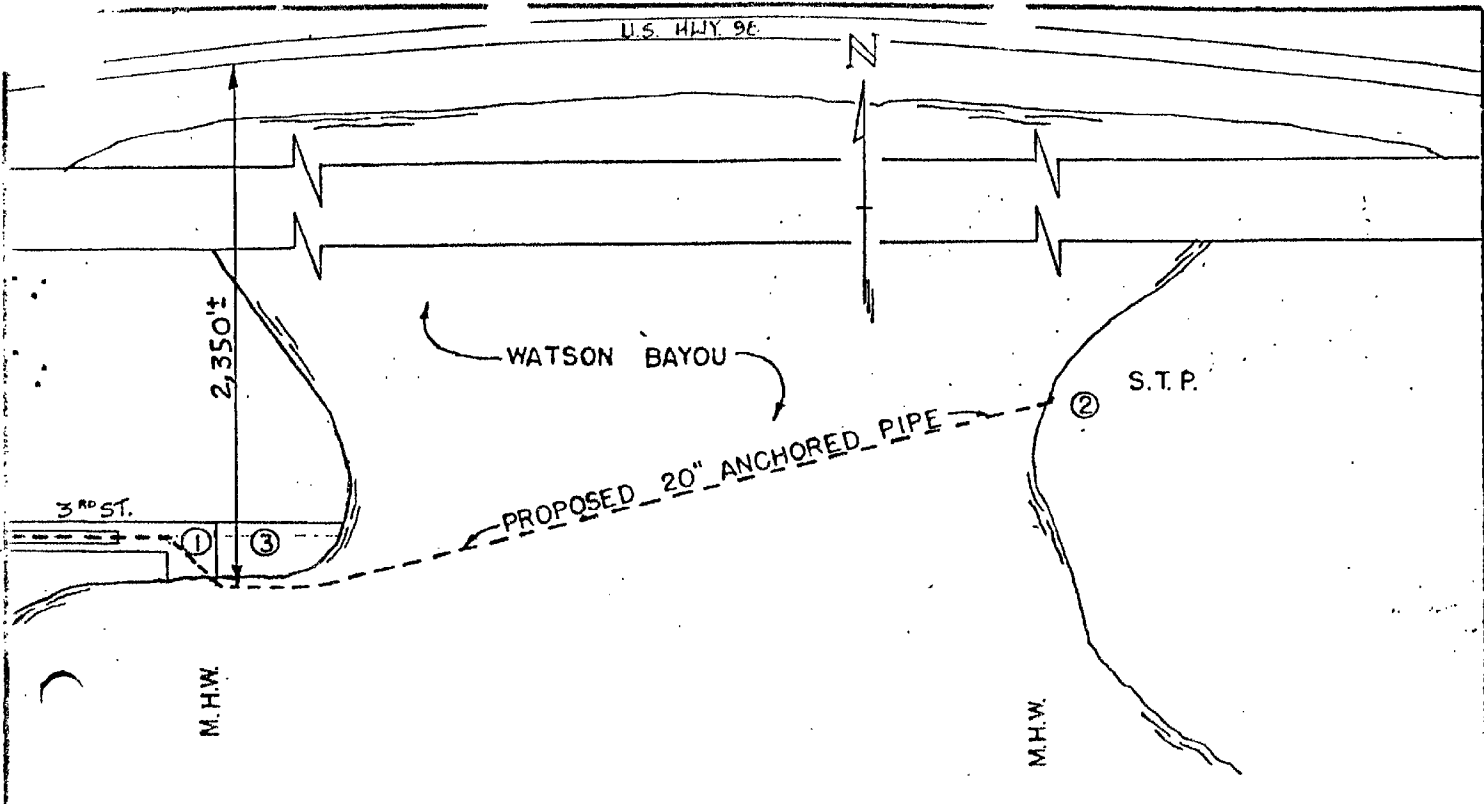
LOCATION MAP



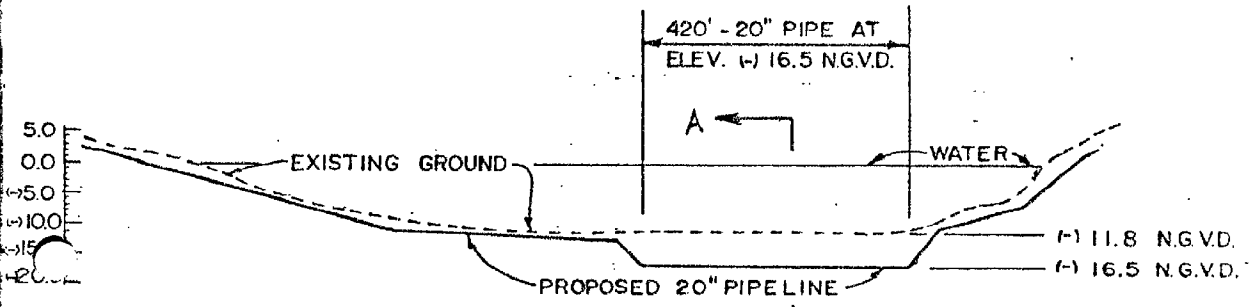
SCALE: 1" = 24,000'



