10172

Diagram No. 1265-3

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-10-2-85

Registery No. H-10172

LOCALITY

State ..... Florida

General Locality ..... Santa Rosa Sound

Sublocality ..... Three Miles East of Woodlawn Beach to Big Sabine Point

19 85-86

CHIEF OF PARTY
LCDR K.W. Perrin

LIBRARY & ARCHIVES

DATE ..... August 11, 1987

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

10172

Area 3
CHT
11385 B
11378 A
11383
CARTOG SIGN OFF ON RECORD OF APPLICATION

NOAA FORM 77-28 (11-72)

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

HYDROGRAPHIC TITLE SHEET

REGISTER NO.

H-10172

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 10-2-85

State: Florida

General locality: Gulf of Mexico - Santa Rosa Sound

Locality: Three Miles East of Woodlawn Beach to Big Sabine Point

Scale: 1:10,000 Date of survey: 4/15/85 - 5/1/86

Instructions dated: September 11, 1984* Project No.: OPR-J288-HFP-85

Vessel: Launch 520 (4/15-7/1/85), Launch 519 (10/24/85 - 2/25/86)

Chief of party: LCDR Kenneth W. Perrin

Surveyed by: LTJG F. Ohlinger (Launch 520), LTJG K. Peters (Launch 519)

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

Graphic record scaled by: FEO, ELM, RWA, DMB, ACS, BAL, MJM, CSW, WLS**

Graphic record checked by: Same as scaled by

Verification by ~~Processed by~~: T.O. Jones, J.N. Shofner Automated plot by: PMC Xynetics Plotter

Evaluation by ~~Verification by~~: C.R. Davies

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

REMARKS: Change No. 1, dated 10/31/84*
Change No. 2, dated 10/8/85*
Change No. 3, dated 12/11/85*

FEO - Franklin E. Ohlinger**
ELM - Edwin L. Martin**
RWA - Reginald W. Adams**
DMB - Danny M. Bryant**
ACS - Andrea C. Saunders**
BAL - Brian A. Link**
MJM - Martin J. McMann**
CSW - Charles S. Weisner**
WLS - Wayne L. Sprye**

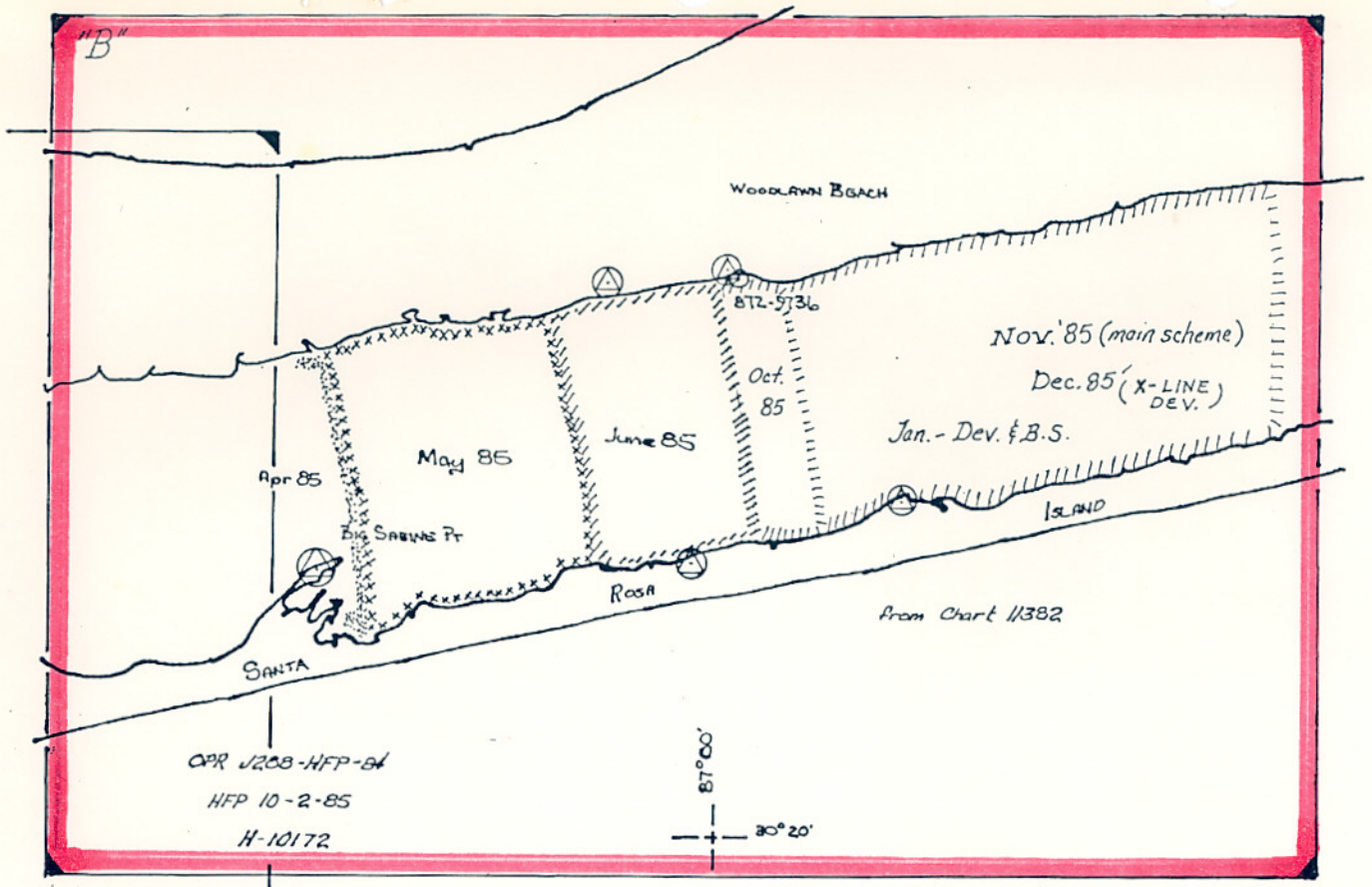
Separates are filed with the hydrographic data. Marginal notes in black by evaluator. All times are in UTC.

STANDARDS CK'D 8-29-87 C.Clay

SC 4-3-97 AWOIS & SURF check 10/13/88 MCR

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

☆ U.S. GOVERNMENT PRINTING OFFICE : 1978-665-016-1174



HFP - 2/3
Progress Sketch
OPR J288 - HFP - 84/85
Santa Rosa Sound, Fl

LCDR K.W. Perrin; Chief, HFPS

H-10168

	HFP - 4			HFP - 2/3				
Month.	May 85	June 85	July 85	Oct. 85	NOV. 85	Dec. 85	JAN. '86	FEB. '86
SqNM Sdg	2.0	3.7	0	1.0	6.0	0.5	1.5	0
LNM Sdg	34.0 (WD 18.3)	68.3 (WD 6.0)	0	11.25	45.0	29.7	23.4	0
LNM to-from	70.0	80.5	13.5	16.0	40.0	40.0	40.0	31.0
LNM misc	6.0	23.5	0.5	2.0	5.0	18.5	17.0	11.0
DP/BS	8/0	0/12	57/0	0/0	0/0	1/18	0/21	30/9
Contr Sta	0	0	0	0/2 rec.	0/2 rec.	0	3set/0rec.	0set/1rec.
Tide Sta	0	1	2	1	0	0	0	0

FIELD WORK COMPLETED 2/25/86

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10172
HFP-10-2-85

Scale: 1:10,000
Chief of Party: Lt. Cdr. Kenneth W. Perrin
Officer in charge: Lt.(jg) Frank E. Ohlinger (0520)
Lt.(jg) Kenneth P. Peters (0519)
Hydrographic Field Parties Section
Hydrographic Field Party 4 and 2/3
Launch 0520/0519

A. Project

This project was conducted in accordance with Project Instructions for OPR-J288-HFP-84 dated 31 September 1984; Change No.1 dated 31 October 1984; Change No. 2, dated 8 October 1985; and Change No. 3, dated 11 December 1985. Change No. 3, Section 1, updates the project number to 1985.

B. Area Surveyed

This survey was conducted in Santa Rosa Sound, Florida. The western survey limit is long. 87°03'30.00"W, just west of a line connecting Big Sabine and Tiger Points. The eastern survey limit is long. 86°56'30.00"W, approximately 2.5 nautical miles east of Woodlawn Beach.

The north shore of the sound is characterized by mud flats terminating at sand beach. This shore is also developed with numerous residences and piers. The south shore is all undeveloped sand beach and dunes.

Bottom composition is primarily hard packed sand with some grassy areas near both shores. Depths in the survey area range from 0-28 feet.

This survey was conducted from 15 April 1985 (DN 105) to 1 July 1985 (DN 182) inclusive by HFP-4 west of long. 86°59'30.00" W. The area east of long. 86°59'30.00"W was conducted by HFP-2/3, from 24 October 1985 (DN 297) to 1 May 1986 (DN 121) inclusive.

C. Sounding Vessel

NOAA Launch 0520 (EDP No. 0520) was used to obtain all survey data prior to 1 July 1985. After this date, NOAA Launch 0519 (EDP No. 0519) was used to collect all survey data, with the exception of the bottom drag conducted on DN 038 and 052. This was done using both Launch 519, as the guide vessel and Launch

517 as the end vessel. This is discussed further in Section P (Miscellaneous). Before running any hydro in 1986 with Launch 519, the 150 HP Johnson outboard (S/N 5852317) was replaced with a 150 HP Evinrude (S/N J0575771). No other problems with the vessels were encountered.

D. Sounding Equipment and Corrections to Echo Soundings

The following Raytheon echo sounding equipment was used for this survey:

From D.N.	To D.N.	Model	S/N	Launch
105	106	719-C	10271	0520
108	182	719-B	7727	0520
297	338	719-C	9955	0519
338	056	719-C	9221	0519

A graduated sounding pole was used for shoal water sounding (two ft. or less).

Fathometer calibration checks were made at frequent intervals on each day of hydrography. Any necessary adjustments were made and noted on the fathogram. Any departure of the trace from the initial zero was corrected during the scanning process. All graphic records were scanned and checked by trained field survey personnel. Peaks and deeps considered significant that occurred between regular sounding intervals were inserted on the generated master or corrector tapes.

Four velocity corrector tables were tabulated from bar check data and included in Appendix IV. Bar checks were taken on each day of hydrography, two whenever conditions permitted. Bar check chains were measured to insure the five-foot interval marks were accurate prior to the start and at the end of the survey. No corrections were necessary. Corrections from Table I and II are to be applied to Launch 0519 data. Corrections from Tables III and IV are to be applied to Launch 0520 data.

Velocity corrections were not applied on the field sheet. When the velocity tape was used to plot with the PDP8/e, erroneous soundings were plotted. When the velocity tape was eliminated, the soundings were plotted correctly. The velocity tapes are included with the survey data for plotting the smooth sheet at PMC.

Settlement and Squat correctors were determined on 14 November 1984 for Launch 0520 and on 3 October 1985 for Launch 0519 (outboard S/N 5852317) and 2 February 1986 for Launch 0519 (outboard S/N EV.J0575771) using the level method. A copy of the field data and graphs of settlement and squat correctors vs. RPM for Launch 0520 and 0519 are included in Appendix IV. These

correctors will be applied via the TC/TI tape during processing of the smooth sheet at the Pacific Marine Center. The TC/TI tape does not include the static draft and does not include a time greater than the last time of hydrography.

This survey was plotted using unverified actual tide heights reduced to Mean Lower Low Water. Heights were obtained from station 872-9736, Woodlawn Beach, for data west of long. 86°59′ 30.00"W, DN 105-182 and from station 872-9679, Santa Rosa Sound, East End (Navarre Beach Bridge), for data east of long. 86°59′30.00"W, DN 297-351, 1985 and DN 013 to 056, 1986.

