

1021

NOAA FORM 76-35A

# DESCRIPTIVE REPORT

LOCALITY

CHIEF OF PARTY

LIBRARY &amp; ARCHIVES

DATE ..... January 3, 1989 .....

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

CAT  
 89) 1373 ✓  
 40) 1374 A ✓  
 1360  
 20) 1375 ✓



## HYDROGRAPHIC TITLE SHEET

H-10261

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-20-4-87

State ALABAMA -- MISSISSIPPI

General locality GULF OF MEXICO

Locality PETIT BOIS PASS TO PETIT BOIS ISLAND

Scale 1:20,000 Date of survey 04 DEC. 1987 - 22 DEC. 1987

Instructions dated 29 NOVEMBER 1983 \* Project No. OPR-J217-HFP -84

Vessel NOAA LAUNCH 1257 (EDP 1257)

Chief of party LCDRs KENNETH W. PERRIN & DAVID A. WALTZ

Surveyed by HYDROGRAPHIC FIELD PARTY #1, LTJG DAVID W. MOELLER, OIC

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

Graphic record scaled by PARTY PERSONNEL: DWM, GSL, RWR, MJB

Graphic record checked by DWM

Protracted by - Field Sheet Automated plot by PDP/e Computer  
XYNETICS 1201 Plotter (AMC)

Verification by AMC HYDROGRAPHIC SURVEYS BRANCH

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

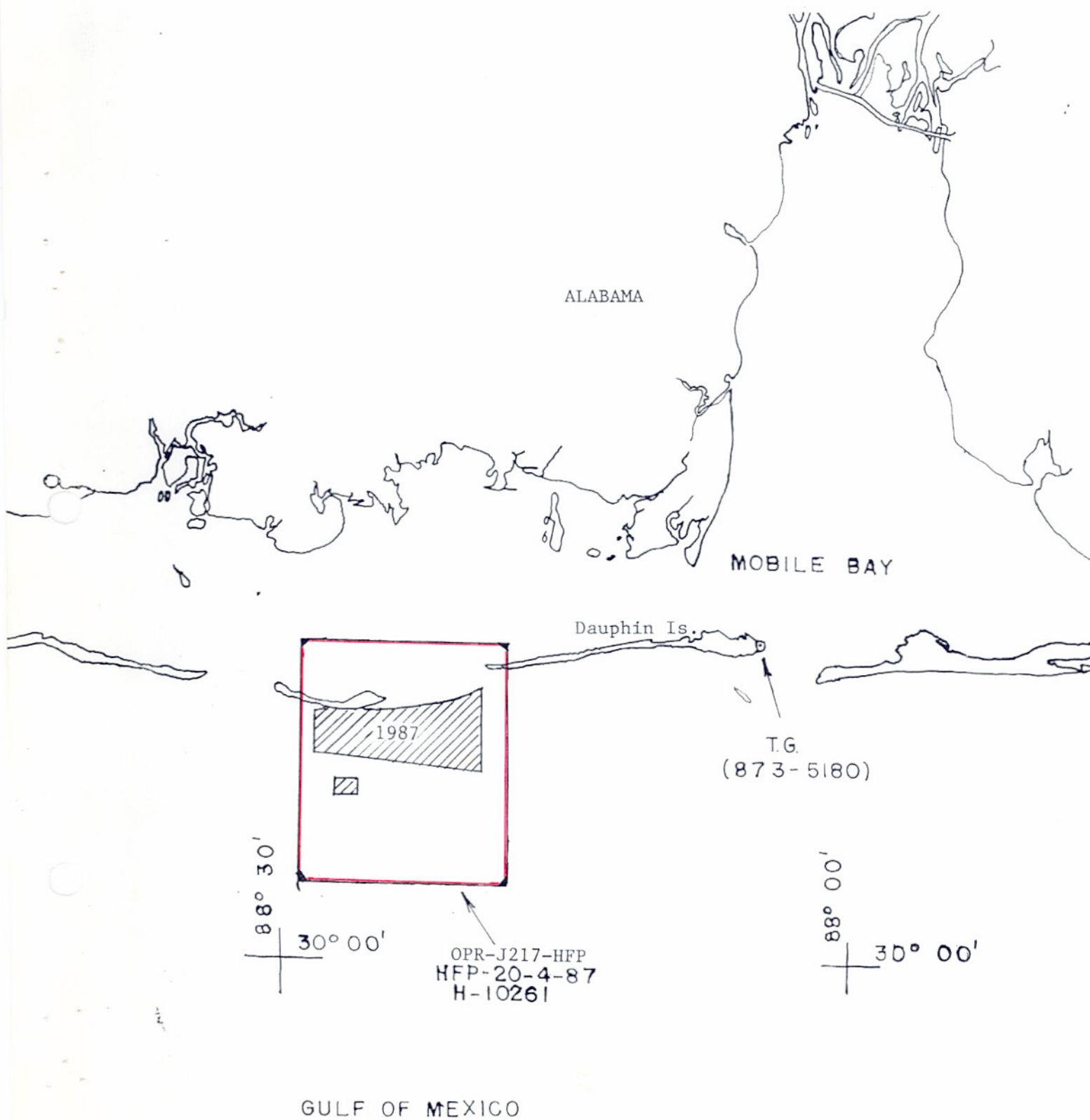
REMARKS: \* Change No. 1 - 06 AUG. 1984 DWM - David W. Moeller  
Change No. 2 - 15 JAN. 1985 GSL - George S. Lloyd  
Change No. 3 - 27 AUG. 1985 RWR - Robert W. Ramsey  
Change No. 4 - 04 APR. 1986 MJB - Michael J. Briscoe  
Change No. 5 - 14 NOV. 1986  
Change No. 6 - 06 MAR. 1987