DALL AIR FORCE BASE



PLAN
1" = 300'



SECTION

SCALE: 1" = 300' HORIZ.
1" = 30' VERT.

MATERIAL TO BE USED FOR PIPELINE IS POLYETHYLENE.

ADJACENT PROPERT OWNERS

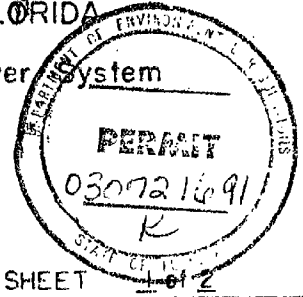
- 1) City of Panama City, Florida
- 2) City of Panama City, Florida
- 3) J. P. Mason

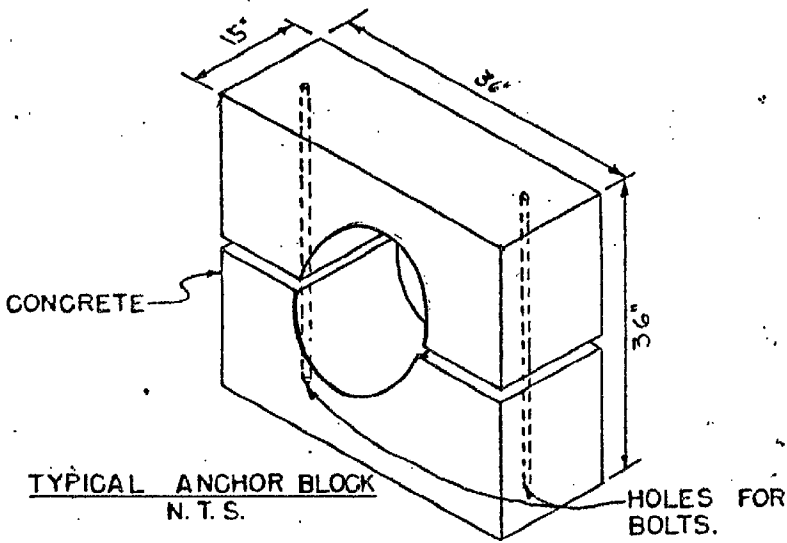
Scale: Horiz. 1" = 300'
Vert. 1" = 30'

**APPLICATION FOR PANAMA CITY,
BAY COUNTY, FLORIDA**

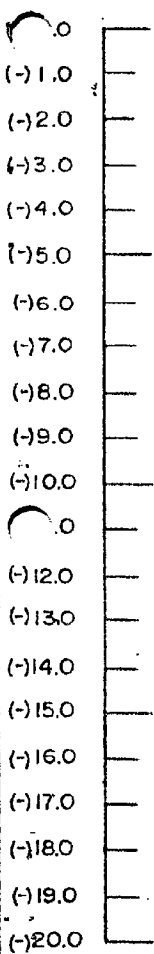
20" Force Main for Sewer System

Section: 10
Township: T4S
Range: R14W





NOTE: CONCRETE ANCHOR BLOCKS
REQ'D. 10'-0" O.C. COMPLETE
LENGTH OF CROSSING.



▼ WATER

M.H.W. ——— 1.07 N.G.V.D.

M.L.W. ——— 0.23 N.G.V.D.

PROPOSED LINE LENGTH 1,475 L.F.
CU. YDS. EXCAVATED AND
REPLACED 2,950 C.Y.

EXISTING GROUND VARIES

PROPOSED
CONC. ANCHOR
BLOCK.