Smooth tides were requested from the Sea and Lake Levels Branch, N/OMA12, in a letter dated 3 March 1986. Filed with the hydrographic data.

E. Hydrographic Field Sheets ✓

Two rough sheets and one boat sheet were prepared in the field office using the PDP8/e and Houston Instrument Complot DP-3 plotter, to monitor and evaluate the survey data. Two sheets were prepared by the same method for the final field sheets. One has all mainscheme hydrography, signals and shoreline, the other detached positions, mainscheme development splits, crosslines, PSR items, buoys, and bottom samples.

Soundings on the final field sheet are corrected for transducer draft, and unverified actual tides. Velocity corrections were not applied, as explained in Section D. Settlement and squat correctors were also not applied to the final field sheet.

All field records and data will be forwarded to the Pacific Marine Center for verification and smooth sheet plotting.

F. Control Stations ✓

Eight monumented control stations (signals 015, 033, 035, 037, 039, 041, 043, 047) and four fixed aids to navigation (signal 004, 107, 109, and 111) were used to control this survey. All control is Third-order, Class I. All control was established in 1984 by personnel from MOA2x1 and HFP-4, with the exception of signal 004, established in 1985. The signal list is included in Appendix VI of this report.

G. Hydrographic Position Control ✓

Range/Range, Range/Azimuth, Visual, and See-Field-Sheet positioning methods were used to control this survey. Most mainscheme, west of long. 86°59′30.00"W and a development on DN 170 were run using two DMU, master transponders, installed on Launch 0520. Position control was Range/Range and control data were received by a DMU set up in the rear of the Launch near the person who was recording. The master transponder for this unit was positioned above the transducer to avoid antenna distance

correctors. The second DMU was installed forward, in view of the helmsman and used to steer mainscheme arcs. This configuration avoided geometry constraints while laying out an effective mainscheme. (See Fig. G-1)

East of long. 86°59'30.00"W, only one DMU/Master combination was used.

Range/Azimuth was used on DN 044, 1986, using the HP-3808A, modified with theodolite yoke, to take pole sounding detached positions.

Del Norte Model R03C equipment used to control this survey was:

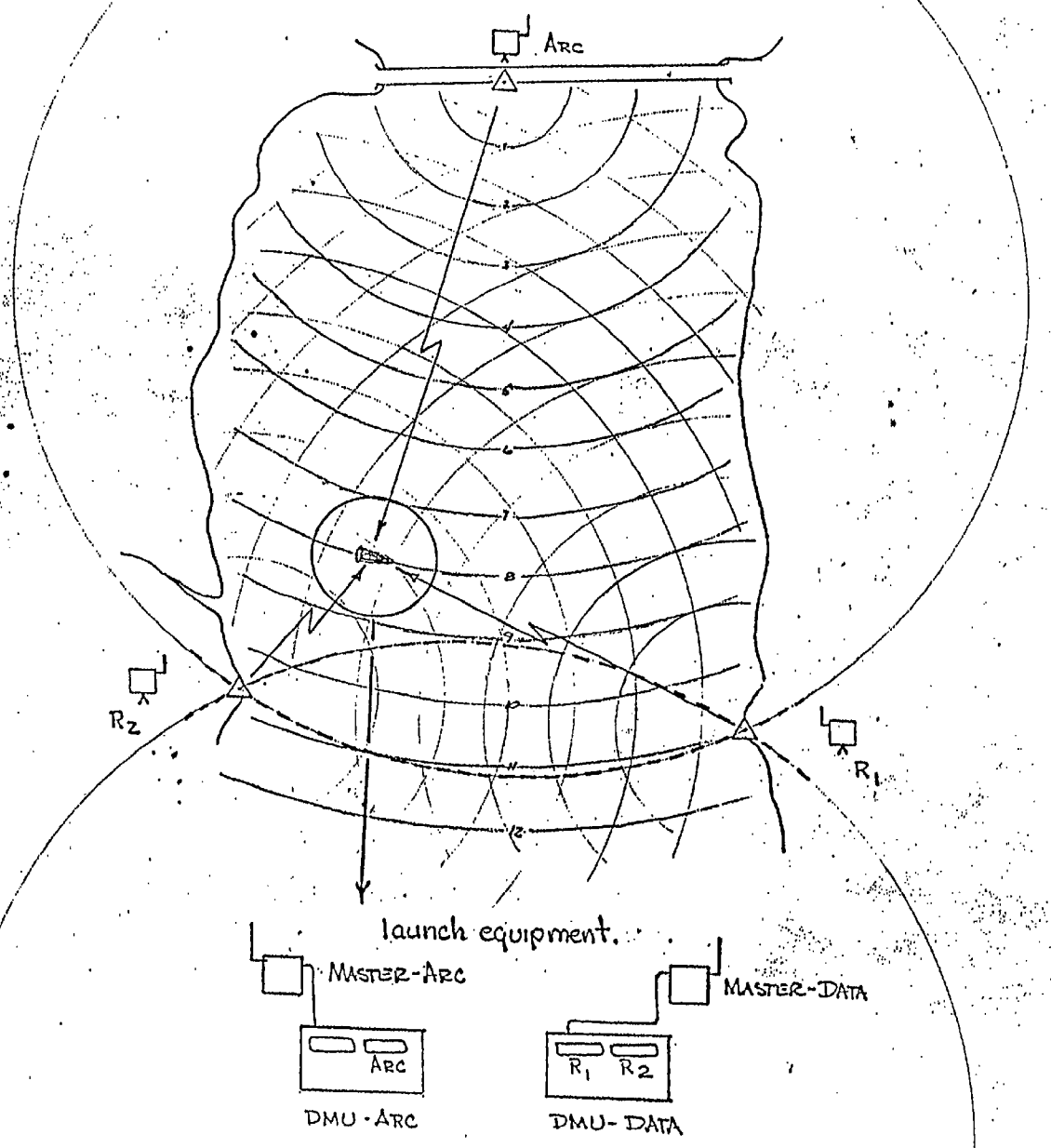
DMU (S/N)	Master (S/N)	Remote (S/N)	Launch
123	159	249	0520
180	1066	180/220	0520
298	1066	180/220	0520
298	1066	180/244	0520
298	1066	248/244	0520
517	159	248/244	0520
517	159	180/244	0520
395	263	222/1320	0519
505	1070	1316/218	0519
505	912	1320/222	0519

Del Norte equipment was calibrated over baselines of 1774 and 2143 meters, measured with a Hewlett/Packard 3808A EDM, S/N 1723A00727. Baseline calibration abstracts are included in the fan folder for each launch.

Daily static checks of the equipment were performed prior to and at the end of each day of hydrography. Exceptions were mid-day on DN 175 when DMU, S/N 298, failed for Launch 0520 and DN 323 for Launch 0519, when dead batteries prevented a check on Remote, S/N 1320.

True distances for these static checks were determined by inverse computation between Third-order stations and fixed aids. Acceptable tolerances were observed throughout the survey and were supported by baseline values. Correctors were applied to the position data via the corrector tapes based on the daily check readings, which in the opinion of the hydrographer, can be considered near baseline calibrations on a daily basis. See Final Report Section 1

Failures of Launch 0520 equipment were DMU, S/N 298, on DN 175 which was replaced with a new DMU/Master pair. No closing baseline values were obtained for DMU/Master pair, S/N 298/1066, on DN 176, nor Remote, S/N 220, due to failures of equipment.



ARC - Del Norte equipment used to establish and steer the proposed system of lines

DATA - Del Norte equipment used to obtain the position information

(FIG. G-1)

Failures of Launch 0519 equipment were Master, S/N 263, during baseline calibration on DN 316, and Master, S/N 912, failed during calibration on DN 350. No closing values were obtained. On DN 323, no evening daily check was obtained for Remote, S/N 1320, because of failed batteries. These failures did not affect the accuracy of hydrography on this survey. Concur

A Del Norte Equipment and Electronic Corrector Abstract for each vessel is included in Appendix V of this report.

H. Shoreline ✓

Shoreline detail shown on the final field sheet was transferred from registered shoreline maps, TP-00548 and TP-00549. The original scale was 1:20,000. A blow-up to 1:10,000 scale was provided for this survey. This enlargement was distorted 0.6mm in 100mm, which necessitated constant shifting of the sheet to transfer shoreline and shoreline details. See FOAC Report Section 2

Shoreline details were verified by detached position or visual verification. These features have been transferred to the field sheet. Shoreline verification was accomplished by comparison of mainscheme hydrography junctions at shore or by visual inspection.

The shoreline is accurately shown along the north side of the sound. Detailed changes to the manuscript found along the north side were:

--Piers should be added at the following geographic positions: The following new piers have been added to the smooth sheet in red. The final field sheet was used as a guide for their orientation and configuration.

Lat. 30°22'42.79"N, Long. 87°03'02.67"W (Pos. 1312)
Lat. 30°22'55.15"N, Long. 87°02'04.19"W (Pos. 1306)
Lat. 30°22'56.20"N, Long. 87°01'17.76"W (Pos. 2370)
Lat. 30°23'03.60"N, Long. 87°00'47.10"W (Pos. 2356)
Lat. 30°23'04.40"N, Long. 87°00'44.00"W (Pos. 2355)
Lat. 30°23'04.66"N, Long. 87°00'34.56"W (Pos. 2350)
Lat. 30°23'08.16"N, Long. 87°00'16.20"W (Pos. 2341)
Lat. 30°23'10.40"N, Long. 86°59'48.60"W (Pos. 2324)
Lat. 30°23'15.86"N, Long. 86°59'03.43"W (Pos. 3922)
Lat. 30°23'18.03"N, Long. 86°58'59.61"W (Pos. 3923)
Lat. 30°23'19.65"N, Long. 86°58'55.07"W (Pos. 3925)
LAT. 30°23'05.72"N Long. 87°00'30.60"W (Pos. 2349)
LAT 30°23'04.28"N Long 87°00'37.77"W (Pos. 2352

Positions shown are on offshore end of piers.

--A pier shown intact should be charted in ruins at lat. 30°22'53.40"N, long. 87°02'25.80"W. (Reference pos. 1307) concur

--A pier shown in ruins should be charted intact at lat. 30°22'56.40"N, long. 87°02'12.00"W. (Reference pos. 1307) concur
Shown in red.

--A bulkhead at lat. 30°22'55.64"N, long. 87°01'49.42"W, is longer than shown on manuscript. (Pos. 1297) concur

--A groin should be added at lat. 30°22'56.19"N, long. 87°01'45.85"W. (Pos. 1296) shown in red concur

--An extension to a bulkhead should be shown at lat. 30°22'56.32"N, long. 87°01'29.64"W. (Pos. 1289) concur

--A pier at lat. 30°23'03.40"N, long. 87°00'54.50"W, is longer than shown on manuscript. (Pos. 1259) Shown in red concur

--A pier shown intact on manuscript is in ruins at lat. 30°23'09.00"N, long. 87°00'06.30"W. (Pos. 2335) concur

--Piers at lat. 30°23'09.96"N, long. 86°59'59.50"W (pos. 2331), lat. 30°23'09.28"N, long. 87°00'01.66"W (pos. 2332) and lat. 30°23'10.80"N, long. 86°59'49.70"W (pos. 2325) are longer than shown on manuscript. Extensions to these piers have been shown in red. concur

--Pier in ruins should be added at lat. 30°23'15.13"N, long. 86°59'14.41"W. (Pos. 3919) concur

--Pier shown in ruins at lat. 30°23'12.93"N, long. 86°59'18.26"W, is intact. (Pos. 3917) concur

--Piers at the following geographic positions are in ruins:

Lat. 30°23'10.50"N, Long. 86°59'32.10"W (Pos. 2316)
Lat. 30°23'10.80"N, Long. 86°59'36.90"W (Ref. 2318)
Lat. 30°23'10.20"N, Long. 86°59'41.90"W (Pos. 2320)
Lat. 30°23'09.70"N, Long. 86°59'43.60"W (Pos. 2321)

The discrepancies listed were transferred to the field sheet in red ink. Shown on the smooth sheet in dashed black

Along the south side of the sound, shoreline is accurately shown with the exception of a small area of beach erosion between long. 86°59'30.00"W and long. 86°59'45.00"W. This is shown in red on the field sheet. No shoreline details exist along the south side. The above shoreline was drawn in dashed red.

