9971

Diagram No. 1265-3

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. HSB-20-5-81

Office No. H-9971

LOCALITY

State Florida

General Locality Gulf of Mexico

Locality Southwest of Pensacola

Bay Entrance

1981-82

CHIEF OF PARTY
LCDR G.W. Jamerson

LIBRARY & ARCHIVES

DATE September 24, 1984

☆U.S. GOV. PRINTING OFFICE: 1980—766-230

9971

INDEX

* Data removed from the Descriptive Report and filed with the field records.

NOAA FORM 77-28 (11-72) | U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | REGISTER NO.

HYDROGRAPHIC TITLE SHEET

H-9971

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. HSB-20-5-81

State Florida

General locality Gulf of Mexico ~~- Northwest Coast of Florida~~

Locality South^west of Pensacola Bay Entrance

Scale 1:20,000 **Date of survey** 10 Sep 81 - 12 Oct 82

Instructions dated July 13, 1981 **Project No.** OPR-J217-HSB-81

Vessel NOAA Launch 1257

Chief of party Lt. Cdr. George W. Jamerson, NOAA

Surveyed by Lt. Cdr. A. A. Armstrong and Lt. Samuel P. De Bow, Jr., NOAA

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

Graphic record scaled by AA, SPD, GSL, GDH, GM, MM, LRN, RAC, PMT

Graphic record checked by SPD

Protracted by N/A **Automated plot by** Field Sheet PDP8/e AMC Xynetics 1200

Verification by AMC Verifications Branch (H.R. Smith & J.B. Wilson)

Soundings in ~~XXXXXX~~ feet **at** [redacted] [redacted] ~~Gulf Coast Low Water Datum~~ Mean Lower Low Water Datum

REMARKS: AA - Lt. Cdr. Andrew A. Armstrong

SPD - Lt. Samuel P. De Bow

GSL - George S. Lloyd

GDH - Glenn D. Hendrix

GM - Gary Merrill

MM - Maria Mangual-Ortiz

LRN - Linda R. Noyes

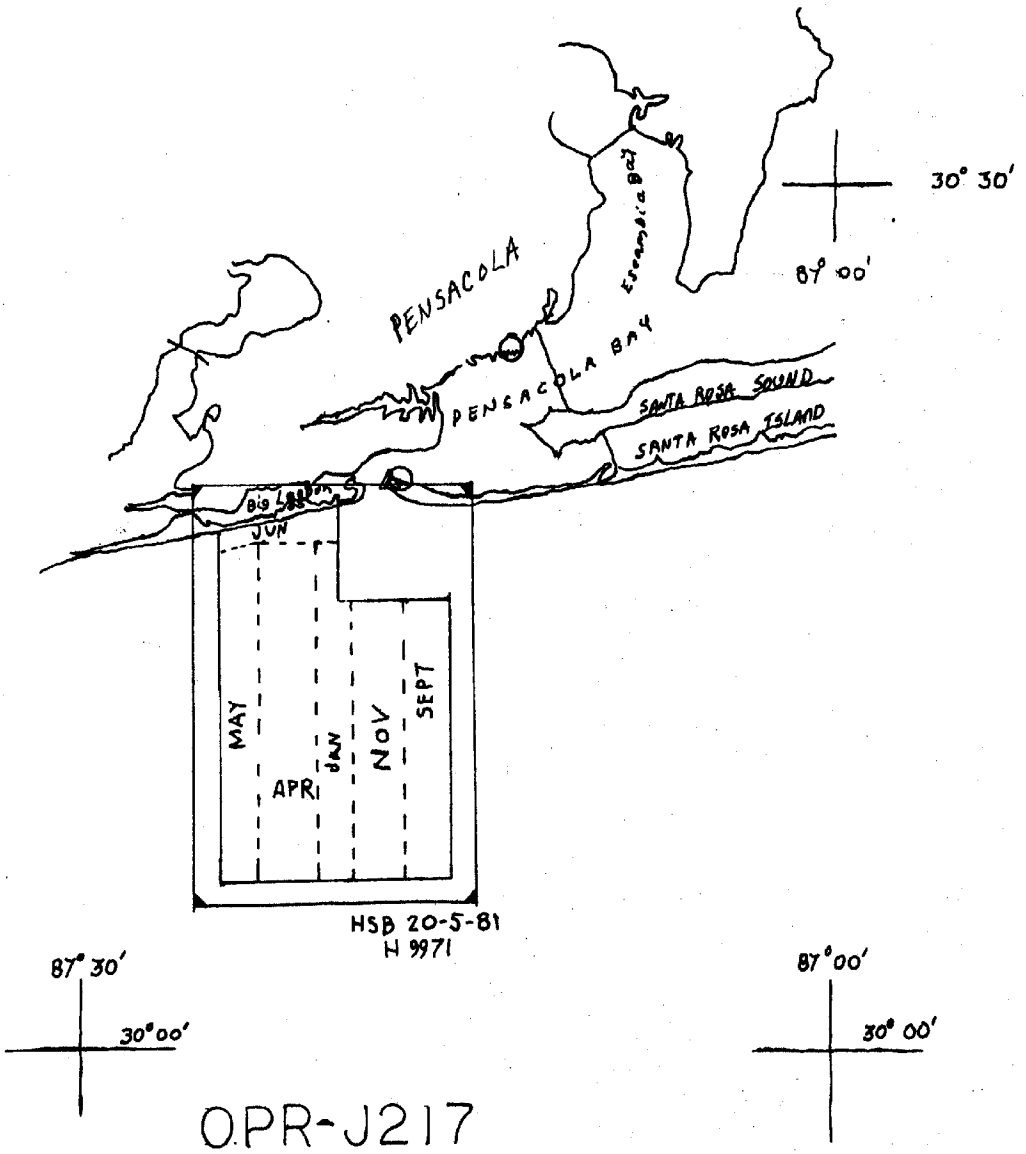
RAC - Robert A. Covey, Canadian Hydrographic Service

PMT - Peter M. Thomas, Lt., Royal Navy

KWLH 3-22-96

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

(1.) AWOIS SURF ✓ KWLH 11/84 ☆ U.S. GPO: 1974-0-768-081/1207



OPR-J217
HSB-20-5-81
H-9971
CHART 11360

DESCRIPTIVE REPORT
TO ACCOMPANY
Hydrographic Survey H-9971
HSB-20-5-81

Scale: 1:20,000
Chief of Party - Lt. Cdr. George W. Jamerson
Officer in Charge: Lt. Cdr. Andrew A. Armstrong (until 1/8/82)
Lt. Samuel P. De Bow (from 1/8/82)
Hydrographic Surveys Branch, Hydrographic Field Party #1
Launch 1257

A. PROJECT

This survey was accomplished under Project Instructions OPR-J217-HSB-81, dated July 13, 1981, and amended by:

Change No. 1, dated July 23, 1981
Change No. 2, dated October 26, 1981 -
Change No. 3, dated December 23, 1981 -
Change No. 4, dated February 10, 1982 - (Not applicable)
Change No. 5, dated March 2, 1982. To 2/3/82

B. AREA SURVEYED

The area surveyed was south of Santa Rosa Island and Perdido Key, off the entrance to Pensacola Bay, Florida and bounded by the following points:

Northeast corner	Lat.	30°15'45"N, Long. 87°15'15"W
Southeast corner	Lat.	30°05'58"N, Long. 87°15'15"W
Northwest corner	Lat.	30°17'50"N, Long. 87°24'36"W
Southwest corner	Lat.	30°06'00"N, Long. 87°24'36"W

This survey was conducted from September 10, 1981 to October 12, 1982 (J.D. 253 to 285) inclusive.