PROPOSED 20"
FORCE MAIN

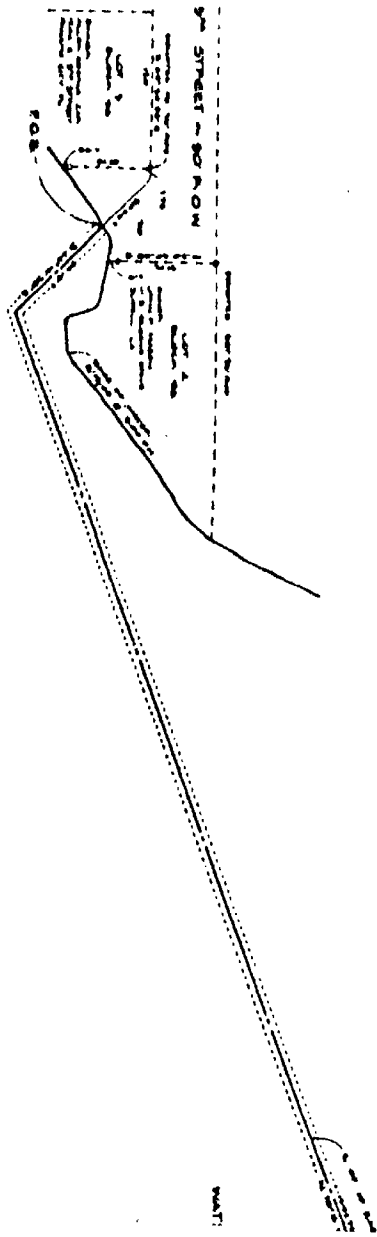
SECTION A-A



SCALE: 1" = 4'-0"

APPLICATION FOR PANAMA CITY,
BAY COUNTY, FLORIDA
20" Force Main for Sewer System
TYPICAL
CROSS SECTION & ANCHOR BLOCK
DETAIL

1. All data furnished hereon is for information only and does not constitute a contract. The Government is not bound by the data furnished hereon. The data are furnished for information only and are not to be used for any purpose other than that for which they were furnished. The data are not to be used for any purpose other than that for which they were furnished. The data are not to be used for any purpose other than that for which they were furnished.



1/18 A

SIGNAL LIST
ST ANDREW BAY, FLORIDA
OPR-J264
H10166

Signal #	Name	Established By	Year
120	St Andrew Bay Entr A Frt Lt	N/MOA2x1	1983
122	PK Southeast Marina	N/MOA2x1	1983
123	PK Northwest Marina	N/MOA2x1	1983
124	St Andrew Bay Entr A Rear Lt	N/MOA2x1	1983
140	PCH-1 USE	N/MOA2x1	1984
141	Smack Bayou	N/MOA2x1	1984
142	Smack U	N/MOA2x1	1984
143	Fresh	N/MOA2x1	1984
144	PCH-3 USE	N/MOA2x1	1984
145	Military Pt	N/MOA2x1	1984
146	Nelson	N/MOA2x1	1984
147	Oys	N/MOA2x1	1984
148	Massa	N/MOA2x1	1984
149	Lina	N/MOA2x1	1984
150	Massalina Bayou Mast	N/MOA2x1	1984
151	Watson	N/MOA2x1	1984
152	Panama City West Fl Natural Gas Mast	N/MOA2x1	1984
153	Stewart	N/MOA2x1	1984
154	Sudduth	N/MOA2x1	1984
155	Hill	N/MOA2x1	1984
156	No Name Rod	N/MOA2x1	1984
157	PK Cofer	N/MOA2x1	1984
158	Thais	N/MOA2x1	1984
159	Jeremy	N/MOA2x1	1984
160	Dyke	N/MOA2x1	1984
161	St Andrew Bay Light 23	N/MOA2x1	1984
162	Cheshire	N/MOA2x1	1984
163	Tyndall AFB Capehart Hs Tk Ecc	N/MOA2x1	1984
164	PK Tyndal	N/MOA2x1	1984
165	Redfish Pt	N/MOA2x1	1984
166	Airport BCN Tyndall AF E Tk Ecc	N/MOA2x1	1984
167	46 76 B38	FDOT	1976
168	Panama City West Tank	N/MOA2x1	1984
169	PK La Gloria	N/MOA2x1	1984
119	NOAA	N/MOA2x1	1983

FDOT - Florida Department Of Transportation

170	St Andrew Bay Light 18		1984
171	Massalina Bayou Entrance Light 1		1984
172	St Andrew Bay Light 19		1984
173	St Andrew Bay Light 27		1984
174	St Andrew Bay Light 24		1984

SIGNAL TAPE LISTING

ST, ANDREW BAY, FLA.