I. Crosslines ✓

Crosslines run accounted for 13.8% of the total nautical miles of hydrography run. Comparison of crosslines with mainscheme hydrography shows excellent agreement, within ±1 foot, when there is little or no displacement of soundings compared. This excellent agreement applies throughout the survey area.

J. Junctions ✓ See EVAL Report Section 5

This survey junctions at the west limit with H-10168, a 1:10,000 scale survey, completed in June 1985 and at the east limit with H-10207, a 1:10,000 survey, being run concurrently with this survey.

Comparison of junction soundings shows good agreement between the west end of sheet H-10172 and the east end of H-10168. Continuation of contour lines shows no abrupt changes when crossing from one sheet to the other. concur

Likewise, the junction of the east end of H-10207 shows excellent agreement with no abrupt changes to contour crossings from one sheet to the other. concur

Junction soundings from the respective surveys are shown on the final field sheet, in red ink. and smooth sheet

K. Comparison With Prior Surveys See Section 6 of EVAL Report

Six presurvey review items (No.'s 3735, 3736, 3737, 3738, 3739, and 3740) assigned to OPR-J288 lie within the limits of H-10172 and were resolved during the course of this survey. PSR 3735 was investigated and resolved during survey H-10168 which was completed on 5 June 1985. A complete discussion of each item is included in Appendix XI of this report.

This survey was compared with:

Registry No.	Scale	Date
H-5667	1:10,000	1935
H-5705	1:10,000	1935

Very little change (generally two ft. or less) exists between the compared prior survey and H-10172 in depths 12 ft. or less. Agreement in waters greater than 12 ft. is within ±3 ft. or less on the eastern end and central portion of the survey and becomes increasingly worse on the western end, with the worst disagreement, to as much as ±4 ft. around lat. 30°22'00.00"N, long. 87°03'00.00"W.

Depth curves throughout the survey area are very similar between the prior survey and H-10172. Differences worth noting are:

-- The appearance of a shoal (PSR 3739) at lat. 30°22'47.00" N, long. 86°59'18.00"W, with least depths to ~~four~~ one ft., not seen on the prior survey. See EVAL Report Section 7

--A hole with depths to 19 ft. at lat. 30°22'20.00"N, long. 86°58'45.00"W, seen on the prior survey, does not appear on H-10172. concur

--A hole with depths to 19 ft. at lat. 30°22'24.00"N, long. 86°57'45.00"W, seen on the prior, shows on H-10172 as ~~an~~ two isolated 19 ft sounding.

--All of the 18-foot contours along the axis of the Intracoastal Waterway Channel show a decrease in size on H-10172 when compared with the prior. concur

Minor shoreline change has occurred since the prior survey. Worth noting are five bayous not seen on the prior survey, at:

Lat. 30°22'51.00"N, Long. 87°02'45.00"W
Lat. 30°23'00.00"N, Long. 87°02'04.00"W
Lat. 30°23'00.00"N, Long. 87°01'51.00"W
Lat. 30°23'00.00"N, Long. 87°01'32.00"W
Lat. 30°23'00.00"N, Long. 87°01'21.00"W

These bayous comprise the only significant shoreline differences between the prior survey and H-10172 along the north side of the sound.

Along the south side of the sound, Big Sabine Point, at lat. 30°21'30.00"N, long. 87°02'45.00"W, has eroded since the 1935 prior survey.

All areas listed above should be charted according to TP-00648 and the smooth sheet.

Among the six presurvey review items investigated, No.'s 3736, 3738, and 3740 originate from prior survey H-5667.

L. Comparison With the Chart ✓ See Section 7 of Evac Report.

This survey was compared with Chart 11385, 16th Ed., Aug./85. This is a 1:40,000 scale small craft chart. A 1:10,000 scale blow-up of Chart 11385, 14th Ed., July/83, for the area covered by H-10172, was supplied to compare the field sheets. Differences between the editions have been taken into account during comparison.

Comparison of soundings shows approximately 75% of soundings agree within ±1 ft., 20% agree within ±2 ft., with the remaining 5% differing by more than ±2 ft. The anomalous soundings within the 5% category are listed in the table below:

GEOGRAPHIC POSITION	DEPTH> CHARTED	H-10172
Lat. 30°23'09.00"N, Long. 86°56'48.00"W	19ft.	14ft.
Lat. 30°23'06.00"N, Long. 86°57'12.00"W	19ft.	14ft.
Lat. 30°22'57.00"N, Long. 86°57'42.00"W	16ft.	13ft.
Lat. 30°22'23.00"N, Long. 86°57'48.00"W	20ft.	17ft.
Lat. 30°22'57.00"N, Long. 86°58'26.00"W	19ft.	16ft.
Lat. 30°22'20.00"N, Long. 86°58'48.00"W	19ft.	15ft.

GEOGRAPHIC POSITION	DEPTH> CHARTED	H-10172
Lat. 30°22'05.00"N, Long. 86°59'14.00"W	16ft.	18ft.
Lat. 30°22'46.00"N, Long. 86°59'48.00"W	21ft.	17ft.
Lat. 30°21'51.00"N, Long. 87°01'21.00"W	16ft.	13ft.
Lat. 30°21'57.00"N, Long. 87°02'42.00"W	22ft.	18ft.
Lat. 30°21'54.00"N, Long. 87°02'51.00"W	21ft.	18ft.
Lat. 30°21'49.00"N, Long. 87°03'00.00"W	20ft.	17ft.
Lat. 30°21'58.00"N, Long. 87°03'21.00"W	20ft.	17ft.
Lat. 30°21'54.00"N, Long. 87°03'10.00"W	22ft.	18ft.
Lat. 30°21'49.00"N, Long. 87°03'20.00"W	21ft.	17ft.

These sounding comparisons represent areas with the largest discrepancies and should be superseded by the soundings from Concur H-10172.

Comparison of contours between the chart and H-10172 show generally good agreement with the following exceptions:

-- The six-foot contour, charted through the center of the sound between long. 86°56'30.00"W and long. 86°58'30.00"W, now shows breaks, forming four separated six-foot depth curves on H-10172. chart according to smooth sheet.

--Line spacing was reduced to 50 meters over the charted six-foot depth at lat. 30°22'30.00"N, long. 86°56'51.00"W and now shows two isolated six-foot shoals at lat. 30°22'28.00"N, long. 86°56'51.00"W and lat. 30°22'27.00"N, long. 86°56'48.00"W. No 6-foot depths in the area after smooth tides applied, chart 7 ft soundings in this area.

--No uncovers area was found at lat. 30°22'50.00"N, long. 86°59'18.00"W as charted. This is item 3739 and is discussed fully in Appendix XII of this report. See Final Report Section 7

--Line spacing was reduced to 50 meters over the charted six-foot sounding at lat. 30°22'54.00"N, long. 86°58'56.40"W. A least depth of ~~five~~ six ft. was found at lat. 30°22'54.~~60~~ 75"N, long. 86°58'58.~~20~~ 53"W, (pos. 3718).

--An isolated six-foot sounding was found at lat. 30°22'16.20"N, long. 87°01'36.60"W (pos. 2189). Line spacing in this area was reduced to 50 meters. No 6 ft sounding found in this area after smooth tides were applied. 7 Ft soundings are in this area, see smooth sheet.

--The six-foot contour arm, centered at lat. 30°22'45.00"N, long. 87°01'45.00"W, has receded northward to shore, leaving ~~three~~ five isolated six-foot shoals at:

LAT. 30°22'37.33"N, Long. 87°01'26.98"W (pos. 2163, 5th)
LAT. 30°22'38.07"N, Long. 87°01'34.99"W (pos. 1328, 5th)
Lat. 30°22'~~37.80~~ 38.58"N, Long. 87°01'~~30.00~~ 28.54"W (pos. 1560, 4th)
Lat. 30°22'39.00"N, Long. 87°01'~~34.80~~ 35.12"W (pos. 2170)
Lat. 30°22'~~43.20~~ 32.58"N, Long. 87°01'~~40.20~~ 46.82"W (pos. 1496)

--The six-foot contour arm, centered at lat. 30°22'45.00"N, long. 87°02'06.00"W, has receded northward, leaving an isolated six-foot shoal at lat. 30°22'43.20"N, long. 87°02'02.40"W. Sounding reduced to 7 ft MLLW

Charted shoreline detail (piers and pier ruins) should be completely superseded by the detail shown on the final field sheet. A complete discussion of these details are found in Section H.

When a comparison is made between the final field sheet and the chart blow-up, some displacement (within 1mm) is evident. With this consideration in mind, the following piers/pier ruins, which exceed the 1mm displacement, are recommended for deletion from the chart (charted position listed is offshore end):

Lat. 30°22'57.60"N, Long. 87°01'16.20"W (Pier Ruins)
Lat. 30°23'01.20"N, Long. 87°01'07.20"W (Pier)
Lat. 30°23'02.70"N, Long. 87°00'58.80"W (Pier)
Lat. 30°23'04.20"N, Long. 87°00'53.70"W (Pier)
Lat. 30°23'10.20"N, Long. 86°59'30.60"W (Pier)
Lat. 30°23'10.80"N, Long. 86°59'21.90"W (Pier Ruins)
Lat. 30°23'14.40"N, Long. 86°59'18.00"W (Pier)
Lat. 30°23'14.40"N, Long. 86°59'15.90"W (Pier)
Lat. 30°23'20.40"N, Long. 86°58'58.20"W (Pier)
Lat. 30°23'25.80"N, Long. 86°58'18.00"W (Pier)
Lat. 30°23'09.90"N, Long. 86°59'25.80"W (Pier)

The recommendation to delete the above listed piers/pier ruins is based on the fact they were not seen during the thorough shoreline investigation. These are shown on the final field sheet overlay in green ink. Concur

Piles, charted at lat. 30°21'58.80"N, long. 86°58'43.20"W, were visually searched for. Depths in this area are only one and two ft. and water clarity was excellent. No evidence of piles, exposed or submerged, was found. These piles are recommended for deletion from the chart. Concur

A corrugated steel pipe was located at lat. 30°21'24.30"N, long. 87°02'28.67"W, but is not considered a danger to navigation. (Pos. 4011)

An uncovers area, charted at lat. 30°21'36.00"N, long. 87°02'15.00"W off Big Sabine Point, was not found. Line spacing in this area was reduced to 50 meters. This feature is recommended for deletion from the chart. Concur

Uncharted piles located during this survey and specifically recommended for charting were found at:

Lat. 30°22'37.08"N, Long. 87°03'21.58"W (Pos. 1313)
Lat. 30°22'52.17"N, Long. 87°02'26.51"W (Pos. 1308)
Lat. 30°22'51.43"N, Long. 87°02'27.32"W (Pos. 1309)
Lat. 30°22'56.46"N, Long. 87°01'40.55"W (Pos. 1295)
Lat. 30°23'01.26"N, Long. 87°01'08.50"W (Pos. 2367)

None of these piles pose a danger to navigation.