C. SOUNDING VESSEL

All soundings obtained on this survey were obtained from NOAA Launch 1257 (EDP #1257). All survey records are annotated with the vessel number 1257.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

The following Raytheon fathometer equipment was used during the survey:

JD 253 (1981) to 281 (1982)	Recorder	Model #DE723D
		Serial #2042
	ECU	Model #DE723D
		Serial #37009
	Digitizer	Model #DE723-D
		Serial #2772

JD 285 Recorder Model #DE723-D
Serial #2934

For the most part no 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 except on JD 117 when it was noticed that the cycles per second were low thus producing inaccurate depths for that day. The problem was found in the ECU and rectified. All data for that day of hydro was rejected and rerun.

Settlement and squat tests on Launch 1257 were run on June 11, 1982 at Pensacola Bay Entrance. The results of these tests are included in the Appendix of this report. Settlement and squat corrections have been applied to the field sheet as dynamic draft on the electronic corrector tape. - S&S and Draft were combined on the corrector tapes

Velocity and instrument corrections were determined by barchecks taken daily, weather permitting, and TDC casts taken once a week. Since at one time three survey sheets were being run at the same time, with the same equipment, barchecks and TDC casts were combined. Common velocity tables, complied by date, were used for all sheets. Field sheets were plotted using approximate velocity curves developed by moving the TDC curves to coincide with and extend the barcheck curves. Final velocity curves and tables were constructed from the TDC curves. The lengths of the line on the bar were checked on December 15, 1981 and July 30, 1982. The results of this inspection showed that no correction was necessary. The TDC used to obtain velocity corrections was a Martek Instrument Model 101-1, Serial #477, which was calibrated by EED on May 10, 1982. - See section 4. of the Evaluation Report.

Velocity corrections were determined by TDC casts taken at the following locations:

JD	LATITUDE	LONGITUDE	
315 (1981)	30°13'15"N	87°09'30"W	Not in the survey area.
342	30°12'50"N	87°10'20"W	
019 (1982)	30°07'33"N	87°13'36"W	
102	30°07'15"N	87°21'00"W	
117	29°49'30"N	87°23'30"W	Not in the survey area.
123	29°49'00"N	87°24'00"W	
141	30°06'00"N	87°16'50"W	
147	29°48'15"N	87°26'00"W	Not in the survey area.
159	29°47'50"N	87°26'20"W	
166	29°47'42"N	87°26'48"W	

JD	LATITUDE	LONGITUDE
176	29°47'30"N	87°27'40"W } Not in the
281	29°50'00"N	87°30'00"W } survey area.

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. Mainscheme hydrography is plotted on the smooth field sheets while crosslines, developments, splits, bottom samples, prior survey soundings, junction soundings, charted soundings, and presurvey review items are shown on various overlay sheets. 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 Atlantic Marine Center on the Harris/7 computer and the Xynetics 1201 plotter.

Only the smooth field sheet & overlay sheets were included in the field records

F. CONTROL STATIONS

Control stations used during this survey were either existing Third Order or better geodetic control stations published by National Geodetic Survey (NGS) or were established by HFP-1 and Hydrographic Surveys Branch's Survey Support Group to third order or better 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.

Horizontal control data were submitted via the NGS computer terminal system. Positions can be verified by Hydrographic Surveys Branch at Atlantic Marine Center.

G. HYDROGRAPHIC POSITION CONTROL

The method used to control this survey was a Hastings Raydist DR-s system operating in the Range/Range mode. Shore stations were located at:

CONTROL SIGNAL

Left	Right	Julian Dates
908	900	253 (1981) - 102 (1982)
910	900	102 (1982) - 285 (1982)

Shore Station Equipment

Left Station: Green Raydist Model AA-60
Serial #68 JD 253-JD 159
Serial #69 JD 159-JD 216
Serial #68 JD 216-JD 285

Right Station: Red Raydist Model AA-60
Serial #84 JD 253-JD 216
Serial #119 JD216-JD 285

Launch Equipment:

Navigator	Model ZA 67B Serial #67
Antenna Loading Coil	Model QB-52 Serial #81
Transmitter	Model TA 96 Serial #87

The system frequency was 3306.4 KHz resulting in a lane width of 45.32 meters. The left station was a 100-foot aluminum tower. The right station was 120-foot tower previously used as a Loran A antenna. The launch antenna was a 35-foot whip located over the fathometer transducer.

Problems encountered with this system were created mainly due to the close proximity of station 910 (Green Station) to the calibration site, approximately two nautical miles away, in relation to the distance to station 900 (Red Station), about 100 nautical miles to the east. The Green signal would over power the Red signal when the Launch (Navigator) was too close to station 910. This problem was rectified by placing an attenuator on the Navigator, but the system was more susceptible to thunderstorms because of the reduced signal strength. Consequently, on days when thunderstorms were predicted, the attenuator was taken off. — Not noted if the attenuator was removed between opening and closing calibrations.

As a result all data from July 2, 1982 (JD 183) was rejected due to lane loss immediately following morning calibration. The lines were rerun on JD 207. Also, on June 25, 1982 (JD 176), after morning calibration, fifteen lanes were lost on the Red Raydist rate due to the aforementioned signal strength problem. Since bottom samples were the only data collected, a fifteen lane corrector was applied via the corrector tape for that day.

The control equipment was calibrated by three point sextant fixes with check angles. Calibrations were done before and after each period of hydrography, except on JD 105 when an afternoon calibration was not obtained due to darkness. A strip chart recorder was monitored between calibrations to check for any lane gains or losses.

H. SHORELINE

No shoreline was delineated on this survey. Shoreline was transferred to the field sheet from Chart 11382, blown up to the scale of the survey, for orientation purposes only. — See Section 2. of the Evaluation Report.

I. CROSSLINES

Crosslines constitude 11% of the mainscheme hydrography. Ninety-nine percent (99%) of the crossings agree within one

foot. No soundings are in disagreement at crossings by more than two feet. The reasons for the disagreement of sounding at crossline is due to the steep bottom topography offshore.

J. JUNCTIONS

This survey junctions with the following surveys:

1. H-9968 to the North; HSB-10-3-81
2. H-9943 to the East; HSB-20-2-81
3. H-9954 to the South; HSB-40-1-81
4. H-10041 to the West; HSB-20-2-82 (In progress)

One hundred percent (100%) of these junction soundings agree within one foot when compared with the current survey. All of the junctions are non-overlap junctions since they are contemporary surveys by the same vessel and same methods.

The hydrographer recommends that in the junction areas, the soundings from the present survey be charted and that the depth curves be smoothed between two sheets, favoring the shoaler of any two overlapping soundings.