OPR-J264

HFP-10-5-84

H-10166

119	3	30	08	54228	085	42	43572	250	0000	000000
120	1	30	08	44915	085	41	34583	139250	0000	000000
122	0	30	08	58042	085	39	53034	250	0000	000000
123	7	30	09	06799	085	40	01930	250	0000	000000
124	1	30	09	26809	085	40	31760	250	0000	000000
140	5	30	08	30381 ²	085	40	09761 ²	250	0000	000000
141	0	30	07	50797	085	39	57063	250	0000	000000
142	6	30	08	00523	085	39	43252	250	0000	000000
143	4	30	07	21937 ⁸	085	39	14806	250	0000	000000
144	5	30	07	25148 ⁹	085	38	39784	250	0000	000000
145	6	30	07	31947	085	37	19364	250	0000	000000
146	7	30	09	03166	085	39	34289 ⁹⁰	250	0000	000000
147	0	30	09	06995	085	39	26372	250	0000	000000
148	3	30	09	18112	085	39	24590	250	0000	000000
149	4	30	09	17781	085	39	20723 ⁴	250	0000	000000
150	4	30	09	55137	085	39	14335 ⁶	139250	0000	000000
151	3	30	09	23372 ³	085	38	39059	250	0000	000000
152	4	30	09	06575	085	38	08645 ⁵⁰	139250	0000	000000
153	2	30	09	02080	085	38	17906	250	0000	000000
154	5	30	08	59421	085	38	26941	250	0000	000000
155	2	30	08	57693 ⁴	085	38	07172 ³	250	0000	000000
156	4	30	08	35258	085	37	55946	139250	0000	000000
157	3	30	08	30906 ⁷	085	38	03489 ⁷⁰	250	0000	000000
158	6	30	08	24413	085	37	48187	250	0000	000000
159	4	30	08	16908	085	38	06980	250	0000	000000
160	1	30	08	06832	085	37	52658 ⁷	139250	0000	000000
161	2	30	08	01655	085	38	54362 ³	139250	0000	000000
162	2	30	08	05173	085	38	51966 ⁷	250	0000	000000
163	4	30	06	04426	085	38	53022	250	0039	000000
164	1	30	05	52022	085	39	15370	250	0000	000000
165	3	30	04	30137	085	38	37931	250	0000	000000
166	3	30	03	50379	085	35	12103	250	0043	000000
167	4	30	05	22040	085	40	39461	250	0000	000000
168	0	30	09	24791	085	38	56020	250	0000	000000
169	7	30	08	39736	085	37	51395	250	0000	000000
170		30	08	34248	085	40	03344	139		
171		30	08	56558	085	39	47914	139		
172		30	08	35037	085	39	31230	139		
173		30	08	00730	085	37	55272	139		
174		30	07	35623	085	38	36168	139		

Replaces C&GS Form 567.

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

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

REPORTING UNIT (Field Party, Ship or Office) HFPS-HFP3
 STATE Florida
 LOCALITY Bay County St. Andrew Bay
 DATE 5/3/85
 The following objects HAVE HAVE NOT been inspected from seaward to determine their value as landmarks.
 OPR PROJECT NO. J264
 JOB NUMBER -----
 SURVEY NUMBER H-10166

ORIGINATING ACTIVITY
 HYDROGRAPHIC PARTY
 GEODETIC PARTY
 PHOTO FIELD PARTY
 COMPILATION ACTIVITY
 FINAL REVIEWER
 QUALITY CONTROL & REVIEW GRP.
 COAST PILOT BRANCH
 (See reverse for responsible personnel)

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	DATUM		POSITION				METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED
		° /	° /	// D.M. Meters	// D.P. Meters	OFFICE	FIELD	DATE		
									LATITUDE	
LIGHT	St. Andrew Bay East Light 28 LL#1616	30 07	85 37	36.338	14.987			F-2-6-L Nov. 1984	11389 11390 11391	
LIGHT	St. Andrew Bay East Light 27 LL#1615	30 08	85 37	00.730	55.272			F-2-6-L Nov. 1984	11389 11390 11391	
LIGHT	St. Andrew Bay East Light 24 LL#1614	30 07	85 38	35.623	36.168			F-2-6-L Nov. 1984	11389 11390 11391	
LIGHT	St. Andrew Bay East Light 23 Signal 161 LL#1613	30 08	85 38	01.655	54.363			F-2-6-L Nov. 1984	11389 11390 11391	
LIGHT	St. Andrew Bay East Light 19 LL#1611.50	30 08	85 39	35.037	31.228 ³⁰			F-2-6-L Nov. 1984	11389 11390 11391	
LIGHT	Massalina Bayou Entrance Lt. 1 LL#1609	30 08	85 39	56.558	47.914			F-2-6-L Nov. 1984	11389 11390 11391	
LIGHT	St. Andrew Bay East Lt. 18 LL#1611	30 08	85 40	34.248	03.344			F-2-6-L Nov. 1984	22489 11390 11391	