Boathouse ruins were located at lat. 30°23'04.40"N, long. 87°00'28.70"W and are not currently charted, but pose no danger to navigation.

Piles, charted at lat. 30°23'09.00"N, long. 86°59'48.00"W, were visually searched for at the above charted location in water depths of two ft. with excellent visibility. None were found there; however, several piles were located in this vicinity at:

Lat. 30°23'09.~~70~~86"N, Long. 86°59'43.~~60~~51"W (Pos. 2321)
Lat. 30°23'10.80"N, Long. 86°59'46.~~10~~08"W (Pos. 2322)
Lat. 30°23'10.40"N, Long. 86°59'48.~~60~~48"W (Pos. 2324)
Lat. 30°23'10.~~80~~92"N, Long. 86°59'49.~~70~~82"W (Pos. 2325)
Lat. 30°23'10.~~60~~95"N, Long. 86°59'51.~~60~~48"W (Pos. 2326)
Lat. 30°23'11.~~50~~47"N, Long. 86°59'52.~~70~~63"W (Pos. 2327)

A recommendation is made to delete the currently charted symbols, ~~retain~~ and the piles notation, and chart ~~symbols~~ pile at the above locations. None of these piles are considered a danger to navigation. concur

All other charted features not mentioned in this section are addressed as PSR items on appended item investigation reports in Appendix XII.

No uncharted dangers to navigation were found while conducting this survey. concur

M. Adequacy of Survey ✓

This survey is considered complete and adequate to supersede prior surveys for charting. concur

N. Aids to Navigation ✓

All floating aids to navigation within the area covered by H-10172 were located by detached position. They are:

POS. No.	Latitude	Longitude	Description
~~1267~~ 4010	30°22'25.~~61~~46"	87°02'03.~~08~~42"	Red Nun #130
3634	30°22'38.~~11~~12"	87°00'17.90"	Green Can #127

A comparison was made between the charted and H-10172 survey positions and 1985 USCG Light List, Vol. II descriptions. Green can #127 was found located within 10 meters of the charted location and in 11 feet of water versus the 12 feet shown in the light list. Red nun #130 was found 80 meters NNE of the charted

location, in 11 feet of water versus the 12 feet shown in the light list. Buoy #130 was relocated on DN 056, 1986 (pos. 4010) as a check of the position from DN 119, 1985. The positions agreed. Both serve the purpose for which they were established.

It was noted that the label for buoy #127 is inconsistent with other green can buoys charted further east in Santa Rosa Sound. It is currently labeled & "127", while those further east are shown as GC "###". This should be corrected on future editions. concur

All fixed aids to navigation within the survey area were located to Third-order, Class I standards in 1984 by MOA2X1 and HFP 4 as required in the project instructions. The fixed aids and their positions are listed on the appended NOAA Form 76-40, and should supersede charted locations.

No landmarks are currently charted within the limits of H-10172; however, three landmarks, a tank, a radio mast, and a microwave tower were located to Third-order, Class I standards by MOA2X1 for charting and are listed on the appended NOAA Form 76-40. The above landmarks are shown on the smooth sheet.

There are no bridges, overhead cables, or submerged pipelines within the survey limit. A uncharted submarine cable exists between lat. 30°21'42.909"N, long. 86°59'23.4830"W, and lat. 30° 23'13.345"N, long. 86°59'26.175"W. There are no signs marking this cable.

O. Statistics ✓

Statistic	Launch 520	Launch 519	Total
No. of Positions.....	1257	956	2213
Naut. Miles of Sounding Line.....	141.1	116.8	257.9
Sq. Naut. Miles of Hydrography....	6.0	4.5	10.5
No. of Bottom Samples.....	12	49	61
PSR Item Investigations.....	1	4	5
Detached Positions.....	80	31	111
Miles of Bottom Drag.....	0	7.5	7.5

P. Miscellaneous ✓

Throughout the period during which this survey was run, no current greater than 0.25 kt. was observed. Observations were made during calibration checks of Del Norte at Santa Rosa Sound Light 125. Currents in the area are tidally influenced.

Bottom Samples obtained on this survey were submitted to the Department of Paleobiology, Smithsonian Institution, Washington, D.C.

As noted in Section B, this survey was conducted by HFP 4 until July 1985, at which time HFP 4 was called to a new project area. Field data were turned over to HFP-2/3 in the fall of 1985 for resumption of the project. While reviewing the field data turned over from party 4, a notation in the sounding volume at the beginning of DN 107 indicated hydrography was run without recovering signal 047. The station was subsequently recovered on DN 108. Data for DN 107 were rejected, and rerun by HFP-2, Launch 519, on DN 015, 1986. Permission to run hydrography west of long. 87°00'00.00"W, without installing Tide Station 872-9806 (Fishing Bend), was obtained by telephone with N/OMA1231.

A two-vessel bottom drag was conducted on DN 038 and 052 for PSR 3735 before it was determined the item had been adequately disposed of on survey H-10168. These data were not scanned, logged, or plotted. The general locality and sublocality are incorrectly shown on the covers of the sounding volumes. The general locality is "Santa Rosa Sound" and the sublocality is "Big Sabine Pt. to Three Miles East of Woodlawn Beach.

See Final Report Section 7

Q. Recommendations ✓

Specific recommendations concerning hydrography, hydrographic features, preasurvey review items, and aids to navigation are made in Sections H, K, L, M, N, and on the Item Investigation Reports in Appendix XII.

R. Automated Data Processing ✓

Program		Version
RK201	Grid, Signal, and Lattice Plot	04/18/75
RK211	Range/Range Non Real Time Plot	02/02/81
RK212	Visual Station Table Load	04/01/74
RK216	Range/Azimuth Non Real Time Plot	02/09/81
RK300	Utility Computations	10/21/80
RK330	Reformat and Data Check	05/04/76
RA362	RK330 and AM602 Combined	08/20/84
AM500	Predicted Tide Generator	11/10/72
AM602	ELINORE	12/08/82

S. Reference to Reports ✓

The Descriptive Report for H-10168 submitted in 1985 and the Descriptive Report for H-10207 to be submitted in 1986, should be reviewed in conjunction with this survey.

The Horizontal Control Report for OPR-J288, Santa Rosa Sound, is in the process of being prepared, and will be submitted by MOA2x1.

Respectfully Submitted,

for Kenneth P. Peters
LTJG, NOAA

Field Tide Note

Field tide reduction of soundings were based on unverified actual heights from Tide Station No. 872-9736, Woodlawn Beach, for hydrography run west of Lon. 86°59'30", with the exception of DN 015, 1986. Heights were obtained from Tide Station No. 872-9769, Santa Rosa Sound, East End, (Navarre Beach Bridge), for hydrography run east of Lon. 86°59'30" and on DN 015, 1986. All data was derived from ADR tapes and reduced to MLLW. All times of actual and applied tides are UTC.

Four tide gages were in operation in support of this survey. The locations and periods of operation were:

Site	Location	Period
Fishing Bend No. 872-9806	30°20.1'N 87°08.5'W	1/1/85 - 6/12/85
Woodlawn Beach No. 872-9736	30°23.2'N 86°59.5'W	1/1/85 - 6/12/85 *Re-installed 10/22/85
Santa Rosa Sound,East End No. 872-~~9736~~ 9769	30°23.1'N 86°51.9'W	4/30/85 - 6/12/85 *Re-Installed 10/16/85
Pensacola, Florida No. 872-9840	30°24.0'N 87°12.1'W	Primary Station

*By HFP-2/3, to be removed at end of project.

Fishing Bend, Pensacola Beach, Florida

The gage and staff were installed and maintained by personnel from HFP-4 for the period listed above. The gage was set to read 10 feet higher than the staff reading, at the time of installation. The gage was operated on UTC. There was no significant loss of data.

Woodlawn Beach, Florida

The gage and staff were installed and maintained by personnel from HFP-4 until 6/12/85, on which date, both were removed. The gage and staff were re-installed and maintained by personnel from HFP-2/3, on 10/22/85. A contract observer was hired to make daily readings. The gage, staff, and pier on which it was located, was destroyed by a tropical storm on 11/03/85. A new gage and staff was installed on the next pier east (approximately 50 meters) of the original location,on 11/04/85. On both installations the gage was operated on UTC, and set to read 10 feet higher than the staff reading at time of installation. Some loss of data occurred in November due to a gage malfunction, not reported by the contract tide observer. This data loss should not affect hydrography run. No other significant loss of data occurred.

Santa Rosa Sound, East End (Navarre Beach Bridge)

The gage and staff were installed and maintained by personnel from HFP-4 until 6/12/85, on which date the gage was removed and the staff remained. The gage was re-installed on 10/16/85, and maintained by personnel from HFP-2/3. The gage was destroyed by a storm on 01/27/86, and replaced on 01/28/86. The staff was not disturbed. The gage was operated on UTC. The gage was set to read 10 feet higher than the staff reading at the time of both installations. The only significant loss of data occurred from 1/27 - 1/28/86 when the gage was destroyed. This did not affect hydrography .

Pensacola, Florida

This installation is a primary tide station owned by NOS, but operated and maintained by Chapin and Associates, through a contract observer. No significant loss of data was reported.

Levels

Levels were run upon installations and again before removals to the staffs at the three sites installed by HFP-4. Levels were run to the staffs installed by HFP-2/3, upon installation, however the gages were still in operation at the close of this survey, and closeout levels had not been run. Inspection levels were run to the Pensacola staff (Sta. No. 872-9840) on 11/12/84 by HFP-4 and again on 10/24/85 by HFP-2/3. No significant differences in elevation between respective level runs was observed for those sites applicable.

Zoning

Zoning was not required for field reduction of soundings for this survey. Final zoning correctors will be determined by N/OMA12.

Signal Tape Listing

H-10172

OPR-J288-HFP-85

Ø04	3	30	20	53391	Ø87	Ø9	12933	250	ØØØØ	ØØØØØØ	Robert L.F.Sikes Bridge Light East,~~1985~~
Ø15	2	30	22	26295	Ø87	Ø5	13493	250	ØØØØ	ØØØØØØ	Creek 3, 1934,~~1984~~
Ø31	2	30	23	31298	Ø86	57	49590	250	ØØØØ	ØØØØØØ	~~Sunset,1984~~
Ø33	7	30	21	57744	Ø86	58	42927	250	ØØØØ	ØØØØØØ	Mike,1984
Ø35	2	30	23	12344	Ø86	59	32322	250	ØØØØ	ØØØØØØ	Ranch 2 1910 PKRM,~~1984~~
Ø37	7	30	21	34875	Ø87	ØØ	53211	250	ØØØØ	ØØØØØØ	Oyster,1984
Ø39	2	30	22	56881	Ø87	Ø1	29844	250	ØØØØ	ØØØØØØ	Booker,1984
Ø41	7	30	21	31195	Ø87	Ø2	47584	250	ØØØØ	ØØØØØØ	Snag,1984
Ø43	7	30	21	Ø1407	Ø87	Ø4	40214	250	ØØØØ	ØØØØØØ	Gulf Islands,1984
Ø47	2	30	22	39624	Ø87	Ø3	19044	250	ØØØØ	ØØØØØØ	Tiger,1984
1Ø5	6	30	21	35804	Ø87	Ø4	54155	139	ØØØØ	ØØØØØØ	Santa Rosa Sound Light "131",1984
1Ø7	6	30	22	24684	Ø87	Ø1	23044	139	ØØØØ	ØØØØØØ	" " " " "129" "
1Ø9	6	30	22	55484	Ø86	59	12234	139	ØØØØ	ØØØØØØ	" " " " "125" "
111	6	30	23	Ø6774	Ø86	57	25304	139	ØØØØ	ØØØØØØ	" " " " "123" "
113	6	30	23	18534	Ø86	55	41054	139	ØØØØ	ØØØØØØ	" " " " "121" "
129	6	30	24	Ø4Ø54	Ø87	ØØ	14937	139	ØØØØ	ØØØØØØ	Midway Tank,1984
131	6	30	24	12704	Ø86	59	33974	139	ØØØØ	ØØØØØØ	Midway WPAN TV 53 Mast,1984
133	6	30	23	32247	Ø87	Ø2	40227	139	ØØØØ	ØØØØØØ	Midway Microwave ~~Tower~~ MAST, 1984

All signals are Third Order,Classl,established by MOA2X1 and HFP 4.