K. COMPARISON WITH PRIOR SURVEYS — See section 6. of the Evaluation Report.

This survey was previously covered by the following surveys:

1. H-5730 (1935); 1:20,000 scale
2. H-6635 (1940); 1:20,000 scale
3. H-6555 (1940); 1:40,000 scale
4. H-4139 (1919); 1:80,000 scale

Comparison of the present survey with H-5730, 1:20,000, 1935, could be considered excellent. H-5730 was a near - shore survey to the west of Caucus Channel. Of the 55 soundings compared, 99% agreed to within 1-2 feet, with no sounding in disagreement by more than 3 feet, except at the northeast corner of the west plotter sheet. In this area, near shore, present survey soundings are significantly deeper than those on the prior survey. Additional lines were run in the area to prove or disprove these findings, as close to shore as was safely possible, and no sounding less than ten feet was observed in the area. It is the opinion of the hydrographer that over the years the building of Caucus Shoal, directly to the east, has caused these deeper soundings inshore. Survey HSB-10-3-81, H-9968, verifies this assumption. Concur

Prior survey H-6635, 1940, 1:20,000, also agreed quite well with the present survey. Ninety-two percent (92%) of the 125 soundings compared agreed to within 1-2 feet, with 98% of the soundings agreeing to within three feet.

Comparison with H-6555, 1940, 1:40,000 is good considering the prior survey methods and the distance the control was carried offshore. Of the 66 soundings compared, 80% agree between 1-2 feet, with 94% in agreement to within three feet. A field reduced sounding of 76 feet was observed at latitude

30°08.13'N, longitude 87°20.95'W where the prior survey shows a sounding of 63 feet (which was brought forward to the Chart). It is the opinion of the hydrographer that the position of the prior survey sounding is in error, since a 64 foot sounding was found 200 meters to the northeast on the present survey (See Section L).

Survey H-4139 is a 1:80,000 survey which was done in 1919. Again the comparison with the present survey could be considered good considering the date and scale of the prior survey. Seventy-nine percent (79%) of the 120 soundings compared agreed between 1-2 feet, with 97% in agreement to within three feet.

Where discrepancies exist, it is recommended that the soundings from the present survey supercede the prior survey soundings due to the accuracy of present day survey methods. - Concur

L. COMPARISON WITH CHART

The only presurvey review item to be investigated during this survey was an unnumbered information item charted as a tide rip at latitude 30°18.5'N, longitude 87°20.6'W directly south of an 18-foot sounding. (from H-5730) No existence of a tide rip was observed while running mainscheme lines or when the 18-foot sounding was developed by closely spaced lines on JD 225. It is the opinion of the hydrographer that the notation for "tide rips" in this area be removed from the chart. ~~- Do not concur - insufficiently investigated for removal of the notation.~~ SKB

This survey was compared as the survey progressed with Chart 11382, 26th Edition and later with the 27th Edition, dated October 24, 1981. Charted soundings and shoreline features were transferred to the field sheet from Chart 11382, 23rd Edition, blown up to the scale of the survey. This blow-up was compared to the 26th Edition, as per project instructions, and no changes in the charted soundings were found.

The charted disposal area to the west of Caucus Channel was developed by splitting the mainscheme hydrography by 100 meters, in accordance with the project instructions. These lines were continued offshore to the edge of the sheet to also delineate a detached 60-foot contour. No discrepancies were observed in the disposal area.

Comparison of the present survey with charted soundings generally showed that the present survey was slightly shoaler than the chart. This discrepancy could be attributed to the fact that predicted tides were used to reduce field soundings. Of the 235 soundings compared, 78% agreed to within two feet, while 93% were in agreement up to three feet. Since the off-shore charted soundings were brought forward from smaller scale surveys up to 60 years old, a number of positional errors were detected when comparison was made to the present survey. The hydrographer recommends the following changes be made to the charted soundings:

Concur - See section 6. of the Evaluation Report.

Not applicable — Present hydrography supersedes all charted hydrography within the common area.

SOUNDING	CHARTED POSITION	PRESENT DEPTH	REMARKS
76ft	30°10.36'N 87°23.70'W	70-72ft	Shift position 200 meters east
81ft	30°08.57'N 87°21.50'W	76ft	Shift position 200 meters east
56ft	30°15.45'N 87°18.53'W	52ft	Shift position 200 meters southeast
57ft	30°15.48'N 87°18.10'W	52ft	Splits run in the area-shift position 200 meters south
69ft	30°14.88'N 87°15.60'W	63ft	Shift position 200 meters south
59ft	30°14.48'N 87°15.65'W	65ft	Shift position 200-300 meters south to fall in the extensive shoal less than 60 feet which was developed.
72ft	30°14.18'N 87°15.63'W	56ft	Shift position 400 meters south
68ft	30°14.48'N 87°16.15'W	60ft	Shift position 400 south
59ft	30°14.88'N 87°18.55'W	54ft	Shift position 200 meters south
71ft	30°13.45'N 87°18.50'W	66ft	Shift position 200 meters south
75ft	30°12.63'N 87°18.55'W	69ft	Shift position 300 meters south
72ft	30°12.20'N 87°16.95'W	66ft	Shift position 400 meters west
76ft	30°11.70'N 87°18.55'W	71ft	Shift position 200 meters south
71ft	30°08.55'N 87°19.20'W	65ft	Shift position 400 meters south
104ft	30°06.08'N 87°19.00'W	112ft	Shift position 200 meters north

No dangers to navigation were located during the survey. Concur
Numerous strays were detected while running mainscheme on the west plotter sheet only. These "suspicious traces" are believed to be schools of fish since they were only observed during the warmer months when the hydro was run. The most significant strays were developed by 25 meter splits on October 12, 1982 (JD 285). In addition there have been numerous occasions where fishermen have been observed towing "junk" (washing machines, tires, car bodies, etc.) offshore to create their own fish havens (pictures enclosed of one such vessel being readied to be towed offshore). Since these private havens are usually in deep water, and obviously do not pose a hazard to navigation, the number of
The numerous strays and spikes detected should be further investigated by divers or side scan sonar. Disregard SRB

None of the development data was plotted or collected in digital form and therefore was not evaluated. Additional work is recommended to resolve these spikes. See Examination Rpt

developments were limited to the most significant spikes, i.e., those rising off the bottom by four feet or more. The following strays were evaluated as follows:

DEVELOPMENT #1 - Lat 30°18.50'N, Lon 87°21.17'W

A five foot spike was found after the 5th out of position #1859, in 17 feet of water. Splits run perpendicular to the mainscheme at 25-meter spacing found nothing.

Recommendation: Disregard; probably fish.

DEVELOPMENT #2 - Lat 30°17.47'N, Lon 87°22.05'W

A four foot spike was observed after position #1602 (LEDE), in 28 feet of water. Twenty-five (25) meter splits were run over the position. Nothing was found.

Recommendation: Disregard; probably fish.

DEVELOPMENT #3 - Lat 30°17.32'N, Lon 87°22.08'W

Spike of four feet in 25 feet of water was observed on position #1939. Twenty-five (25) meter splits found noting in the area.