L-707 (86)

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	Frederick W. Rossman, LTJG, NOAA
POSITIONS DETERMINED AND/OR VERIFIED	Frederick W. Rossman, LTJG, NOAA
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	<input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
FIELD ACTIVITY REPRESENTATIVE 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' <i>(Consult Photogrammetric Instructions No. 64.)</i>	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD 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 A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

RESPONSIBLE PERSONNEL		ORIGINATOR
TYPE OF ACTION	NAME	
OBJECTS INSPECTED FROM SEAWARD	Frederick W. Rossman	<input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input checked="" type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	Frederick W. Rossman	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		<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,		
<p>OFFICE</p> <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>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</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>FIELD (Cont'd)</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>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>		

DATE: 7/19/85

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Marine Center: Atlantic

OPR: J264

Hydrographic Sheet: H-10166

Locality: St. Andrews Bay, Florida

Time Period: November 5, 1984 - April 11, 1985

Tide Station Used: 872-9108 Panama City, Florida

Plane of Reference (Mean Lower Low Water): 3.24 ft.

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

Remarks: Recommended Zoning:

Zone Direct


Chief, Tidal Datums Section

FIELD TIDE NOTE
SURVEY H-10166

Field tide reduction of soundings was based on predicted tides from Pensacola, Florida corrected to St. Andrew Bay, Florida, and were interpolated by a PDP8/e computer utilizing AM500.

The project instructions stated in Section 5.9 that prediction stations numbers 3155 through 3169 found in Table 2 of the Tide Tables should be used to provide preliminary time and height corrections to the predicted tide at Pensacola. A detailed tide zoning chartlet was provided by N/OMS12 for clarification and was used for this survey. A copy of this chartlet is appended to this Tide Note.

The operating control tide station at Pensacola, Florida (872-9840), will serve as control for datum determination and the operating tide station at Panama City, Florida (872-9108), will provide additional control. These gages were maintained and operated by Chapin and Associates, Inc. These gages were monitored by contract observers and operated well through all periods of hydrography.

<u>SITE</u>	<u>LOCATION</u>	<u>PERIOD</u>
Pensacola, Florida 872-9840	30°24.2' 87°12.8'	Entire period of survey
Panama City, Florida 872-9108	30°09.1' 85°40.0'	Entire period of survey

PENSACOLA, FLORIDA
PANAMA CITY, FLORIDA

A line of communications was established with Chapin and Associates to assure correct operation of these gages and to be notified in case of any malfunction. No problems were encountered.

LEVELS

Levels were not run by party personnel to the staff at the Pensacola gage. Levels were run to the staff at the Panama City gage 26 October 1984. The staff has not been leveled out to date.

ZONING

Zoning should be provided by the Tides and Water Levels Branch N/OMS12.

Atlantic Marine Center
Hydrographic Field Parties Section

April 25, 1985 N/MOA233:RL

TO: N/OMS123 - Tidal Datum Section

FROM: N/MOA233 - Kenneth W. Perrin *Robert Lewis*

SUBJECT: Request for smooth tides

Please provide smooth tide correctors and zoning information to the Atlantic Marine Center, Hydrographic Surveys Branch for the Pensacola (872-9840) and Panama City (872-9108) tide stations for Survey H-10166, OPR-J264-HFP-84.

The following times include four hours before and after actual times of Hydrography:

<u>Day Number</u> <u>Julian Day</u> 1984	<u>Begin (UTC)</u>	<u>END (UTC)</u>
310	101200	012900
311	101200	012800
313	094200	025400
314	101300	240300
317	105700	024100
319	094600	024700
320	095500	022300
332	102300	232200
333	104800	022800
334	090400	022300
335	110800	024000
338	100900	014100
341	111200	023100
342	112300	032800
346	111500	021900
348	093500	013600
349	100600	025500
352	105300	024000
353	104400	023200
1985		
011	101600	244000
016	111500	031100
017	112100	021200
018	101400	242900
023	123000	020400
025	102900	234600

028
029
032
035
042
044
045
073
085
101

104300
125300
120200
095200
123800
090600
094500
092600
094000
132000

010800
022700
011500
013600
033300
024800
223700
242500
024600
030500

GEOGRAPHIC NAMES

OPR-J264
H-10166
HFP-10-5-85

A ON CHART NO. 11390 & 11391
B ON PREVIOUS SURVEY NO.
C ON U.S. QUADRANGLE MAPS
D FROM LOCAL INFORMATION
E ON LOCAL MAPS
F P.O. GUIDE OR MAP
G RAND McNALLY ATLAS
H U.S. LIGHT LIST
K