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

AWOIS/SURF 12 APR 89 LQ

Approved 27 JUL 88

3-27-87 N. Wike Cartographer  
RWW 4-12-88



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H-10261

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\* Removed from the original Descriptive Report and  
filed with the field survey records.



DESCRIPTIVE REPORT  
TO ACCOMPANY  
HYDROGRAPHIC SURVEY H-10261  
HFP-20-4-87

Scale: 1:20,000

Chief of Party: Lt. Cdr. Kenneth W. Perrin (to Dec. 11, 1987)

Lt. Cdr. David A. Waltz (from Dec. 14, 1987)

Officer in Charge: Lt. (jg) David W. Moeller

Hydrographic Field Parties Section

Hydrographic Field Party #1

Launch 1257

A. PROJECT

Hydrographic Survey, H-10261, designated Sheet Z, was accomplished under Project Instructions OPR-J217-HFP, dated 29 November 1983 and amended by:

Change No. 1, dated 06 August 1984,  
Change No. 2, dated 15 January 1985,  
Change No. 3, dated 27 August 1985,  
Change No. 4, dated 04 April 1986,  
Change No. 5, dated 14 November 1986,  
Change No. 6, dated 06 March 1987.

This project is a basic hydrographic survey intended to provide modern data to support existing nautical charts and the NOS bathymetric mapping program.

B. AREA SURVEYED

The area surveyed is located in Alabama, Gulf of Mexico, Petit Bois Pass to Petit Bois Island. The survey is bounded on the north by Petit Bois Island and the COLREGS Demarcation Line between Dauphin and Petit Bois Islands. The eastern boundary is 088°20'00"W and on the western boundary is 088°28'42"W. The southern boundary is the northern edge of survey H-10208 or more specifically a line from 30°08'20"N, 088°20'00"W to 30°09'15"N, 088°28'42"W.

Included with this survey is additional work on survey H-10208 as required by Change No. 5 of this project. Originally intended as a field examination it has been treated as the southern sheet of this survey.

This survey was conducted from 04 December 1987 to 22 December 1987.



C. SOUNDING VESSEL

NOAA launch 1257 (EDP 1257) was the only vessel used to gather data. No unusual sounding configurations were used nor unusual problems encountered.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

Soundings were recorded with the following Raytheon Model DSF-6000N Fathometer:

UNIT	SERIAL NUMBER	INCLUSIVE DATES
Model DSF-6000N		
Recorder/	B037N	DN 338 - DN 356
Transcriber		
TMU 7191	AB-221	DN 338 - DN 356

The above equipment was used to measure depths ranging from approximately six (6) to sixty (60) feet.