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

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

NONFLOATING AIDS ~~OR LANDMARKS FOR CHARTS~~

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

(See reverse for responsible personnel)

[X] TO BE CHARTED [ ] TO BE REVISED [ ] TO BE DELETED	REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
	HFP-2	Florida	Gulf of Mexico Santa Rosa Sound	2/86

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

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
OPR-J288-HFP-85		H-10172	North America 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	POSITION LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
Light	Santa Rosa Sound Light "129" (1985 USCGLL #6022)	30 22	24.682	87 01	23.044		Oct. 84 F-3-6-L	11385
Light	Santa Rosa Sound Light "125" (1985 USCGLL #6021)	30 22	55.482	86 59	12.234		Oct. 1984 F-3-6-L	11385
Light	Santa Rosa Sound Light "123" (1985 USCGLL #6020) L-708(87)	30 23	06.996	86 57	25.301		Oct. 1984 F-3-6-L	11385
	G.P.S are Field positions							

Appendix IX
71

L-459(86) - L-708(87)

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	Brian A. Link, AOIC, HFP 2	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	Brian A. Link, AOIC, HFP 2	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

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

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

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

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

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

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

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

FIELD (Cont'd)

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

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

II. TRIANGULATION STATION RECOVERED

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

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

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

NOAA FORM 76-40 (8-74)
Replaces C&GS Form 567.

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

[redacted] OR LANDMARKS FOR CHARTS

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

(See reverse for responsible personnel)

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

REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
HFPS-HFP2/3	Florida	Gulf of Mexico Santa Rosa Sound	2/86

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

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
J288-HFP-85	---------	H-10172	North American

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	POSITION LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
TANK	(Midway Tank) ht.____ elev.____	30 24	04.054	87 00	14.937		F-3-6-L Oct. 1984	11385
MAST	(Midway WPAN TV 53 Mast) ht.____ elev.____	30 24	12.700	86 59	33.976		F-3-6-L Oct. 1984	11385
TOWER*	(Midway Microwave Mast) ht.____ elev.____	30 23	32.247	87 02	40.229		F-3-6-L Oct. 1984	11385
	*This feature is a tower even though its triangulation name denotes "Mast".							
	Note: Heights above ground and elevations above MHW will be computed for the above features and will be submitted.							
		* G.P.s are field positions.						

L-459(86)

RESPONSIBLE PE NNEL

TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	Brian A. Link, AOIC, HFP 2	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	Brian A. Link, AOIC, HFP 2	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

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

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

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

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

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

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

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

FIELD (Cont'd)

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

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

II. TRIANGULATION STATION RECOVERED

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

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

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

NOAA FORM 76-40 (8-74)

SUPERSEDES NOAA FORM 76-40 (2-71) WHICH IS OBSOLETE, AND EXISTING STOCK SHOULD BE DESTROYED UPON RECEIPT OF REVISION.

☆ U.S. GPO:1975-0-665-080/1155

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
13 January 1986

TO: N/CG223 - Director, Charting and Geodetic Services

FM: N/MOA233 - OIC, Hydrographic Field Party 2/3

SUBJ: Coast Pilot Report

Coast Pilot 5, 18th edition, July 1985 was inspected during hydrographic survey operations from November 1985 through January 1986. It was determined that the information contained in the Coast Pilot is accurate and complete. Specific comments are noted on the attached copy of page 313.

Appendix X

United States Coast Pilot 5
Atlantic Coast
Eighteenth Edition
July 1985
Page 313

Gulf is at Mile 228.0E. The bay and its tributaries are described in chapter 6.

The waterway leaves Choctawhatchee Bay at Mile 223.4E and proceeds W for 33 miles through The Narrows and Santa Rosa Sound to Pensacola Bay. The E part of the route is through a well-marked dredged channel; the W part is through open water with depths greater than 12 feet and marked by occasional lights and buoys. Restricted areas in The Narrows and Santa Rosa Sound extend from Mile 218.9E to Mile 204.4E. (See 204.134 and 204.136, chapter 2, for limits and regulations.)

Test Areas verified as Active

U.S. Route 98 highway bridge over The Narrows at Mile 223.1E has a fixed span with a clearance of 50 feet. There are several small-craft facilities along The Narrows in the vicinity of and W of the bridge. (See the small-craft facilities tabulation on chart 11385 for services and supplies available.)

Tape Measured and Verified. 1/7/86

Fort Walton Beach on the N side of The Narrows at Mile 222.2E has complete repair facilities; fuel and marine supplies are available. A 5-mph speed limit is enforced in The Narrows. A mobile hoist is available at Shalimar. (See chapter 6 for more complete information on the facility at Shalimar.)

An overhead power cable crossing The Narrows at Mile 216.8E has a clearance of 76 feet. State Route 87 highway Navarre Causeway, over Santa Rosa Sound at Mile 206.7E has a fixed channel span clearance of 50 feet over the waterway.

Tape Measured and Verified. 1/8/86

Chart 11378.–State Route 399 highway bridge over the W end of Santa Rosa Sound, at Mile 189.1E, has twin fixed spans with clearances of 65 feet. Immediately E of the fixed bridges, the center span of a former bascule bridge has been removed to a depth of 9½ feet within the channel. The remainder of the bridge is used as fishing piers. An overhead power cable just E of the fixed spans and the fishing piers has a clearance of 70 feet. Gasoline, diesel fuel, water, ice, launching ramps, and berths are available at a marina on Little Sabine Bay at Pensacola Beach at the S end of the bridge. In December 1984, the controlling depth was 6 feet in the channel leading from the waterway. The channel is marked by private daybeacons.

At Mile 182.9E, a 4.1-mile route leads about NNE through deep water in Pensacola Bay to Pensacola. The city has complete supply and repair facilities. (See chapter 6 for more complete information.)

From Pensacola Bay, the waterway passes through a landcut at Mile 179.0E into Big Lagoon. At Mile 178.4E, three unmarked concrete blocks, one awash and two covered 1 foot, are just outside the S edge of the channel; caution is advised. Several marinas are on the N shore W of Trout Point, Mile 177.0E. Gasoline, diesel fuel, water, ice, launching ramps, marine supplies, and berths with water and electricity are available. A mobile hoist can haul out craft to 20 tons for complete repairs.

A Coast Guard station is about 0.8 mile W of Trout Point.

State Route 292 highway bridge over the W end

CHART #11385 PRE-SURVEY REVIEW ITEM #3736

SOURCE: H5667/1934-35 DESCRIPTION: Obstruction (Snag)

INVEST. DATE: 2/7/86 (DN 38) TIME: 1837Z VESSEL #519

OIC: LT(jg) Kenneth P. Peters

REFERENCE:

POSITION: 3916 VOLUME: 12 PAGE: 25

CORRECTORS APPLIED:

VELOCITY: TRA CORRECTORS:

UNVERIFIED ACTUAL TIDES:

GEODETIC POSITION:	LATITUDE	LONGITUDE
CHARTED:	30°21'28.20"	87°02'58.20"
OBSERVED:	---------- Not found ----------	

POSITION DETERMINED BY: Range/Range (Del Norte)

METHOD OF ITEM INVESTIGATION: Area of charted snag is too shallow for bottom drag. The area was visually searched in depths of 1 to 2 ft., with excellent visibility and flat calm seas. No evidence of charted snag was seen.

CHARTING RECOMMENDATIONS: Delete snag from chart. concur

COMPILATION USE

CHART: APPLIED AS:

Appendix XI

CHART #11385 PRE-SURVEY REVIEW ITEM #3737

SOURCE: UNKNOWN DESCRIPTION: Piles

INVEST. DATE: 4/25/85 (DN 115) TIME: 1612Z VESSEL #520

OIC: LT(jg) F.E. Ohlinger

REFERENCE:

POSITION: 1234-1235 VOLUME: 2 PAGE: 29

CORRECTORS APPLIED:

VELOCITY: NO TRA CORRECTORS: NO

UNVERIFIED ACTUAL TIDES: YES

GEODETIC POSITION:		LATITUDE	LONGITUDE
CHARTED:		30°21'42.00"	87°02'45.00"
OBSERVED:	Pos. 1234>	30°21'~~40.96~~ 41.00"	87°02'4~~2.85~~ 3.07"
	Pos. 1235>	30°21'~~41.98~~ 42.02"	87°02'42.~~56~~ 79"

POSITION DETERMINED BY: Range/Range (Del Norte)

METHOD OF ITEM INVESTIGATION: Visual Search. Piles were found submerged and about 30 meters apart N-S. Least Depth of 1.3 ft. at MLLW was found on position 1234. A ~~1.5~~ 2.0 ft. least depth was found on position 1235.

pos.# 1234 submerged pile(coo 1 ft At mllw)

pos.# 1235 2 obstruction (pile)

CHARTING RECOMMENDATIONS: Chart submerged piles at above observed locations. concur Add submerged notation.

COMPILATION USE

CHART: APPLIED AS:

CHART #11385 PRE-SURVEY REVIEW ITEM #3738

SOURCE: H5667/1934-35

INVEST. DATE: 1/15/86 (DN 15) TIME: 1825Z VESSEL #519

OIC: LT(jg) Kenneth P. Peters

REFERENCE:

POSITION #: 3713A VOLUME: 11 PAGE: 37

CORRECTORS APPLIED:

VELOCITY: TRA CORRECTORS:

UNVERIFIED ACTUAL TIDES:

GEODETIC POSITION:	LATITUDE	LONGITUDE
CHARTED:	30°23'08.40"	86°59'30.00"
OBSERVED:	---------- Not found ----------	

POSITION DETERMINED BY: Range/Range (Del Norte)

METHOD OF ITEM INVESTIGATION: Area of charted submerged pile is too shallow for bottom drag. A visual search of the area in depths of 1-2 ft., with excellent visibility and calm seas, found no evidence of submerged pile.

CHARTING RECOMMENDATIONS: Delete submerged pile from chart. concur

---

COMPILATION USE

CHART: APPLIED AS:

CHART #11385

PRE-SURVEY REVIEW ITEM #3739
DESCRIPTION: Obstruction (Shoal)

SOURCE: Unknown (1st appeared on 1947 ed. of Chart 11385)

INVEST. DATE: 12/17/85(DN 351) TIME: 1604-1645Z VESSEL #519
2/25/86(DN 056) 1814-1826Z

OIC: LT(jg) Kenneth P. Peters

REFERENCE:

POSITION #:	3596-3625	VOLUME: 11	PAGE: 4-10
	4012-4015	12	58-59

CORRECTORS APPLIED:

VELOCITY: No TRA CORRECTORS: Yes

UNVERIFIED ACTUAL TIDES: Yes

GEODETIC POSITION:	LATITUDE	LONGITUDE
CHARTED:	30°22'50.00"	86°59'18.00"
OBSERVED: Least Depth>	30°22'52.~~76~~80"	86°59'16.~~59~~63"

pos #4012
1 ft at MLLW

POSITION DETERMINED BY: Range/Range (Del Norte)

METHOD OF ITEM INVESTIGATION: Hydrography was run over area of charted shoal at no greater than 25 meter arc spacing, with one cross line over shoal (DN 351). On DN 56,a fathometer drift search to obtain the least depths was conducted. Poles soundings were taken over the determined areas of least depth and found to be 1 ft. at Lat. 30°22'52.~~76~~80"N, Lon. 86°59'16.~~59~~63"W (Pos.4012), 4 ft. at Lat. 30°22'51.~~86~~87"N, Lon. 86°59'18.~~13~~17"W,(Pos. 4013) and 4 ft. at Lat. 30°22'46.~~91~~92"N, Lon. 86°59'21.~~35~~36"W (Pos. 4014). Depths are reduced to MLLW.