Name on Survey

Name on Survey	A	B	C	D	E	F	G	H	K
Bay Harbor	X								
Beacon Beach	X								
Bunkers Cove	X				X				
Bunkers Pt.	X				X				
Cromanton	X								
Davis Pt.	X	H-5782							
Donaldson Pt.	X								
Ferry Pt.	X								
Freshwater Bayou	X	H-5782							
Johnson Bayou	X								
Lake Claire	X								
Lake Van Vac	x								
Lands End	X								
Massalina Bayou	X	H-5782		X	X				
Millville	X								
Millville Pt.	X								
Military Pt.	X								
Palemetto Pt.	X								
Panama City	X	H-5782		X	X				
Parker	X								
Parker Bayou	X	H-5782							
Pearl Bayou	X	H-5782 H-1382							
* Pitt Bayou	X	H-5782							
Pratt Bayou	X								
Redfish Pt.	X				X				

Note: crossed out geographic names fall outside sheet limits.

GEOGRAPHIC NAMES

OPR-J264
H-10166
HFP-10-5-84

ON CHART NO. 11390 & 11391
ON PREVIOUS SURVEY
ON U.S. QUADRANGLE
MAPS
FROM LOCAL
INFORMATION
ON LOCAL MAPS
P.O. GUIDE OR MAP
TP-00347
GRAND McNALLY
ATLAS
U.S. LIGHT LI

Name on Survey

	A	B	C	D	E	F	G	H	K
Shell Island	X			X					
Sheephead Bayou	X								
Smack Bayou	X	H-5782 H-1375							
St. Andrew Bay	X								
Town Pt.	X								
Watson Bayou	X	H-5782 H-1375		X	X				
<i>Florida (title)</i>									
<i>Glenwood</i>						X			
* Pitt Bayou is shown as Pitts Bayou on TP-00347									
* Note: crossed out geographic name fall outside sheet limits.									

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	SMOOTH OVERLAYS: POS., ARC, EXCESS	10
DESCRIPTIVE REPORT	1	FIELD SHEETS AND OTHER OVERLAYS	2

DESCRIP-TION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/ SOURCE DOCUMENTS
ACCORDION FILES	1				
ENVELOPES					
VOLUMES	9				
CAHIERS					
BOXES					

SHORELINE DATA

SHORELINE MAPS (List): TP-00345, TP-00346

PHOTOBATHYMETRIC MAPS (List):

NOTES TO THE HYDROGRAPHER (List):

SPECIAL REPORTS (List):

NAUTICAL CHARTS (List):

OFFICE PROCESSING ACTIVITIES

The following statistics will be submitted with the cartographer's report on the survey

PROCESSING ACTIVITY	AMOUNTS		
	VERIFICATION	EVALUATION	TOTALS
POSITIONS ON SHEET			2007
POSITIONS REVISED			
SOUNDINGS REVISED			208
CONTROL STATIONS REVISED			
	TIME-HOURS		
	VERIFICATION	EVALUATION	TOTALS
PRE-PROCESSING EXAMINATION			
VERIFICATION OF CONTROL			
VERIFICATION OF POSITIONS	53.5		53.5
VERIFICATION OF SOUNDINGS	183.0		183.0
VERIFICATION OF JUNCTIONS			
APPLICATION OF PHOTOBATHYMETRY			
SHORELINE APPLICATION/VERIFICATION			
COMPILATION OF SMOOTH SHEET	59.5		59.5
COMPARISON WITH PRIOR SURVEYS AND CHARTS		22.0	22.0
EVALUATION OF SIDE SCAN SONAR RECORDS			
EVALUATION OF WIRE DRAGS AND SWEEPS			
EVALUATION REPORT		79.0	79.0
GEOGRAPHIC NAMES			
OTHER* Digitizing	20.0		20.0
*USE OTHER SIDE OF FORM FOR REMARKS	316.0	101.0	417.0

Pre-processing Examination by Lt. S.R. Iwanoto	Beginning Date	Ending Date 8/27/85
Verification of Field Data by P. Niland	Time (Hours) 296.0	Ending Date 3/17/86
Verification Check by S. Otsubo, B. Olmstead, J. Green	Time (Hours) 86.5	Ending Date 6/2/86
Evaluation and Analysis by A. Luceno	Time (Hours) 101.0	Ending Date 6/2/86
Inspection by D. Hill	Time (Hours) 5.0	Ending Date 6/2/86