The Raytheon DSF-6000N Fathometer was used by launch 1257. Both the high and low frequency transducers have the same draft, and settlement and squat correctors are the same. All data gathered using the DSF-6000N was in the High + Low (High Digitized) mode. (Correctors are applied equally to both high and low frequency information.)

All fathograms were scanned for peaks and deeps and for the effects of heave. The appropriate changes were made on the corrector tapes.

The following procedures were used to determine the corrections to echo soundings:

Velocity Corrections

Daily bar checks were taken throughout the survey. Twice daily bar checks as required by Sections 1.5.2. and 4.9.5.1.1. of the Hydrographic Manual were not obtained.

Six bar checks were obtained from launch 1257. A copy of the lead line/bar line calibration is included in the accordion file. Corrections to echo soundings for launch 1257 velocity of sound through water were determined from 2 nansen casts. The velocity corrector tables were generated by PDP8/e program RK530, Layered Correctors for Velocity and NOS program VELTAB. Copies of Nansen thermometer calibrations are located in the accordion file.

The instrument correction was determined from comparison of bar check and velocity corrector data and have not been applied to the soundings on the final field sheet. This correction will be applied to the soundings on the final smooth sheet via the TC/TI tape.



Copies of all direct comparison forms are included in the accordion file.

#### Settlement and Squat

Settlement and squat for launch 1257 was measured using the level instrument method described in Section 4.9.4.2, of the Hydrographic Manual. The results of these measurements are included in the accordion file. Settlement and squat correctors were not applied to the final field sheet, but have been included on the TC/TI tape and will be applied to the soundings on the final smooth sheet.

#### Draft Correction

A launch draft correction of 2.7 feet was applied. A copy of the Sounding Correction Abstract\* is included in the appendix, along with printouts of the velocity and TC/TI tapes.\*

#### Tide Correction

Field tide reduction of soundings was based on predicted tides from Pensacola, Florida (Tide Table Station 3651), corrected to Horn Island Pass (Tide Table Station 3679).

All field tide correctors were interpolated from the predictions in the NOS Tide Tables using a PDP8/e computer and HYDROLOT program AM500. A printout of predicted tide tapes is located in the accordion file.

Smooth tides have been requested from Sea and Lake Levels Branch (N/OMA12). Field Tide Note and a copy of the smooth tide request are appended.\*

#### E. HYDROGRAPHIC SHEETS (Field Sheets)

Field sheets used during this survey were prepared in the field using a PDP8/e computer and a Houston Instrument DP-3 Complot plotter. Final field and overlay sheets are included with this survey. Mainscheme, crossline, and development soundings are plotted on the final field sheet. Bottom samples, detached positions, charted soundings, junction soundings, and prior survey soundings are plotted on the overlay sheets.

The projection parameter tapes are included with the project data. Parameter tape listings are included in the appendix.\*

All records will be forwarded to the Hydrographic Surveys Branch at the Atlantic Marine Center for verification and smooth plotting.

\* Removed From the original Descriptive Report and filed with the original field records.



## F. CONTROL STATIONS

All control stations used during this survey were either existing geodetic control published by the National Geodetic Survey or control located by either Coastal Surveys Unit, MOA2222 or by HFP-1 personnel. All positions are based on the North American 1927 Datum and meet third order, Class 1 standards. *See also section 2.c. of the Evaluation Report.*

A list of control stations used during this survey is included in the appendix.

One station is located seaward of the shoreline. It is as follows:

MBEPSI WELLHEAD BLK 822 (Signal Number 024). This station is a capped wellhead used as a fixed point system check site. *This station falls off the area of the smooth sheet.*

## G. HYDROGRAPHIC POSITION CONTROL

The Motorola Falcon 484, Mini-Ranger system was used for all hydrographic position control during this survey.

The following Mini-Ranger equipment was used during this survey:

UNIT	SERIAL NUMBER	DAY NUMBERS
=====	=====	=====
RPU	E0160	338 - 356
CDU	E 009	338 - 356
R/T	F3389	338 - 356
R/S	E2969	338 - 356
R/S	F3292	338 - 356

Baseline calibrations were performed before and after the survey. Mean baseline correctors were applied to Mini-Ranger S/N F2969 data via the corrector tapes. Mini-Ranger S/N F3292 failed during the closing baseline calibration. The opening baseline correctors for this unit was applied to all data via the corrector tapes.