Recommendation: Disregard as fish.

DEVELOPMENT #4 - Lat 30°15.55'N, Lon 87°22.05'W

A three foot spike was observed after position 1598 in 38 feet of water. Twenty-five (25) meter splits were run parallel to, and perpendicular to, the position. An additional three foot spike was observed on the first line run over the item. Although the trace did not go to the bottom, and looked like fish, there may be a small pile of "junk" here. See Examination Rpt.

Recommendation: A dive is planned on this item to prove or disprove the existence of a wreck. Results will be forwarded when the dive is made. No charting action recommended at this time.

DEVELOPMENT #5 - Lat 30°15.27'N, Lon 87°23.67'W

A six foot spike in 50 feet of water was found after the 5th out of 1391. Twenty-five (25) meter splits were run over the position. A slight indication was observed after the first out of 2802 which looked like fish. In addition after the second out of that line, another smaller spike (1 ft) was seen on the bottom. There appears to be something there and diver investigation is warranted. See Examination Rpt

Recommendation: No charting action at this time. Further investigation is necessary with divers.

DEVELOPMENT #6 - Lat 30°16.57'N, Lon 87°23.05'W

A four foot spike was found in 30 feet of water after the first out of position #1300. Twenty-five (25) meter splits parallel to the mainscheme found nothing.

Recommendation: Disregard as fish.

The above developments were run on JD 285. A wide-beam transducer was used and the lines were plotted on the rough field sheet in the line plot mode of RK 112. The data was not smooth plotted. Developments were halted on JD 285 due to increasing wind and sea conditions. Numerous other strays were noted on the fathograms, and not plotted or investigated, since they rose off the bottom 2-3 feet and were not considered hazards to navigation. The rough field sheet will be kept on the party should further investigations be advisable. — See section E, of this report. The rough field sheets were not submitted with the survey records.

M. ADEQUACY OF SURVEY

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

N. AIDS TO NAVIGATION

No fixed or floating aids to navigation, cable crossings, or bridges are located within the limits of this survey.

O. STATISTICS

Number of positions	2,832
Nautical miles of sounding line	1,007.4
Nautical miles of crossline	108.9
Nautical miles of development	130.3
Total miles of hydrography	1,246.6
Number of bottom samples	73
Number of barchecks	41
Number of TDC casts	12

P. MISCELLANEOUS

On July 4, 1982, a severe thunderstorm hit the Pensacola Beach area with winds gusting to 45 knots causing one of the processing office trailers to be blown over on its side. All of the original master data tapes were saved in tact, however, some of the fathogram records and original master tape listings got wet in the storm. More specifically, the following days sustained minimal damage:

JD	JD
105	132
119	137
123	139
124	140

Interpretation of the records was not affected, but most of the problems exists in the handling of the data. Care must be taken when the data is verified so as not to add to the unfortunate situation.

Loran C comparisons were made by recording Loran values simultaneously with Raydist rates at bottom sample sites. The comparison forms will be submitted to CAM1.

A copy of the smooth sheet should be sent to the following people who have a vested interest in the data for their work:

Gulf Islands National Seashore
P. O. Box 100
Gulf Breeze, Florida 32561
Attention: Mr. Buck Thackery, Resource Manager

U. S. Army Corps of Engineers
Mobile District
P. O. Box 2288
Mobile, Alabama 36628
Attention: Mr. Thomas, SAM-FO-MO

Q. RECOMMENDATIONS

See Sections J, K, L, M, and P for specific recommdations.

R. AUTOMATED DATA PROCESSING

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

PROGRAM	DESCRIPTION	VERSION DATE
RK111	Range-range Real Time Hydroplot	1/30/76
RK201	Grid, Signal, and Lattice Plot	4/18/75
RK211	Range-range Non-Real Time Plot	1/15/76
RK300	Utility Computations	2/05/76
RK330	Reformat and Data Check	5/04/76
PM360	Electronic Corrector Abstract	2/02/76
RK407	Geodetic Inverse/Direct Computation	9/25/78
AM500	Predicted Tide Generator	11/10/72
RK530	Layer Corrections for Velocity	5/10/76
RK561	H/R Geodetic Calibration	2/19/75
AM602	Elinore-line oriented editor	5/20/75

S. REFERENCE TO REPORTS

Descriptive Report H-9968, 1981, 1:10,000
Descriptive Report H-9948, 1981, 1:20,000
Descriptive Report H-9954, 1981, 1:40,000 (In progress)
Control Report for OPR-J217 dated 1/12/82.

Respectfully submitted,

Samuel P. DeBow, Lt, NOAA

Lt. Samuel P. DeBow, Jr., NOAA
OIC, HFP-1

APPROVAL SHEET
SURVEY H-9971 (HSB-20-5-81)

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

Direct daily supervision was not given be me during the field work.

Approved and forwarded,

Geo W. Jamerson

George W. Jamerson
Lt. Cdr. NOAA
Chief, Hydrographic Surveys Branch

SIGNAL TAPE LISTING
OPR J217
HSB 20-5-81
H-9971
VESNO 1257

106	7	30	21	35305	087	10	56109	139	0000	000000

GULF BREEZE TANK *
QUAD 3008721, 1981

107	7	30	19	07174	087	15	18724	139	0000	000000

PARK RANGERS *
ANT POLE, 1981
QUAD 3008721

109	7	30	19	02194	087	15	26539	139	0000	000000

FIXED NO. 2 *
1942 - 1981
QUAD 3008721

110	7	30	19	18469	087	17	06198	139	0000	000000

H-73-FL-80, 1980 *
QUAD 3008724

111	7	30	20	47316	087	16	06799	139	0000	000000

****
PENSACOLA USN AIR
STA PWR STK, 1934
QUAD 300872 STATION 1137

114	7	30	20	45346	087	18	29205	139	0000	000000

****
PENSACOLA LIGHT-
HOUSE CENTER, 1867
QUAD 300872 STATION 1120

116	7	30	20	12536	087	18	59500	139	0000	000000

CAUCUS CHANNEL *
R RNG LT., 1981
QUAD 3008724

120	3	30	19	30907	087	18	46773	139	0000	000000

FORT MCREE LEADING
LIGHT, 1981 *
QUAD 3008724

124	7	30	20	49163	087	18	37416	139	0000	000000

SHERMAN FIELD TK**
QUAD 3008724, 1982

134	7	30	19	08571	087	25	32464	139	0000	000000

**
ESCAMBIA COUNTY TK
QUAD 3008724, 1982

136	7	30	17	42154	087	29	07650	139	0000	000000

ONO ISLAND TANK **
QUAD 3008724, 1982

900	7	29	40	09229	085	21	26851	250	0000	330640

CAPE SAN BLAS ****
LORAN TR 1956
QUAD 290851 STATION 1018

902	7	30	19	15517	087	13	24115	250	0000	330640

H-62-01, 1980***
QUAD 3008721

908	7	30	22	45075	086	52	47698	250	0000	330640

H-4-FL-77, 1980***
QUAD 3008634

910	7	30	19	45842	087	17	42885	250	0000	330640

H-82-FL, 1982 **
QUAD 3008724

Control located by:
* Hydrographic Field Party #1
** Hydrographic Surveys Branch
*** Operations Division
**** National Geodetic Survey

SPD.