PACIFIC MARINE CENTER
EVALUATION REPORT
H-10166

1. INTRODUCTION

H-10166 was accomplished by the Hydrographic Field Party 3 in accordance with the following project instructions:

OPR-J264-HFP-83, dated August 15, 1983
Change No. 1, dated September 30, 1983
Change No. 2, dated October 18, 1984
Change No. 3, dated October 22, 1984

This is a basic hydrographic survey of St. Andrew Bay, Florida. The surveyed area covers a portion of the main harbor between Military Point and Redfish Point. Bay Harbor, where one of the largest paper mills in the world is located, is also within the sheet's limits. Entrance to the harbor from the Gulf of Mexico is provided by a channel cut through Shell Island. Along the main channel of the harbor, general depths of 40 to 50 feet exist, except in an area between longitudes $85^{\circ}37'30''\text{W}$ and $85^{\circ}38'30''\text{W}$, where depths of only 29 to 40 feet are available. Depths of more than 30 feet are available within a 150 to 900-meter wide channel. Constriction of channel widths occurs in the vicinity of land points and are marked by lighted fixed and floating aids to navigation. The bottom is generally muddy with broken shells.

Predicted tides based on the Pensacola reference station with subordinate station Panama City, St. Andrew Bay, Florida were used during field processing. Tide correctors used for the reduction of final soundings reflect approved hourly heights zoned directly from the Panama City, St. Andrew Bay, Florida tide station.

The field sheet parameters have been revised to center the hydrography on the smooth sheet and to change the projection to polyconic. The TRA correctors have been revised during office processing to combine the transducer draft with the settlement and squat correctors. Electronic control correctors used were the mean values of the morning and afternoon calibrations for each day of hydrography. Sound velocity and instrument correctors were determined from the daily bar check data. The revised data is listed in the smooth position/sounding printout.

A digital file for this survey has been generated and includes categories of information required to comply with N/CG2 Hydrographic Survey Guideline No. 23, Completion of Digital Hydrographic Surveys, September 7, 1983. Certain descriptive information, however, may not be included in the digital record due to the restrictions of the presently available cartographic codes. The user should refer to the smooth sheet for complete information.

2. CONTROL AND SHORELINE

Horizontal control and positioning are discussed in sections F and G of the hydrographer's report.

Horizontal control station positions used during the hydrography are field positions based on the North American Datum of 1927.

Applicable shoreline manuscripts are TP-00345 and TP-00346. These are registered copies of National Ocean Survey/Florida - Bay County Federal - State Cooperative Mapping Series and originate from aerial photography of January and April 1977. Horizontal control, landmarks, aids to navigation and other features were verified by a field edit in 1978.

The three shoreline features discussed in section H of the hydrographer's report and shown on TP sheets 00345 and 00346 were not found by the hydrographer and are plotted in blue on the field sheets. However, there is no indication in the records that an underwater search was made for the submerged ruins of these structures. These features were plotted as submerged ruins on the smooth sheet.

3. HYDROGRAPHY

Soundings at line crossings are in good agreement. Hydrography within the limits of the sheet is adequate to:

- a. Delineate the bottom configuration, develop shoal soundings to determine least depths, and to draw the standard depth curves.
- b. Reveal that there are no significant discrepancies or unusual anomalies requiring further investigation.
- c. Show that the survey had been properly controlled and soundings are plotted correctly.

4. CONDITION OF SURVEY

The hydrographic records and reports are adequate and conform to the requirements of the Hydrographic Manual, 4th Edition, revised through Change Three, except as noted in the Preprocessing Examination Report, dated August 27, 1985.

5. JUNCTIONS

H-10166 junctions with H-10122 (1983) to the west. The junction has been adequately effected.

There are no contemporary surveys to the east; however, a comparison with charted depths reveals good agreement with the present survey.

6. COMPARISON WITH PRIOR SURVEYS

H-1375 (1877) 1:20,000

H-1375 is listed in the project instructions for comparison and was discussed in the descriptive report. This survey has been superseded by H-5782, therefore does not require further consideration.

H-5782 (1935) 1:10,000

Soundings generally agree to within 1 foot between the surveys. However, shifting of the 30-foot depth curve in the prior survey was observed at the following positions:

- a) Latitude 30°09'13"N between longitudes 85°40'13"W and 85°40'24"W, 200 meters offshore.
- b) Latitude 30°07'39"N, between longitudes 85°39'12"W and 85°39'29"W, 250 meters offshore.
- c) Latitude 30°07'53"N, between longitudes 85°38'12"W and 85°39'02"W, from 60 to 100 meters offshore.
- d) Latitude 30°07'25"N, between longitudes 85°37'50"W and 85°38'26"W, from 180 to 330 meters shoreward.
- e) Latitude 30°08'09"N, between longitudes 85°37'31"W and 85°37'49"W, 100 meters shoreward.