Twice daily critical system checks were conducted using the fixed point method. Copies of all system checks and baseline calibrations are included in the accordion file.

The ANDIST correctors for the launch is 0.0 meters. An Electronic Corrector Abstract is appended.\*

*\*Removed from the original Descriptive Report and filed with the original field records.*



H. SHORELINE - See section 2. b. of the Evaluation Report.

No verification of shoreline was conducted. Shoreline shown on the Final field sheet is from an unverified advance copy of TP-01355.

One control station exist seaward of the shoreline. It is detailed in Section F of this report.

The Coast Pilot Report for this survey is appended.

I. CROSSLINES - See section 3. a. of the Evaluation Report.

Crosslines totaled 37.6 nautical miles or 13% of the hydrography.

Crossline agreement with mainscheme hydrography was very good with random differences of less than two feet.

J. JUNCTIONS - See section 5. of the Evaluation Report.

This survey junctions with the following surveys:

H-10247, 1:20,000, 1987 (to the east),  
H-10208, 1:20,000, 1985 (to the south).

Agreement with H-10247 was very good with random differences of less than two feet.

Agreement with H-10208 was good with random differences of less than three feet.

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

The survey area was previously covered by the following surveys:

H-4424	1917-18	1:40,000
H-4171	1920	1:80,000
H-8647	1961-62	1:20,000
H-9118	1970	1:20,000
FE-349WD	1974	1:40,000

Comparison to prior survey H-4171 showed good agreement with random differences of one to three feet throughout the survey area.

Comparison to prior survey H-8647 showed fair agreement with random differences of one to four feet. AWOIS item # 0448 originates with this survey. No investigation of this item was conducted due to the close proximity of shoal water to this item.

Comparison to prior survey H-9118 showed good agreement with random differences of one to three feet with the exception of the Petit Bois Pass area where differences of up to six feet were noted.

L. COMPARISON WITH THE CHART - *See section 7. of the Evaluation Report*

Comparisons were made between this survey and the following NOAA charts:

11373, 30th Edition, Sep. 6, 1986,  
11374, 20th Edition, Dec. 29, 1984,

Agreement between the survey and the published charts of the area was good with the exception of the Petit Bois Pass area where larger differences were noted.

No uncharted Dangers to Navigation were located during this survey.

The following AWOIS items were investigated during this survey:

AWOIS 3599 - Sunken Wreck, Cleared to 30FT. Survey lines in the vicinity of this wreck revealed no evidence of its existence. Electronic control problems prevented further investigation. Recommend it remain as charted. *See section 6.b. of the Evaluation Report.*

AWOIS 3602 - Visible Wreck (Not charted due to planned salvage efforts). A visible wreck was located on DN 352. A detached position (pos. # 708) was taken approximately 120 meters due south of the wreck as shoal water prevented a closer approach. The wreck lies approximately 10 meters from the waters edge and bares approximately 4 feet. A position of  $30^{\circ}11'48.5N$   $088^{\circ}26'40.6W$  was determined by direct computation from position 708 using an azimuth of  $180^{\circ}00'00''$  and a distance of 120 meters. It is recommended that this item be charted as a visible wreck (PA) at the computed position. *See section 7.a.1) of the Evaluation Report.*

AWOIS Item Reports are located in the accordion file. - *See pages 28 and 29 of the Hydrographer's Report.*

All areas where shoals or spikes were indicated by the Fathometer record were developed using reduced line spacing. *See sections 7.a.4) and 7.a.5) of the Evaluation Report.*

M. ADEQUACY OF SURVEY

This survey is complete and adequate to supersede all prior surveys in the common area for charting purposes.



N. AIDS TO NAVIGATION

No fixed or floating aids exist within the boundaries of this survey.

No bridges, overhead or submarine cables, pipelines or ferry routes exist in the survey area.