CHARTING RECOMMENDATIONS:

Delete charted uncovers area. Chart above listed least depth soundings, representative soundings from H-10172, and show a 3 and 6 ft. depth curve. concur

---

COMPILATION USE

CHART: APPLIED AS:

CHART # 11385 PRESURVEY REVIEW ITEM #03740

SOURCE: H5667/34-35

INVEST. DATE: 1/22/86 (DN 22 1986) TIME:161200 UTC VESSEL: #0519

OIC: LT(jg) Kenneth P. Peters

REFERENCE:

POSITION : 3875 VOLUME: 12 PAGE: 11

CORRECTORS APPLIED: NONE

VELOCITY: N/A TRA CORRECTORS: N/A

UNVERIFIED ACTUAL TIDES: N/A

GEODETIC POSITION:	LATITUDE	LONGITUDE
CHARTED:	30°22'03.6"	086°57'53.7"
OBSERVED:	N/A	N/A

POSITION DETERMINED BY: Range/Range(Del Norte)

METHOD OF ITEM INVESTIGATION: Area of charted snag was found too shallow for drag. The area was visually searched @ Low water (depths ranged from 0-4') with excellent bottom visibility. No evidence of a snag was seen in an area extending approx. 500m east and west of the charted position.

CHARTING RECOMMENDATIONS: Recommend snag be deleted from chart. concur

---

COMPILATION USE

CHART: APPLIED AS:

Pacific Marine Center
1801 Fairview Avenue East
Seattle, Washington 98102-3767

FEB 27 1987 N/MOP211/DJH

Commander (OAN)
USCG
Hale Boggs Federal Building
500 Camp Street
New Orleans, Louisiana 70130-3396

ATTN: Tom Marian

Dear Commander Rots:

Office processing of hydrographic surveys H-10168, H-10172, and H-10207 has resulted in revised positions for aids to navigation presently charted in Santa Rosa Sound, Florida. These surveys were completed June 5, 1985, May 1, 1986, and May 28, 1986, respectively. The fixed aids were located to Third Order specifications while the floating aids have been located hydrographically. Both types of positions are of sufficient quality to satisfy the requirements of nautical charting. These survey positions are provided to you on the attached list for your information and possible publication in Local Notice to Mariners.

For further information please contact Cdr. Thomas W. Richards, Chief, Nautical Chart Branch, N/MOP21, telephone 206-526-6852.

Sincerely,

Robert L. Sandquist
Rear Admiral, NOAA
Director, Pacific Marine Center

Enclosure

JLS FEB 24 1987 DJH 3/17/87

FILE COPY

CODE	SURNAME	DATE	CODE	SURNAME	DATE
N/MOP2	Richards TWR	3/26	N/MOP	Sandquist	5/27
N/MOP2	Murdock M.	3/26			
N/MOPx	Petersen				

NOAA FORM 61-2

*U.S. GPO: 1985-567-601

AID	LAT. N	LONG. W	SOURCE
Santa Rosa Sound Lt. 87	30/23/51.23	86/50/31.28	H-10207
Santa Rosa Sound Lt. 88	30/23/58.07	86/51/01.58	H-10207
Santa Rosa Sound Lt. 90	30/23/53.41	86/51/23.35	H-10207
Santa Rosa Sound Lt. 102	30/23/38.41	86/53/22.02	H-10207
Santa Rosa Sound Lt. 108	30/23/33.95	86/54/00.06	H-10207
Santa Rosa Sound Lt. 114	30/23/29.32	86/54/42.49	H-10207
Santa Rosa Sound Lt. 121	30/23/18.54	86/55/41.06	H-10207
Santa Rosa Sound Lt. 125	30/22/55.49	86/59/12.23	H-10172
Santa Rosa Sound Lt. 129	30/22/24.69	87/01/23.04	H-10172
Santa Rosa Sound Lt. 131	30/21/35.80	87/04/54.18	H-10168
Santa Rosa Sound Buoy 81A	30/23/46.9	86/49/32.1	H-10207
Santa Rosa Sound Buoy 83	30/23/45.4	86/49/56.1	H-10207
Santa Rosa Sound Buoy 84	30/23/50.8	86/50/02.0	H-10207
Santa Rosa Sound Buoy 85	30/23/48.3	86/50/13.5	H-10207
Santa Rosa Sound Buoy 88A	30/23/54.3	86/51/14.4	H-10207
Santa Rosa Sound Buoy 89	30/23/50.6	86/51/13.0	H-10207
Santa Rosa Sound Buoy 89A	30/23/48.8	86/51/23.9	H-10207
Santa Rosa Sound Buoy 91	30/23/47.7	86/51/40.3	H-10207
Santa Rosa Sound Buoy 92	30/23/48.9	86/52/01.3	H-10207
Santa Rosa Sound Buoy 95	30/23/43.2	86/52/16.6	H-10207
Santa Rosa Sound Buoy 96	30/23/43.6	86/52/33.4	H-10207
Santa Rosa Sound Buoy 97	30/23/40.5	86/52/33.7	H-10207
Santa Rosa Sound Buoy 99	30/23/38.4	86/52/50.9	H-10207
Santa Rosa Sound Buoy 101	30/23/36.9	86/53/05.5	H-10207
Santa Rosa Sound Buoy 103	30/23/35.3	86/53/21.0	H-10207
Santa Rosa Sound Buoy 104	30/23/36.2	86/53/35.4	H-10207
Santa Rosa Sound Buoy 105	30/23/33.9	86/53/35.1	H-10207
Santa Rosa Sound Buoy 106	30/23/34.8	86/53/41.6	H-10207
Santa Rosa Sound Buoy 107	30/23/31.1	86/53/59.1	H-10207
Santa Rosa Sound Buoy 110	30/23/32.7	86/54/13.4	H-10207
Santa Rosa Sound Buoy 111	30/23/28.2	86/54/26.7	H-10207
Santa Rosa Sound Buoy 112	30/23/31.4	86/54/27.2	H-10207
Santa Rosa Sound Buoy 113	30/23/26.5	86/54/42.2	H-10207
Santa Rosa Sound Buoy 115	30/23/25.1	86/54/56.5	H-10207
Santa Rosa Sound Buoy 117	30/23/23.6	86/55/09.1	H-10207
Santa Rosa Sound Buoy 119	30/23/21.8	86/55/24.5	H-10207
Santa Rosa Sound Buoy 122	30/23/24.3	86/55/43.7	H-10207

APPROVAL SHEET

For

SURVEY H-10172 (HFP-10-2-85)

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

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

Approved and forwarded.

Kenneth W. Perrin

Kenneth W. Perrin
LCDR, NOAA
Chief, Hydrographic Field Parties Section

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

DATE: 07/21/86

Marine Center: Pacific

OPR: J-288

Hydrographic Sheet: H-10172

Locality: Santa Rosa Sound, Florida

Time Period: April 15, 1985 - February 25, 1986

Tide Station Used: 872-9736 Woodlawn Beach, FL

Plane of Reference (Mean Lower Low Water): 1.57 ft.

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

Remarks: Recommended Zoning:

Zone direct

for [signature]
Chief, Tidal Datum Quality
Assurance Section

NOAA FORM 76-155
(11-72)

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

SURVEY NUMBER

H-10172

GEOGRAPHIC NAMES

Name on Survey	A ON CHART NO. 11385	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 Manuscript TP	
FLORIDA, SANTA ROSA SOUND BIG SABINE PT TO 3 MILES E. OF WOODLAWN BEACH										
FLORIDA (TITLE)										1
BIG SABINE POINT	X								00549 X	2
GULF OF MEXICO	X								00549 X	3
SANTA ROSA ISLAND	X								00549 X	4
SANTA ROSA SOUND	X								00549 X	5
TIGER POINT	X								00549 X	6
WOODLAWN BEACH	X								00549 X	7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
					Approved:					19
					Chas. L. Harrington					20
					Chief Geographer - N/CG2x5					21
										22
					JAN 6 1987					23
										24
										25

NOAA FORM 76-155 SUPERSEDES C&GS 197

NOAA FORM 76-155
(11-72)

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

SURVEY NUMBER

H-10172

GEOGRAPHIC NAMES

Name on Survey	A ON CHART NO.	B ON PREVIOUS SURVEY NO.	C ON U.S. QUADRANGLE MAPS	D FROM LOCAL INFORMATION	E ON LOCAL MAPS	F P.O. GUIDE OR MAP	G RAND MCNALLY ATLAS	H U.S. LIGHT LIST	K	
Big Sabine Point	11378		X							1
Santa Rosa Island	11378 11385	5667	X		X		X	X		2
Santa Rosa Sound	11378 11385	5667	X		X					3
Tiger Point	11378		X		X					4
Woodlawn Beach	11385		X		X					5
										6
										7
										8
										9
										10
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										25

NOAA FORM 76-155 SUPERSEDES C&GS 197

Appendix III

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
National Ocean Service
Pacific Marine Center
1801 Fairview Avenue East
Seattle, Washington 98102-3767

June 11, 1986 N/MOP21x2/JDW

TO: N/MOA - Wesley V. Hull

FROM: N/MOP - Robert L. Sandquist

SUBJECT: Preprocessing Examination of H-10172, Florida, Santa Rosa Sound, Big Sabine Point to 3 miles East of Woodlawn Beach

Hydrographic survey H-10172 has been reviewed in accordance with Hydrographic Survey Guideline No. 15. The Preprocessing Examination Critique for this survey is attached. Survey H-10172 is accepted for Pacific Marine Center processing.

The Preprocessing Examination Critique is designed to provide information which will be useful to the command for maintaining the quality of future hydrographic surveys. Comments from the Chief-of-Party on specific critique items are welcome.

Attachment

cc: N/MOP21x2
N/MOP211
N/CG2
N/MOA232
N/MOA233

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Pacific Marine Center
Nautical Chart Branch
7600 Sand Point Way NE
BIN C15700
Seattle, Washington 98115-0070

June 9, 1986 N/MOP21x2/JDW

TO: N/MOP - Robert L. Sandquist

FROM: N/MOP21 - Thomas W. Richards

SUBJECT: Preprocessing Examination for H-10172

I. SURVEY INFORMATION

A. Field No. HFP-10-2-85 Registry No. H-10172

B. State: Florida

General Locality: Santa Rosa Sound

Sublocality: Big Sabine Point to 3 miles East of Woodlawn Beach

C. Project Instructions: OPR-J288-HFP-84

Original dated: September 11, 1984

Change No. 1 dated: October 31, 1984

Change No. 2 dated: October 8, 1985

Change No. 3 dated: December 11, 1985

D. Date:

Field Work Commenced: April 15, 1985

Field Work Completed: May 1, 1986

plus six weeks = June 13, 1986

Data received at Marine Center: May 19, 1986

plus one month = June 19, 1986

Examination critique transmitted to field: June 12, 1986

Target for completion of Marine Center processing: December 12, 1986

II. PREPROCESSING EXAMINATION CRITIQUE

Hydrographic survey H-10172 was performed by personnel of the Atlantic Hydrographic Field Party (HFP), LT(jg) F. E. Ohlinger, Officer-in-Charge (OIC), and LT(jg) K. P. Peters, OIC.