There is no significant change observed in the shoreline except in the vicinity of latitude 30°09'06"N, longitude 85°39'54"W, where a wharf was constructed after the prior survey was accomplished.

H-10166 is adequate to supersede the prior surveys within their common areas.

7. COMPARISON WITH CHART

Chart 11390, 14th Edition, dated July 16, 1983; scale 1:40,000

Chart 11391, 15th Edition, dated October 29, 1983; scale 1:25,000

a. Hydrography - Most charted information originates from prior survey H-5782, discussed in Section 6 of this report. Other soundings and charted features originate from miscellaneous sources. Pre-survey review items are adequately discussed in section L of the hydrographer's report and in the item investigation forms attached to that report.

The charted 26-foot shoal at latitude 30°07'48"N longitude 85°37'45.00"W and the 20-foot shoal at latitude 30°07'41.00"N, longitude 85°37'41.50"W originate from unknown sources. Least depths of 30 feet at the charted 26-foot charted shoal and 29 feet at the charted 20-foot shoal were obtained in the present survey. The development of these features during this survey was adequate to determine the least depths. Chart these shoals according to the present survey.

The listing contained on pages 16 to 21 of the hydrographer's report for the most part itemized features found during this survey. The evaluator has annotated concurrence or included comments as appropriate for each item when the hydrographer's recommendation is to delete or to not chart. In all cases, however, the chart compiler should chart this area according to the smooth sheet, except for the following features which should be retained as charted.

- a. The cable area between Redfish Point and Panama City Wharf centered at latitude 30°08'45"N, longitude 85°39'57"W.

- b. The pier with the inshore end charted at latitude 30°09'31"N, longitude 85°40'11"W should be revised to submerged pier ruins.
- c. The pile charted at latitude 30°08'10.5"N, longitude 85°37'33.2"W should be revised to a submerged pile.
- d. The pile charted at latitude 30°08'23"N, longitude 85°37'38"W should be revised to a submerged pile.
- e. The pipeline and cable area in the vicinity of Military Point centered at latitude 30°07'48"N, longitude 85°37'20"W.

Geographic names appearing on the smooth sheet are plotted in accordance with these charts.

Except for the features listed above, H-10166 is adequate to supersede charted hydrography within the common area.

There have been no dangers to navigation identified or reports submitted by the hydrographic field party or PMC Nautical Chart Branch for this survey.

b. Controlling Depths - There are no controlling depths within the limits of this survey.

c. Aids to Navigation - There are 7 lighted fixed aids and 4 floating aids (2 lighted) within the limits of this survey. Charted aids to navigation have been located and adequately serve their intended purpose.

8. COMPLIANCE WITH INSTRUCTIONS


H-10166 complies adequately with the project instructions noted in section 1 of this report.

9. ADDITIONAL FIELD WORK

This is a good basic hydrographic survey.

Additional field work, preferably by diving investigation, is recommended to confirm or disprove the existence of the submerged ruins at the following locations:

Item	Latitude (N)	Longitude (W)
Pier (offshore end)	30°09'18"	85°40'11"
Structure/pier	30°09'13"	85°39'25"
Groin	30°09'03"	85°39'38"
Dolphin	30°08'44"	85°37'49"
Pile/dolphin	30°08'23"	85°37'38"


 Arsenio A. Luceno
 Cartographer

This survey has been examined and it meets Charting and Geodetic Services standards and requirements for use in nautical charting. The survey is recommended for approval.



Dennis Hill
Chief, Hydrographic Section

ATTACHMENT TO DESCRIPTIVE REPORT FOR H-10166

I have reviewed the smooth sheet, accompanying data, and reports of this hydrographic survey. Except as noted in the Evaluation Report, the hydrographic survey meets or exceeds Charting and Geodetic Services (C&GS) standards, complies with instructions, and is accurately and completely represented by the smooth sheet and digital data file for use in nautical charting.

James W. Leland 6-16-86
Chief, Nautical Chart Branch (Date)

CLEARANCE:

N/MOP2:LWMordock

SIGNATURE AND DATE:

Ray J. Mordock 6-16-86

After review of the smooth sheet and accompanying reports, I hereby certify this survey is accurate, complete, and meets appropriate standards with only the exceptions as noted above. The above recommendations are forwarded with my concurrence.

Robert L. Sampit 6-16-86
Director, Pacific Marine Center (Date)