O. STATISTICS

	TOTAL
	-----
Days of Production.....	6
Number of positions.....	837
Nautical miles of sounding lines.....	283.3
Mainscheme.....	242.4
Crosslines.....	37.6
Development.....	3.3
Square nautical miles of hydrography....	25
Bottom samples.....	46
Tide stations.....	0
Current stations.....	0
Nansen casts.....	2
Magnetic stations.....	0

P. MISCELLANEOUS

Lack of recoverable existing control, access difficulty for installation of new control on Petit Bois Island, and lack of clear sight lines for Range/Azimuth control prevented the completion of the northern edge of this survey to the required 12 foot contour. Blockage of station #810 by the trees on the east end of Petit Bois Island, prevented completion of work to the maximum allowable intersection angle in the northwest corner of this survey.

All bottom samples were sent to Smithsonian Institution. Copies of Oceanographic Log Sheet-M are appended.\*

No anomalous currents were observed in the survey area.

Loran-C data was collected automatically at each fix by the HYDROPLOT system on DN 338 only. Malfunction of the Loran-C receiver prevented collection of data on all other days.

Q. RECOMMENDATIONS

None.

\* Removed from the original Descriptive Report and filed with the original field records.

R. AUTOMATED DATA PROCESSING

The following HYDROPLOT system programs were used during this survey:

PROGRAM	DESCRIPTION	VERSION
RK112	Range-Range and Hyperbolic Real-Time HYDROPLOT	04/23/84
RK201	Grid, Signal, and Lattice Plot	04/18/75
RK221	Range-Range Non-Real Time Plot	07/25/86
RK226	Range-Azimuth Non-Real Time Plot	07/25/86
RK300	Utility Computations	10/21/80
RK321	LORAN-C Computations	10/21/80
RK330	Reformat and Data Check	05/04/76
PM360	Electronic Corrector Abstract	02/02/76
RA362	RK330 and AM602 Combined	08/20/84
RK407	Geodetic Inverse/Direct Computation	09/25/78
RK409	Geodetic Utility Package	09/20/78
AM500	Predicted Tide Generator	11/10/72
RK530	Layer Corrections for Velocity	05/10/76
RK561	H/R Geodetic Calibration	12/01/82
AM602	ELINORE--Line Oriented Editor	12/08/82
RK606	Tape Duplicator	08/22/74
MI999	Utility Plot	05/30/73

NOS program VELTAB

S. REFERENCE TO REPORTS

AWOIS Item Reports  
Horizontal Control Report  
Coast Pilot Report

Respectfully Submitted,

*Robert Snow for*

David W. Moeller, LTJG, NOAA  
Officer in Charge, HFP-1



SIGNAL TAPE LISTING

OPR-J217-HFP  
HFP-20-4-87  
H-10261

VESNO 1257

024 6 30 11 05236 088 11 15370 250 0006 000000 MBEPSI  
WELLHEAD 822  
QUAD 3008822, 1987

\*  
off  
sheet  
sheet

008 6 30 12 07171 088 27 54585 250 0000 000000 PETIT BOIS 1985 \*\*  
QUAD 3008823

010 6 30 13 49573 088 10 15159 250 0008 000000 DAUPHIN \*\*\*  
STA #1036  
QUAD 3008823, 1935

CONTROL LOCATED BY:

\* HYDROGRAPHIC FIELD PARTY # 1  
\*\* PHOTOGRAMMETRY BRANCH  
\*\*\* NATIONAL GEODETIC SURVEY

CHART # 11373

ITEM # AWOIS 3599

ITEM DESCRIPTION : SUNKEN WRECK, CLEARED 30 FT

SOURCE : HFP-1

INVESTIGATION DATE:        TIME:        VESSEL:

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-4-87, H-10261

POSITION #:        VOLUME:        PAGE:

CORRECTORS APPLIED:

VELOCITY

TRA CORRECTOR

PREDICTED OR

ACTUAL TIDE CORRECTORS

GEODETIC POSITION:

CHARTED:

LATITUDE  
30°09'15.00"

LONGITUDE  
088°28'28.80"

OBSERVED:

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

FATHOMETER SEARCH

CHARTING RECOMMENDATION:

SURVEY LINES REVEALED NO EVIDENCE OF WRECK. SEARCH WAS  
INSUFFICIENT TO DISPROVE REMAIN AS CHARTED.