A. Danger to Navigation Reports

No dangers to navigation were reported by HFP for the area covered by H-10172.

No dangers were identified during the Preprocessing Examination.

B. Compliance with Instructions

This survey meets the requirements for a basic hydrographic survey.

C. Final Field Sheets

There were no Geographic Names listed in the final field sheet (HM 4.2.1), although there were five entries on the Geographic Names List in the Descriptive Report.

D. Descriptive Report

The Descriptive Report was very well-written. Two minor requirements were not met. The sublocality was designated from West to East rather than East to West (HSG 19). The purpose of the survey was not given in Section A (HM 5.3.4).

More information on the disposition of PSR Item 3735 would have been desirable. This item lies within the limits of H-10172 and the field unit conducted bottom drag investigations for this item during two days of the survey. The only documentation in the Descriptive Report states that "...it was determined the item had been adequately disposed of on survey H-10168". If PSR 3735 had been resolved on adjoining survey H-10168, it would have been helpful to include a copy of the item investigation sheet for PSR 3735 as submitted with H-10168. PSR 3735 will be addressed on the smooth sheet and in the Evaluator's Report for survey H-10172.

See EVAL Report Section 7

Documentation on visual searches of features which resulted in recommendations of "delete from chart" should have included the amount of time spent on each investigation (HM 4.8.3.10).

H. Tide Data

In the Field Tide Note the hydrographer notes, "Some loss of data occurred in November due to a gage malfunction, not reported by the contract tide observer. This data loss should not affect hydrography run." A tabulation of missing hourly heights that may be required for reduction of soundings to the datum of reference should be included with the Field Tide Note (HM 5.3.4).

J. Positioning Control

A number of positions around Big Sabine Point were acquired when LOP intersection angle was less than 30 or greater than 150 degrees (HM 4.4.3.2.2, Attachment A).

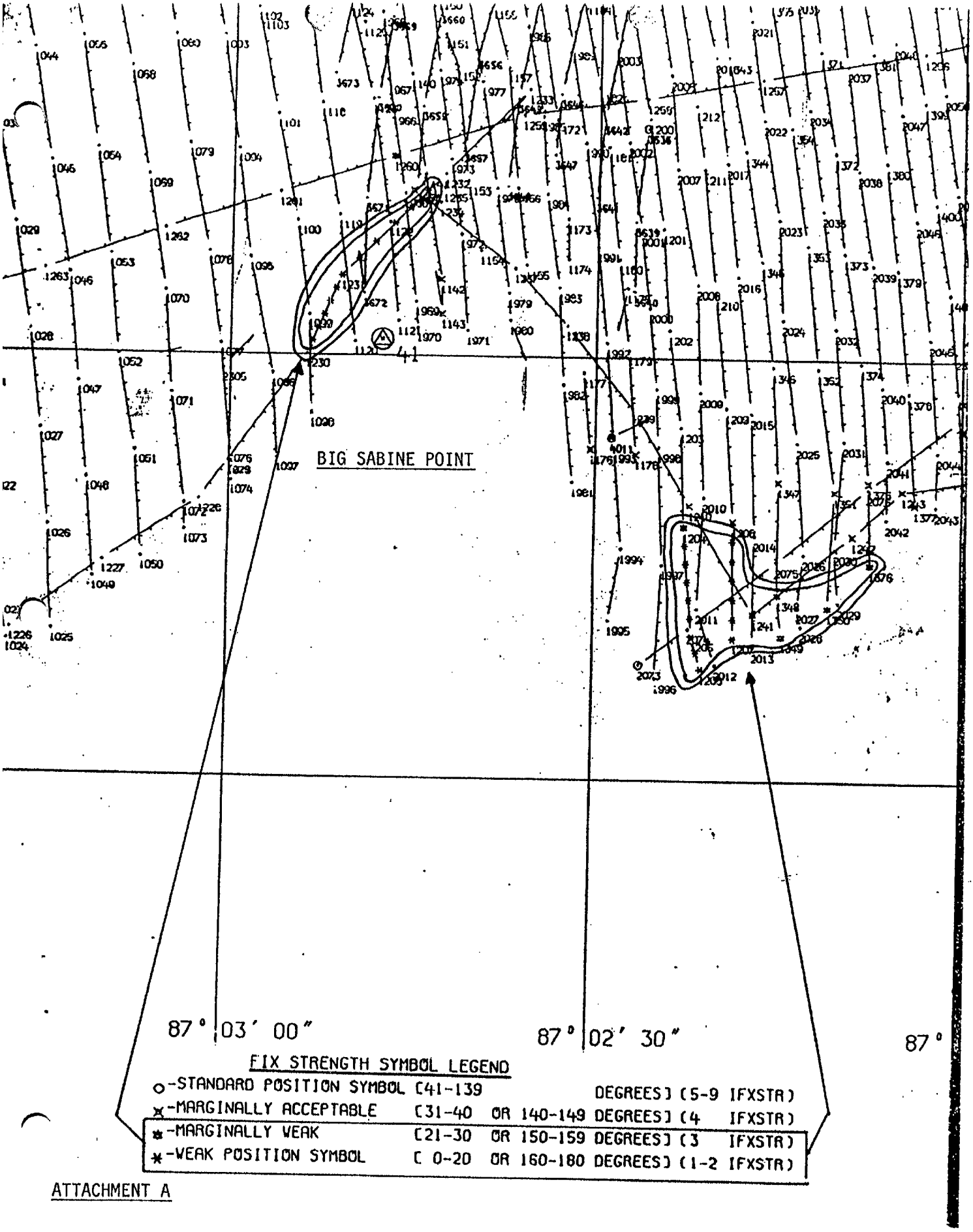
N. Survey Acceptance

The Preprocessing Examination for H-10172 was conducted under the time constraints of HSG 15. All comments contained herein are based on a spot check of the data, and it is possible that some problem areas have not been addressed.

Except for the items noted in the critique, H-10172 is in compliance with the project instructions. I recommend that H-10172 be accepted for Nautical Chart Branch processing.

Prepared by:

John D. Wilder



FIX STRENGTH SYMBOL LEGEND

o-STANDARD POSITION SYMBOL	[41-139	DEGREES]	(5-9 IFXSTR)
x-MARGINALLY ACCEPTABLE	[31-40 OR 140-149	DEGREES]	(4 IFXSTR)
*-MARGINALLY WEAK	[21-30 OR 150-159	DEGREES]	(3 IFXSTR)
*-WEAK POSITION SYMBOL	[0-20 OR 160-180	DEGREES]	(1-2 IFXSTR)

ATTACHMENT A

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

U.S. DEPARTMENT OF COMMERCE

HYDROGRAPHIC SURVEY STATISTICS

REGISTRY NUMBER
H-10172

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	SMOOTH OVERLAYS: POS., ARC, EXCESS	7
DESCRIPTIVE REPORT	1	FIELD SHEETS AND OTHER OVERLAYS	2

DESCRIPTION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/ SOURCE DOCUMENTS	
ACCORDION FILES	2					
ENVELOPES						
VOLUMES	12					
CAHIERS						
BOXES						

SHORELINE DATA

SHORELINE MAPS (List): TP-00548, TP-00549

PHOTOBATHYMETRIC MAPS (List):

NOTES TO THE HYDROGRAPHER (List):

SPECIAL REPORTS (List):

NAUTICAL CHARTS (List): Enlargement of Chart 11385

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS VERIFICATION	AMOUNTS EVALUATION	AMOUNTS TOTALS
POSITIONS ON SHEET			2228
POSITIONS REVISED			2172
SOUNDINGS REVISED			199
CONTROL STATIONS REVISED			
	TIME-HOURS VERIFICATION	TIME-HOURS EVALUATION	TIME-HOURS TOTALS
PRE-PROCESSING EXAMINATION			
VERIFICATION OF CONTROL			
VERIFICATION OF POSITIONS	163		163
VERIFICATION OF SOUNDINGS	132		132
VERIFICATION OF JUNCTIONS			
APPLICATION OF PHOTOBATHYMETRY			
SHORELINE APPLICATION/VERIFICATION			
COMPILATION OF SMOOTH SHEET	96		96
COMPARISON WITH PRIOR SURVEYS AND CHARTS		6	6
EVALUATION OF SIDE SCAN SONAR RECORDS			
EVALUATION OF WIRE DRAGS AND SWEEPS			
EVALUATION REPORT		32	32
GEOGRAPHIC NAMES			
OTHER* Digitizing			17
*USE OTHER SIDE OF FORM FOR REMARKS — TOTALS	391	38	446

Pre-processing Examination by: J. Wilder	Beginning Date		Ending Date 6/11/86
Verification of Field Data by: J.N. Shofner, T.O. Jones	Time (Hours) 391		Ending Date 5/14/87
Verification Check by: J. Stringham, B. Olmstead	Time (Hours) 49		Ending Date 5/14/87
Evaluation and Analysis by: C. R. Davies	Time (Hours) 38		Ending Date 6/4/87
Inspection by: D. Hill	Time (Hours) 4		Ending Date 6/25/87

☆ U.S. GOVT. PRINTING OFFICE 1983: 764-006/6061

PACIFIC MARINE CENTER
EVALUATION REPORT
H-10172

1. INTRODUCTION

H-10172 was accomplished by the NOAA Hydrographic Field Parties 2, 3 and 4 in accordance with the following project instructions:

OPR-J288-HFP-85, dated September 11, 1984
Change Number 1, dated October 31, 1984
Change Number 2, dated October 8, 1985
Change Number 3, dated December 11, 1985

H-10172 is a basic hydrographic survey of Santa Rosa Sound, Florida intended to obtain modern hydrographic data for revision of existing nautical charts of Santa Rosa Sound, Florida. The survey includes the Sound between longitudes 86°56'30"W and 87°03'30"W. Extending east-west through the survey area is a marked channel, part of the Intracoastal Waterway. The northern shore is characterized by mud flats and numerous cultural features; piers, piles and ruins. The southern shore is characterized by sandy beaches and grassy areas and is undeveloped, being part of the Gulf Islands National Seashore. The maximum depth in the survey area of 24 feet is in the channel. The bottom is generally composed of sand.

Field tide reduction of soundings were based on unverified actual heights from gage 872-9736 Woodlawn Beach and gage 872-9679 East End. Tide correctors used for the reduction of final soundings are approved hourly heights zoned from Woodlawn Beach, Florida.

The field sheet parameters have been revised to center the hydrography on the smooth sheet and to change the projection to polyconic. The electronic control correctors have been revised during office processing to incorporate daily correctors. 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 hydrographic positioning are adequately discussed in sections F and G of the hydrographer's report.

Positions of horizontal control stations used during hydrography are either published or field values based on the North American Datum of 1927. The computation of positions accomplished during office processing utilized these

same values. The smooth sheet and accompanying overlays have been annotated with an NA 1983 Datum adjustment tick. Geographic positions based on the NA 1983 Datum may be plotted on the smooth sheet utilizing the NA 1927 Datum projection by applying the following corrections:

Latitude - 0.717 seconds (-22.1 meters)
Longitude - 0.127 seconds (3.4 meters)

The year of establishment of control stations shown on the smooth sheet originates with the hydrographer's signal list and is subject to change pending certification of the data by NGS.

Applicable shoreline manuscripts are TP-00548 and TP-00549, compiled at the scale of 1:20,000 and photographically enlarged to 1:10,000. These are registered Class III maps, and originate from photography dated January, February, March, and April 1978. The photographic enlargements supplied by headquarters contained slight distortions. These were compensated for by shifting the enlargement as required to bring the latitude, longitude grids into agreement.