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

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

[redacted] 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)

[ ] TO BE CHARTED [ ] TO BE REVISED [X] TO BE DELETED	REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
	HFP-1	FLORIDA	ENTRANCE TO PENSACOLA BAY	10/82

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

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
OPR-J217	HSB 20-5-81	H-9971	NORTH AMERICAN 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION 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
(TWIN) TANKS	Twin elevated tanks have been removed (Fort Barrancas East Tank-Lost)	30 21	06.198	87 17	28.051	Off the sheet	Triang Lost	11378 11382-NC 11383 11384
	Survey L-9141 82							

(69)

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	**NAME**	**ORIGINATOR**
OBJECTS INSPECTED FROM SEAWARD	Samuel P. De Bow, LT, NOAA	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	Samuel P. De Bow, LT, NOAA	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

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

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

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

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

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

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

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

FIELD (Cont'd)

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

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

II. TRIANGULATION STATION RECOVERED

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

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

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

☆ U.S.GPO:1975-0-665-080/1155

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

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

[redacted] 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-1	FLORIDA	ENTRANCE TO PENSACOLA BAY	10/82

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-J217	HSB-20-5-81	H-9971	NORTH AMERICAN 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION 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	Pensacola Beach East Tank (Signal 102)	30 20	26.339	87 05	51.599	Off the Sheet	F-3-6-L 3/78 2-22-82	11360 11378 11382 ✓ 11383
TANK	Pensacola Beach Tank (Signal 104)	30 19	55.438	87 08	29.041	Off the Sheet	F-3-6-L 3/78 2-22-82	11360 11378 11382 ✓ 11383
TANK	Multi-leg Tank in Gulf Breeze,FL (Signal 106) (Gulf Breeze Tank)	30 21	35.305	87 10	56.109	Off the Sheet	F-3-6-L 10-19-81	11360 11378 11382 ✓ 11383
* AERO Rot W&G	USNAS Pensacola Sherman Field Aero Beacon. Rotating W & G Light atop steel Skeletal Tower	30 20	49.681	87 18	50.799	Off the Sheet	F-3-6-L 2-22-82	11360, 11378 11382 ✓ 11383 11384
* TOWER	Steel and Concrete Observation Tower on Fort Pickens National Park (Sig 110) (H-73-FL-80)	30 19	18.469	87 17	06.198	Plotted on the Smooth Sheet	F-2-6-L	11378 11383 11384
* TANK	Escambia County Tank (Signal 134)	30 19	08.571	87 25	32.464	Off the Sheet	F-3-6-L 10-20-81	11360 11382 ✓
* TANK	Ono Island Tank (Signal 136)	30 17	42.155	87 29	07.651	Off the Sheet	F-3-6-L 10-20-81	11360 11382 ✓
* RADOME	Spherical Radar Dome mounted on steel skeletal tower at USNAS Pensacola (Sherman Field Radar Tower)	30 20	48.536	87 18	52.944	Off the Sheet	F-3-6-L 10-2-81	11378 11382 ✓ 11383 11384
TANK	NAVY YARD SUPPLY TANK	30 21	48.807	87 16	24.844	Off the Sheet	F-3-6-L 2-22-82	11378 11382 ✓ 11383
STACK	Brick Stack on USNAS Pensacola (Pensacola USN Air Sta Pwr Stk) (Sig111)	30 20	47.316	87 16	06.799	Off the Sheet	V-VIS Triang Recov 12-15-81	11378 11382 ✓ 11383 11384

(29)

* PRESENTLY NOT CHARTED

LP 2-1483(82

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	**NAME**	**ORIGINATOR**
OBJECTS INSPECTED FROM SEAWARD	Samuel P. De Bow, LT, NOAA	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	Samuel P. De Bow, LT, NOAA	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS
Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.
EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED
Enter the applicable data by symbols as follows:

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

A. Field positions* require entry of method of location and date of field work.
EXAMPLE: F-2-6-L
8-12-75

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

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.
EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED
When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.
EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH
Enter 'V-Vis.' and date.
EXAMPLE: V-Vis.
8-12-75

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

☆ U.S.GPO:1975-0-665-080/1155

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

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

[redacted] LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- [XX] 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 - 1	FLORIDA	ENTRANCE TO PENSACOLA BAY	10/82

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

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
OPR-J217	HSB 20-5-81	H-9971	NORTH AMERICAN 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION 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
TOWER	Skeletal Steel Pilot Lookout Tower (Sig 112)(Bar Pilots Lookout Tower)	30 20	47.650	87 17	21.236	Off the Sheet	F-6-V Triang Recov 10-23-81	11378 11382 11383 11384
TANK	Six-legged Tank at Sherman Field on USNAS Pensacola (Sig 124)(Sherman Field Tank)	30 20	49.163	87 18	37.416	Off the Sheet	F-3-6-L 10-2-81	11378 11382 11383 11384
RADIO TOWER	East of Three Radio Towers	30 21	27.80	87 17	00.26	Off the Sheet	Existance Verified 12/15/81 Pos. From Chart	11378 11382 11383
RADIO TOWER	South of Three Radio Towers	30 21	24.00	87 17	01.91	Off the Sheet	List 6-19-81 " "	"
RADIO TOWER	West of Three Radio Towers	30 21	27.25	87 17	04.87	Off the Sheet	" "	"
TANK	Water Tank in Warrington area	30 23	12.05	87 17	21.54	Off the Sheet	" "	"
TANK	Water Tank In Warrington Area (Warrington Water Tank)	30 23	08.714	87 16	46.945	Off the Sheet	Existance Verified. Triang Recov 6/19/81	11378 11382 11383
	Also L-1683 (84)							

(68)

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	**NAME**	**ORIGINATOR**
OBJECTS INSPECTED FROM SEAWARD	Samuel P. De Bow, LT, NOAA	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	Samuel P. De Bow, LT, NOAA	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

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

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

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

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

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

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

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

FIELD (Cont'd)

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

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

II. TRIANGULATION STATION RECOVERED

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

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

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

☆ U.S.GPO:1975-0-665-080/1155

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	**NAME**	**ORIGINATOR**
OBJECTS INSPECTED FROM SEAWARD	Samuel P. De Bow, LT, NOAA	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	Samuel P. De Bow, LT, NOAA	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS
Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.
EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED
Enter the applicable data by symbols as follows:

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

A. Field positions* require entry of method of location and date of field work.
EXAMPLE: F-2-6-L
8-12-75

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

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.
EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED
When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.
EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH
Enter 'V-Vis.' and date.
EXAMPLE: V-Vis.
8-12-75

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

☆ U. S. GPO:1975-0-665-080/1155

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	Samuel P. De Bow, LT, NOAA	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	Samuel P. De Bow, LT, NOAA	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS
Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.
EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED
Enter the applicable data by symbols as follows:

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

A. Field positions* require entry of method of location and date of field work.
EXAMPLE: F-2-6-L
8-12-75

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

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.
EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED
When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.
EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH
Enter 'V-Vis.' and date.
EXAMPLE: V-Vis.
8-12-75

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

☆ U.S.GPO:1975-0-665-080/1155

ORIG IN H-9754 folder

April 14, 1983

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): 872-9678 Navarre Beach, Florida

Period: September 10, 1981 - October 12, 1982

HYDROGRAPHIC SHEET: H-9971

OPR: J217

Locality: Offshore Pensacola Bay Entrance, Florida

Plane of reference (mean lower low water): 25.64 ft.