*See section 6.b. of the Evaluation Report. For a charting  
recommendation.*

-----  
Compilation use only

CHART

APPLIED AS



CHART # 11373

ITEM # AWOIS 3602\*

ITEM DESCRIPTION : VISIBLE WRECK (PA)

SOURCE : HFP-1

INVESTIGATION DATE: 18 DEC 1987 TIME: 172143 VESSEL: 1257

OIC: LTJG DAVID W. MOELLER

REFERENCE: OPR-J217-HFP, HFP-20-4-87, H-10261

POSITION #: 708 VOLUME: 1 PAGE: 13

CORRECTORS APPLIED:

VELOCITY

TRA CORRECTOR

PREDICTED OR

ACTUAL TIDE CORRECTORS

GEODETTIC POSITION:

CHARTED:

LATITUDE

LONGITUDE

30°11'42" 8 088°27'30"

OBSERVED:

30°11'48.53"N 088°26'40.61"W

POSITION DETERMINED BY: MINI-RANGER

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH

CHARTING RECOMMENDATION:

WRECK WAS LOCATED VISUALLY AND A DP WAS TAKEN APPROXIMATELY 120 METERS DUE SOUTH OF ITS POSITION (DUE TO VESSEL SAFETY CONSIDERATIONS). REPORTED POSITION HAS BEEN CORRECTED FOR THIS OFFSET. ~~RECOMMEND IT BE CHARTED AS A VISIBLE WRECK (PA).~~

*See section 7.2.1) of the Evaluation Report*

\* Not presently charted see attached AWOIS listing.

-----  
Compilation use only

CHART

APPLIED AS

03602  
LITTLE TUB    Z    1 0000000 30/11/42.00 088/27/30.00    J 82 11 0098 11373

HISTORY

LNM48/83 (11/16/83)--8TH CGD; F/V LITTLE TUB, 30 FT LONG, REPORTED SWAMPED AND GROUND ON THE SOUTH OF PETIT BOIS ISLAND IN APPROX. POSITION AT.30-11-42N, LONG.88-27-30W. WILL NOT BE CHARTED SINCE SALVAGE EFFORTS ARE PLANNED. (ENTERED 9/84 RWD)

SURVEY REQUIREMENTS

FULL--VERIFY BY VISUAL SEARCH AT SOUNDING DATUM. IF NOT VISIBLE, A BOTTOM DRAG OR DIVER INVESTIGATION IS REQUIRED (750M MINIMUM RADIUS). IF FOUND, LEAST DEPTH REQUIRED. DISPROVAL BY SALVAGE DOCUMENTATION LIKELY IN

THIS CASE.

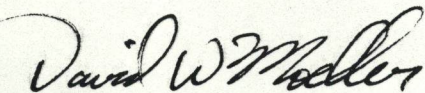
SIGNED: OPR-J217-MI-85



COAST PILOT REPORT  
To Accompany  
Hydrographic Survey  
H-10261

The portions of the U.S. Coast Pilot 5, 19th edition, August 1986, pertaining to Survey H-10261 were reviewed. No previously unsubmitted changes are necessary.

Respectfully submitted,



David W. Moeller  
LTJG, NOAA  
OIC, HFP-1

APPROVAL SHEET

For

OPR-J217-HFP

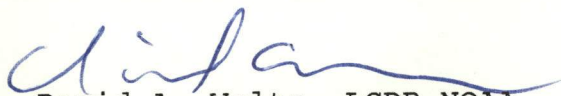
HFP-20-4-87

H-10261

The hydrographic records transmitted with this survey are complete and adequate for charting purposes. No additional field work is recommended.

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

Approved and forwarded,



David A, Waltz, LCDR NOAA  
Chief, Hydrographic Field Parties Section



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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: March 11, 1988

MARINE CENTER: Atlantic

OPR: J217

HYDROGRAPHIC SHEET: H-10261

LOCALITY: Alabama, Gulf of Mexico

TIME PERIOD: December 4 - 22, 1987

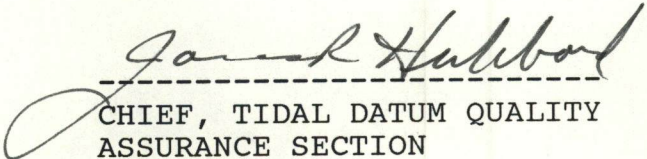
TIDE STATION(S) USED: 873-5180 Dauphin Island, AL

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 2.68 ft.