Shoreline and alongshore features were verified by the hydrographer. No significant changes in the shoreline were noted in the field except at latitude 30°21'42"N between longitude 86°59'30"W and 86°59'45"W, shown in dashed red, and the removal of some previously charted features, particularly old piers and the construction of new ones. The hydrographer generally located only the offshore end of each pier. Their orientation to shoreline as shown on the smooth sheet was obtained directly from the final field sheet without supporting positions. These features are otherwise described in section L of the hydrographer's report.

3. HYDROGRAPHY

Hydrography within the limits of the sheet is adequate to:

a. Delineate the bottom configuration, determine least depths, and to draw the standard depth curves.

b. Reveal that there are no significant discrepancies or anomalies requiring further investigation.

c. Show that the survey had been properly controlled and soundings are plotted correctly.

A number of positions around Big Sabine Point were acquired when LOP intersection angles were less than 30 or greater than 150 degrees. These soundings were consistent with the surrounding data which had acceptable intersection angles, therefore the data was accepted.

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

No.3, The Hydrographic Survey Guidelines, and the AMC OPORDERS except as noted in the Preprocessing Examination Report, dated June 11, 1986 (copy attached).

5. JUNCTIONS

H-10172 junctions with the following surveys:

Survey	Year	Scale	Area
H-10168	1984-85	1:10,000	West
H-10207	1985-86	1:10,000	East

Soundings were transferred from H-10168 and H-10207 to justify depth curves and to portray shoaler information. The junction with H-10207 has been adequately effected.

H-10168 has been processed and submitted to headquarters for charting by the Atlantic Marine Center. Junction comparison was made using a copy. Soundings are in agreement. Depth curves should be adjusted to conform with those on H-10172.

6. COMPARISON WITH PRIOR SURVEYS

H-5667 (1934-35) 1:10,000
H-5705 (1935) 1:10,000

The present survey soundings compare within 1 to 4 feet of the prior soundings. There are, however, some areas where significant changes have been noted. These are adequately described in section K of the hydrographer's report.

AWOIS items originating from the prior survey are adequately discussed in item investigation reports attached to the hydrographer's report supplemented as follows:

AWOIS item 03736, snag, at latitude 30°21'28.2"N, longitude 87°02'58.2"W, originating from H-5667 (1934-35) was adequately investigated and disproven. It is recommended that the charted snag be removed from the chart.

AWOIS item 03738, submerged pile charted at latitude 30°23'08.4'N, longitude 86°59'30.0"W, originating from H-5667 (1934-35) as hydrographic signal "BOX" was adequately investigated and disproven. It is recommended that the submerged pile be removed from the chart.

AWOIS item 03740, snag charted at latitude 30°22'03.6"N, longitude 86°57'53.7"W, originating from H-5667 (1934-35) was adequately investigated and disproven. It is recommended that this snag be removed from the chart.

H-10172 is adequate to supersede the prior surveys within their common areas.

7. COMPARISON WITH CHART

Chart 11385, 14th Edition, dated July 2, 1983; scale 1:40,000
16th Edition, dated August 24, 1985; scale 1:40,000

The 16th Edition was compared to as the most current edition available at the time of processing. The only difference between the two chart editions is a change in aid to navigation color from black to green.

a. Hydrography - Most charted information originates from the prior surveys discussed in Section 6 of this report. Other soundings and charted features originate from miscellaneous sources. For more details see section L of the hydrographer's report.

AWOIS items originating from miscellaneous sources are adequately discussed in item investigation reports attached to the hydrographers' report supplemented as follows:

AWOIS item 03735, submerged wreck, (TAURUS) at latitude 30°21'52.0"N, longitude 87°03'25.0"W, originating from LNM1/73 (1/2/73) was investigated during H-10168 (1984-85) and was recommended for removal from the chart. The submerged wreck was also adequately investigated by the hydrographer during H-10172 with the same results. It is recommended that the submerged wreck be removed from the chart. Refer to H-10168 for additional information on this item.

AWOIS item 03737, piles, at latitude 30°21'42.0"N, longitude 87°02'45.0"W, originate from an unknown source. Two 12-inch diameter wood piles were found 30 meters apart in a north-south orientation at latitude 30°21'41.00"N, longitude 87°02'43.07"W and latitude 30°21'42.02"N, longitude 87°02'42.79"W. The first pile is covered by one foot at MLLW and the second covered by two feet at MLLW. It is recommended that the charted pile symbol be deleted and two submerged piles be charted at the above locations.

AWOIS item 03739, shoal area, at latitude 30°22'50.0"N, longitude 86°59'18.0"W, originating from an unknown source was investigated by the hydrographer. Hydrography was run in the area with 25-meter line spacing and a least depth by pole sounding of one foot at MLLW was found at latitude 30°22'52.80"N, longitude 86°59'16.62"W. Other shoal depths in the area include 4-foot soundings at MLLW at latitude 30°22'46.91"N, longitude 86°59'21.36"W. It is recommended that this feature be revised to show depths as portrayed on H-10172 smooth sheet.

Geographic names appearing on the smooth sheet have been approved by the Chief Geographer and are plotted in accordance with this chart.

H-10172 is adequate to supersede the presently charted hydrography within the common area.

There was one danger to navigation report submitted to the Coast Guard for the survey (copy attached).

b. Controlling Depths - The Intracoastal Waterway extends from east to west across the survey area. All depths are in excess of the project depth of 12 feet.

c. Aids to Navigation - There are three fixed aids and two floating aids to navigation within the limits of this survey. Three landmarks were also located during this survey. Geographic positions of the fixed aids were determined to third-order accuracy standards as required by the project instructions. All navigational aids are found to be in good condition and adequately serve their intended purpose. More information regarding these aids is contained in section N of the hydrographer's report and on NOAA Form 76-40, Nonfloating Aids or Landmarks for Chart, included with this report. Revised positions for two of the fixed aids were provided by a letter from the Director, Pacific Marine Center to the 8th Coast Guard District, dated February 27, 1987 (copy appended).

8. COMPLIANCE WITH INSTRUCTIONS

H-10172 adequately complies with the project instructions noted in section 1 of this report.

9. ADDITIONAL FIELD WORK

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

Respectfully submitted,

Charles R. Davies

Charles R. Davies
Cartographer

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

Dennis Hill

Dennis Hill Chief,
Hydrographic Section

ATTACHMENT TO DESCRIPTIVE REPORT FOR H-10172

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.

Chief, Nautical Chart Branch (Date)

CLEARANCE: SIGNATURE AND DATE:

N/MOP2:LWMordock

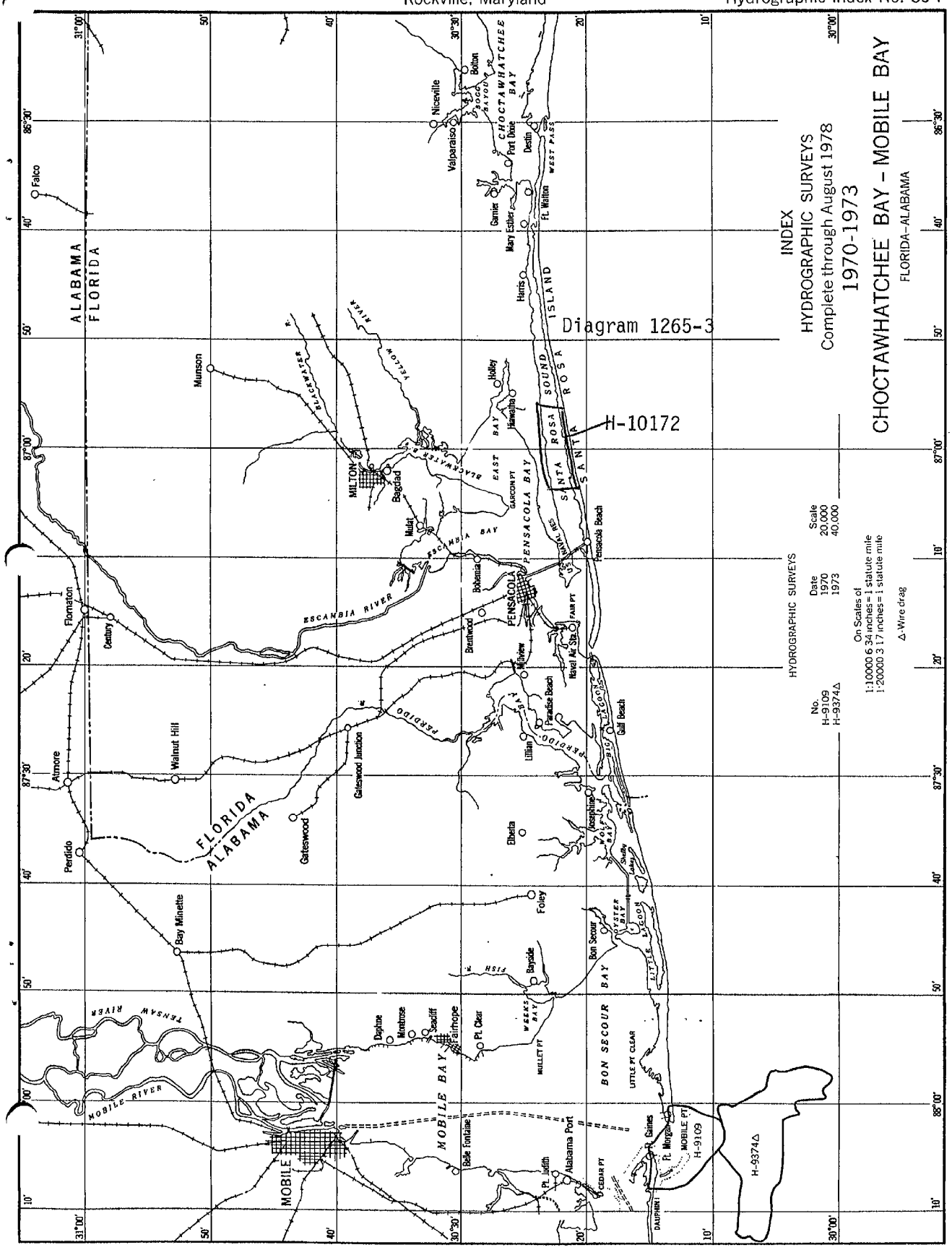
After review of the smooth sheet and accompanying reports, I hereby certify this survey is accurate, complete, and meets appropriate standards with only the exceptions as noted above. The above recommendations are forwarded with my concurrence.

6-30-87

Director, Pacific Marine Center (Date)

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

Hydrographic Index No. 85 F



NOAA FORM 75-96
(10-83)

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

MARINE CHART BRANCH

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10172

INSTRUCTIONS

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

CHART	DATE	CARTOGRAPHER	REMARKS
11378	11/29/88	R. A. Lillis	~~Part application~~ ~~Full Part Before After~~ Marine Center Approval Signed Via
			Drawing No. 23 Exam. for N.M. corr. - No Corr.
11385	4/10/89	S.H. Stout	Full ~~Part Before~~ After Marine Center Approval Signed Via
			Drawing No. full application of sndgs from SS
11383	4/5/89	S. H. Stoute	Full ~~Part~~ Before After Marine Center Approval Signed Via full application of
			Drawing No. from SS and inagreement with 11385
11378	4/18/89	S.H. Stoute	Full ~~Part~~ Before After Marine Center Approval Signed Via full application
			Drawing No. of sndg from SS and inagreement with
			11383 and 11385
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
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			Full Part Before After Marine Center Approval Signed Via
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			Full Part Before After Marine Center Approval Signed Via
			Drawing No.

SUPERSEDES C&GS FORM 8362 WHICH MAY BE USED.