Height of Mean High Water above Plane of Reference is 1.38 ft.

REMARKS: Recommended Zoning:

Zone Direct

James R Hubbard
Chief, Datums and Information Branch

NOAA FORM 76-155
(11-72)

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

GEOGRAPHIC NAMES

SURVEY NUMBER

H-9971

Name on Survey	A ON CHART NO. 11382	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	
FLORIDA (Title)	X									1
GULF OF MEXICO (Title)	X									2
PENSACOLA BAY (Title)	X									3
PERDIDO KEY	X									4
CAUCUS SHOAL	X									5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
				Approved:						18
										19
				Charles E. Harrington						20
				Chief Geographer - N/CG2x5						21
				JUL 09 1984						22
										23
										24
										25

NOAA FORM 76-155 SUPERSEDES C&GS 197

NOAA FORM 77-27 | U.S. DEPARTMENT OF COMMERCE | REGISTRY NUMBER

HYDROGRAPHIC SURVEY STATISTICS

H-9971

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	SMOOTH OVERLAYS: POS., ARC, EXCESS	3
DESCRIPTIVE REPORT	1	FIELD SHEETS AND OTHER OVERLAYS	6

DESCRIPTION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/ SOURCE DOCUMENTS	
ACCORDIAN FILES	3					
ENVELOPES					2	
VOLUMES	2	1				
CAHIERS				1		
BOXES		1				

SHORELINE DATA

SHORELINE MAPS(List):

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			2696
POSITIONS REVISED	1485		1485
SOUNDINGS REVISED	163		163
CONTROL STATIONS REVISED			0
	TIME-HOURS		
	VERIFICATION	EVALUATION	TOTALS
PRE-PROCESSING EXAMINATION	4	14	18
VERIFICATION OF CONTROL	4		4
VERIFICATION OF POSITIONS	52		52
VERIFICATION OF SOUNDINGS	110		110
VERIFICATION OF JUNCTIONS	11		11
APPLICATION OF PHOTOBATHYMETRY			
SHORELINE APPLICATION/VERIFICATION	1		1
COMPILATION OF SMOOTH SHEET	54		54
COMPARISON WITH PRIOR SURVEYS AND CHARTS		34	34
EVALUATION OF SIDESCAN SONAR RECORDS			
EVALUATION OF WIRE DRAGS AND SWEEPS			
EVALUATION REPORT		18	18
OTHER	4	6	10
TOTALS	240	72	312

Pre-processing Examination by: R. G. Roberson & J. S. Bradford	Beginning Date: Nov. 16, 1982	Ending Date: Jan. 15, 1983
Verification of Field Data by: J. B. Wilson & H. R. Smith	Time(Hours): 236	Ending Date: Jan. 15, 1984
Verification Check by: J. S. Bradford, R. R. Hill, H. R. Smith, L. G. Cram, M. B. Hickson	Time(Hours): 74	Ending Date: Jul. 6, 1984
Evaluation and Analysis by: M. B. Hickson	Time(Hours): 58	Ending Date: Jul. 16, 1984
Inspection by: C. D. Meador	Time(Hours): 11	Ending Date: Jul. 16, 1984

ATLANTIC MARINE CENTER
EVALUATION REPORT

REGISTRY NO.: H-9971 FIELD NO.: HSB-20-5-81

Florida, Gulf of Mexico, Southwest of Pensacola Bay Entrance

SURVEYED: September 10, 1981 through October 12, 1982

SCALE: 1:20,000 PROJECT NO.: OPR-J217-HSB-81

SOUNDINGS: Raytheon DE-723D Fathometer CONTROL: Raydist (Range-Range)

Chief of Party.....G. W. Jamerson

Surveyed by.....A. A. Armstrong
.....S. P. DeBow

1. INTRODUCTION

a. No unusual problems were encountered during the verification of this survey.

b. Necessary corrections and notes made by the evaluator to the Descriptive Report are denoted in red ink.

2. CONTROL AND SHORELINE

a. The source of control is adequately discussed in sections F. and G. of the Descriptive Report.

b. Shoreline originates with registered Coastal Zone Map TP-00545 of 1978-79 and unregistered Coastal Zone Map TP-00543 of 1978-79.

3. HYDROGRAPHY

a. Soundings at crossings are in excellent agreement considering the irregular nature of the bottom within the area.

b. Except for a few short sections of the 12-ft. curve, depth curves were drawn at the standard intervals. A 90-foot brown curve, other brown curves, the 36-ft. supplemental curve, and dashed curves were added to better portray the bottom topography.

c. The development of the bottom configuration and investigation of least depths is considered adequate except:

1) Additional sounding lines would have been desirable on the shoal features in approximately:

a) Latitude 30°15'35", Longitude 87°22'55"

b) Latitude 30°12'50", Longitude 87°17'50"

c) Latitude 30°09'40", Longitude 87°19'00" disregard-no shoal located at this position. SRB.

2) The sounding lines along the northern part of the present survey were run parallel instead of perpendicular to the shoreline which detracts from alongshore feature development and portrayal.

3) Additional development would have been desirable on the spikes noted in section L. of the Descriptive Report. Additional work is recommended on these spikes in section 9. of this report. See Examination Rpt.

4. CONDITION OF SURVEY

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

a. Sounding line spacing frequently exceeded by 10 to 20 meters the 200 meter maximum allowance for sounding along an open coast. See section 4.3.4.2 of the Hydrographic Manual.

b. The position fix interval frequently exceeded by 1 to 3mm the 5cm maximum allowance for surveys where a position is determined and recorded for each sounding. See section 1.4.5.1. of the Hydrographic Manual.

c. Line spacing within the entire charted fairway anchorage areas should have been reduced to 100 meters. Do not concur - not a requirement SRB

d. No control stations were plotted on the final field sheets as required by section 4.2.1. of the Hydrographic Manual.

e. The northwest corner of the survey is in an area of weak electronic control pattern intersections. The data may be slightly displaced and not within the required standards of accuracy.

f. Insufficient bar checks (19 bar checks for 43 days of hydrography) were taken during this survey (see section 1.5.2. of the Hydrographic Manual). Twelve T.D.C. casts were used for velocity determinations but only two T.D.C. casts were within the survey area (see section 4.9.5. of the Hydrographic Manual).

g. Velocity tables 5, 6, 7, 8, 10, and 11 were revised during verification since the deeper depths were scaled incorrectly from the velocity graphs by the field.

h. The landmarks located and listed in the Descriptive Report could not be verified as the survey records for these landmarks were not available and possibly were not submitted to N.G.S. for inclusion into the geodetic network. only one landmark exists within common area

i. The developments run on year day 285 on six prominent spikes noted during this survey were not included in the survey's digital or graphic records. None of the six spikes were inserted into the digital files by the field or during verification. See Examination Rpt.

j. The TC/TI and velocity tapes submitted were not in accordance with AMC Operations Order 77, section V.

k. Sea and weather conditions were not annotated on the fathograms as required by section 4.8.3.7. of the Hydrographic Manual.

l. The charts used for comparison with the present survey were not submitted with the survey field data.

5. JUNCTIONS

H-10041 (1982-84) to the west
H-9968 (1981) to the northeast - George's coordinates not located during examination of present survey.
H-9954 (1981) to the south
H-9943 (1981) to the east

Adequate junctions were effected with surveys H-9943 (1981) and H-9968 (1981). A small junctional holiday (approximately 200 by 700 meters) exists between H-9968 (1981) and the present survey near the shore and west of Caucus Shoal in the vicinity of Latitude 30°18'55", Longitude 87°19'50".

The smooth sheet for survey H-9954 (1981) is archived at Headquarters and a standard junction was not made. Comparisons between the stable base copy of H-9954 (1981) and the present survey shows adequate agreement in the junctional areas and junctional curves can be completed. The appropriate junctional curves are drawn on the present survey and the curves on H-9954 (1981) require adjustment in the junctional area.

The junction between the present survey and survey H-10041 (1982-84) will be discussed in the Evaluation Report for H-10041 (1982-84).

No contemporary junctional surveys exist to the north of the present survey.

6. COMPARISON WITH PRIOR SURVEYS

a. Hydrographic Surveys

H-6635	(1940)	1:20,000
H-6634	(1940)	1:20,000
H-6633	(1940)	1:10,000 not w/i common area
H-6555	(1940)	1:40,000
H-6554	(1940)	1:40,000
H-5730	(1935)	1:20,000
H-4139	(1919-20)	1:80,000

Prior hydrographic surveys H-6635 (1940), H-6634 (1940), H-6633 (1940), and H-5730 (1935) collectively cover the northern one-sixth of the present survey. Comparison of present with prior hydrography reveals that depths and bottom structure remain quite similar with some minor shifting of bottom material except in the area just to the south of Caucus Shoal where present survey depths are up to 14 feet shoaler. Agreement between present and prior hydrography is generally good with most depths being within ± 1 to 3 feet. Throughout the area there appears to be a slight shoaling trend. The bottom in this area is basically irregular with sand waves which are shifted, oriented, and structured by currents.

Prior hydrographic surveys H-6555 (1940) and H-6554 (1940) cover the southern one-fourth of the present survey. Comparison of present with prior hydrography reveals that general depths and bottom structure remain quite similar. The bottom within the common area is irregular with substantial sand waves which shift with currents. The basic pattern or orientation of the ridges and troughs is similar on the present and prior surveys. Overall, the depths and structures give an indication of a slight shoaling trend within the common area.

Prior hydrographic survey H-4139 (1919-20) is common to the central area of the present survey. The bottom within the common area is irregular with substantial sand waves which are shifted, structured, and oriented by currents. The basic pattern or orientation of ridges and troughs is similar on the present and prior surveys. Overall, the depths and structures give an indication of a slight shoaling trend within the common area.

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

b. Wire Drag Survey

H-9466WD (1974) 1:40,000

Survey H-9466WD (1974) is common to the northeastern area of the present survey. Numerous conflicts exist between present hydrography and the effective wire-drag depths. These conflicts are on the crests of substantial sand waves which are shifted, structured, and oriented by currents. Present hydrography is considered adequate to supersede conflicting wire-drag effective depths within the common area since the bottom in this area is highly changeable. Four hangs on the prior survey were brought forward to the present survey smooth sheet. Charting recommendations for the four hangs are contained in the tabulation in section 8.4.b of the Evaluation Addendum to the Descriptive Report of H-9466WD (1974). These hangs are:

A - Burned remains of a vessel's hull - extends 5 ft. off bottom - estimated hang depth of 62 ft. - in Latitude 30°13'15", Longitude 87°18'42".

B - Uninvestigated hang - hung at 60 ft. - in Latitude 30°13'37", Longitude 87°17'21".

C - Unidentified obstruction - extends 3 ft. off bottom - estimated hang depth of 61 ft. - in Latitude 30°13'19", Longitude 87°16'20".

D - Hunk of metal - extends 3 ft. off bottom - hung at 63 ft. - cleared by 58 ft. - in Latitude 30°12'20", Longitude 87°16'35".

7. COMPARISON WITH CHARTS

11382 (27th Edition, October 24, 1981)
11382 (28th Edition, September 11, 1982)
11383 (38th Edition, April 25, 1981)
11383 (39th Edition, March 27, 1982)

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys and soundings from sources not readily ascertainable. The previously discussed prior surveys require no further consideration. Most of the charted soundings originating from unascertained sources are in the areas charted as Disposal Areas and Dump Sites, south of Caucus Shoal, and alongshore. These charted soundings are generally within ± 2 feet of present hydrography. Charting recommendations based on the results of this survey are adequately covered in section L. of the Descriptive Report.

The present survey is adequate to supersede the charted hydrography except as noted in this report.

b. Aids to Navigation

There are no aids to navigation common to the surveyed area.

8. COMPLIANCE WITH INSTRUCTIONS

This survey adequately complies with the Project Instructions except as noted in this report.

9. ADDITIONAL FIELD WORK

This is an adequate basic survey. Since none of the planned dive investigations were done, additional field work is recommended to further investigate the numerous spikes noted in section L. of the See Examination Rpt. Descriptive Report.

James B. Wilson
Cartographic Technician
Verification of Field Data

Maurice B. Hickson, III
Cartographer
Evaluation and Analysis

Harry R. Smith
Senior Cartographic Technician
Verification Check

Inspection Report
H-9971

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

Inspected

Charles D. Meador

Charles D. Meador
Chief, Evaluation and Analysis Group
Hydrographic Surveys Branch

David B. MacFarland, Jr., LCDR, NOAA
Chief, Hydrographic Surveys Branch

Approved July 16, 1984

Wesley V. Hull, RADM, NOAA
Director, Atlantic Marine Center

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF CHARTING AND GEODETIC SERVICES
ROCKVILLE, MARYLAND 20852

N/CG242:SRB

October 11, 1985

TO: N/CG24 - Roy K. Matsushige RKM

FROM: N/CG242 - George K. Myers, Jr. George K. Myers, Jr.

SUBJECT: Examination of Hydrographic Survey H-9971 (1981-82), Florida, Gulf of Mexico, Southwest of Pensacola Bay Entrance

Chief of Party	A. A. Armstrong
	S. P. DeBow
Field Unit	Hydrographic Field Party No. 1
Processed by	Atlantic Marine Center
Examined by	S. R. Baumgardner

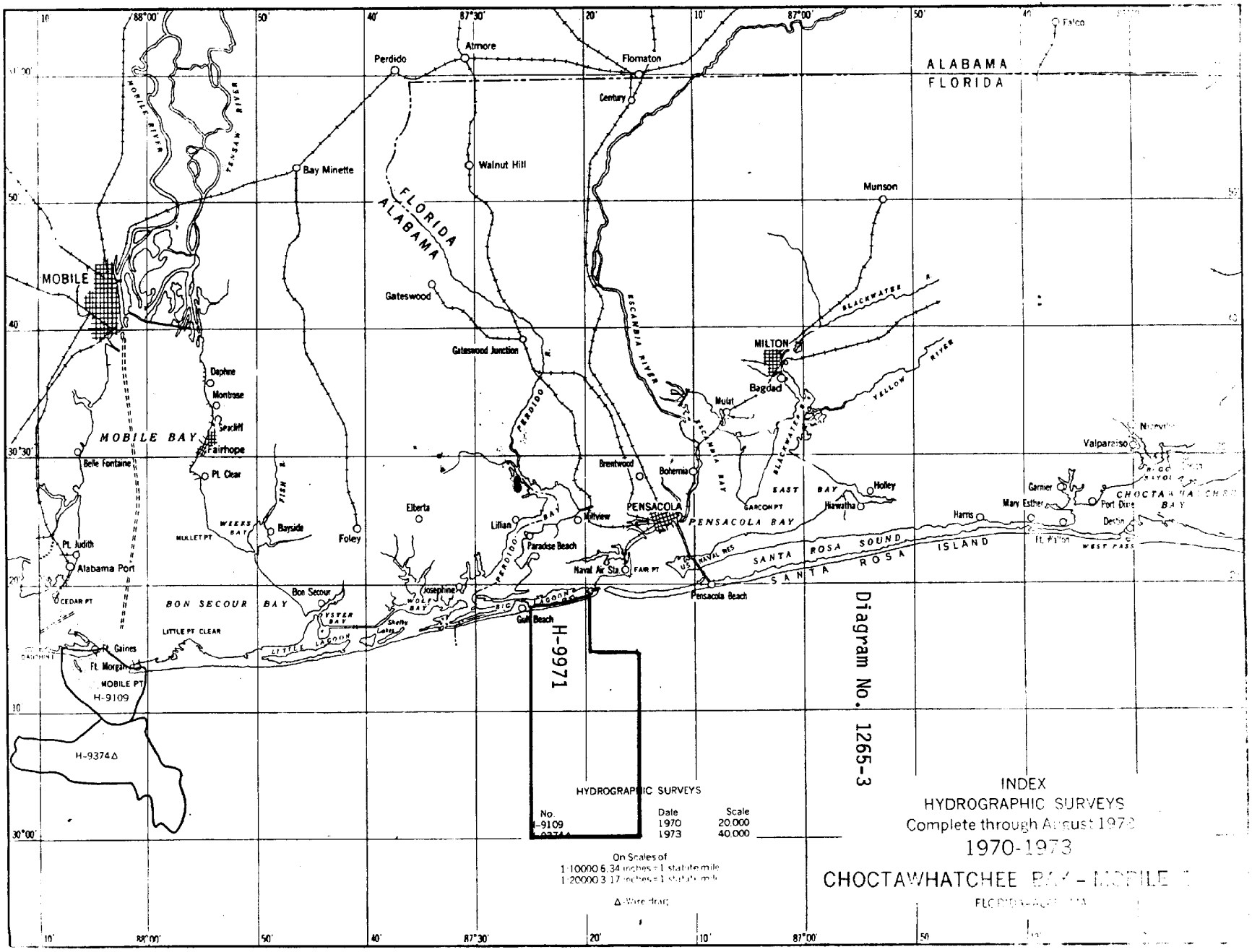
An examination of hydrographic survey H-9971 (1981-82) was accomplished to monitor the survey for adequacy with respect to data acquisition, conformance with applicable project instructions, delineation of the bottom, determination of least depths, navigational hazards, junctions, sounding line crossings, smooth plotting, shoreline transfer, digital data standards, decisions made and actions taken by the evaluator, and the cartographic presentation of data.

Digital data and/or programming deficiencies are identified on a full-scale plot made from the magnetic tape transmitted by the marine center. This plot will be forwarded to the marine center.

In general, the survey was found to conform to National Ocean Service standards and requirements except as stated in the Evaluation Report and as follows:

The examiner does not concur with the recommendations for additional field work stated in section 3, item C.3; and in section 9 of the Evaluation Report. In section L, of the Descriptive Report, the hydrographer discusses developments of six significant spike-like traces on the echograms. These developments, noted by the hydrographer to have been done on day 285, are not included in the survey records. However, it is likely that the hydrographer would have included these developments had they shown anything of significance. As a result of these developments, the hydrographer decided that four of the six traces were fish. There is no evidence that the planned dives on the other two traces were actually accomplished.

It is concluded that all of the spike-like traces on the echograms of this survey are fish and that these traces should be disregarded. This conclusion was reached after a careful examination of the echograms and other supporting documentation, such as the hydrographer's notes on the echograms. None of these traces are shown on the present survey and no additional work is considered necessary.


ALABAMA
FLORIDA
Perdido
Atmore
Flomaton
Century
Falco
Bay Minette
Walnut Hill
Munson
MOBILE
Gateswood
Gateswood Junction
MILTON
Bagdad
Daphne
Montrose
Spanish Fort
Fairhope
MOBILE BAY
Belle Fontaine
Pt. Clear
Mulat
Brentwood
Bohemia
Holley
Harwatha
Garnier
Valparaiso
Mary Esther
Harris
Elberta
Bayside
Foley
Lillian
Millview
PENSACOLA
PENSACOLA BAY
Pt. Judith
Alabama Port
Paradise Beach
Naval Air Sta
FAIR PT
SANTA ROSA SOUND
ISLAND
Pensacola Beach
Gulf Beach
Josephine
BON SECOUR BAY
Bon Secour
CEDAR PT
LITTLE PT CLEAR
Ft. Gaines
Ft. Morgan
MOBILE PT
H-9109
H-9374Δ
H-9971
Diagram No. 1265-3
HYDROGRAPHIC SURVEYS
No. Date Scale
H-9109 1970 20,000
1973 40,000
On Scales of
1:10000 6.34 inches = 1 statute mile
1:20000 3.17 inches = 1 statute mile
Δ Wire drag
INDEX
HYDROGRAPHIC SURVEYS
Complete through August 1973
1970-1973
CHOCTAWHATCHEE BAY - MOBILE

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-9971

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
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
11383	11/21/85	Cottle ww	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 36
~~11360~~			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
11360	3/6/85	Cottle ww	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 42
11382	12/3/85	Maria Herrick ww	Full Part Before After Verification Review Inspection Signed Via
			Drawing No. 38
11006	4/30/86	Pearce Hunt ww	
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No. 35
411	9/17/90	Dan Hoch	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 62 THRU 11006 #35.
11378	11/9/90	William Harper ww	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 26 Applied IN FULL, ~~PARTIALLY~~ ALSO THRU
			# 11383
11383	12-19-91	William B Harper	Full Part Before After Verification Review Inspection Signed Via
			Drawing No. #39 Reapplication
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8556-P63