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

REMARKS: RECOMMENDED ZONING

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

  
CHIEF, TIDAL DATUM QUALITY  
ASSURANCE SECTION



## GEOGRAPHIC NAMES

H-10261

Name on Survey	ON CHART NO. 11373									
	A	B	C	D	E	F	G	H	K	
	ON PREVIOUS SURVEY NO.	CON U.S. QUADRANGLE MAPS	FROM LOCAL INFORMATION	ON LOCAL MAPS	P.O. GUIDE OR MAP	GRAND MCNALLY ATLAS	U.S. LIGHT LIST			
ALABAMA (title)	X									1
MEXICO, GULF OF	X									2
MISSISSIPPI (title)	X									3
PETIT BOIS ISLAND	X									4
PETIT BOIS PASS	X									5
										6
										7
										8
										9
										10
										11
										12
										13
										14
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										16
										17
										18
										19
										20
										21
										22
										23
										24
										25

Approved:

*Charles E. Harrington*  
Chief Geographer - N/CG2x5

JUL 5 1988



08/02/88

HYDROGRAPHIC SURVEY STATISTICS  
REGISTRY NUMBER: H-10261

NUMBER OF CONTROL STATIONS

2

NUMBER OF POSITIONS

840

NUMBER OF SOUNDINGS

5505

TIME-HOURS

DATE COMPLETED

\* PREPROCESSING EXAMINATION

36

02/29/88

VERIFICATION OF FIELD DATA

94

06/09/88

QUALITY CONTROL CHECKS

57

EVALUATION AND ANALYSIS

41

07/26/88

FINAL INSPECTION

6

07/21/88

TOTAL TIME

198

MARINE CENTER APPROVAL

07/27/88

\* Preverification time is not considered as part of total survey time.



MOA23-105-88

## LETTER TRANSMITTING DATA

TO:

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

DATA AS LISTED BELOW WERE FORWARDED TO YOU  
BY (Check):☐ ORDINARY MAIL☐ AIR MAIL☒ REGISTERED MAIL☐ EXPRESS☐ GBL (Give number) \_\_\_\_\_

DATE FORWARDED

15 DEC 1988

NUMBER OF PACKAGES

Two (2)

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

H-10261 (HFP-20-4-87)  
OPR-J217-HFP-84, Alabama--Mississippi,  
Gulf of Mexico,  
Petit Bois Pass to Petit Bois Island

PKG. 1 (TUBE)

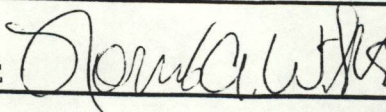
- 1 FINAL SMOOTH SHEET
- 1 FINAL POSITION OVERLAY
- 2 FINAL EXCESS OVERLAYS
- 1 ORIGINAL DESCRIPTIVE REPORT
- 4 FINAL FIELD SHEET

PKG. 2 (BOX)

- 1 CAHIER containing FINAL POSITION PRINTOUT
- 1 CAHIER containing FINAL SOUNDING PRINTOUT
- 1 NOAA FORM 77-44 (SOUNDING VOLUMES)
- 1 ENVELOPE containing SUPPLEMENTAL DATA FROM PRINTOUTS
- 1 ENVELOPE containing DATA REMOVED FROM DESCRIPTIVE REPORT

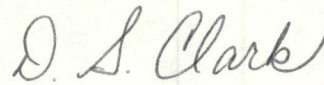
FROM: (Signature)

NORRIS A. WIKE

RECEIVED THE ABOVE  
(Name, Division, Date)

Return receipted copy to:

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

  
1-3-89



REFERENCE NO.

MOA23-105-88

## LETTER TRANSMITTING DATA

DATA AS LISTED BELOW WERE FORWARDED TO YOU  
BY (Check):☐ ORDINARY MAIL☐ AIR MAIL☒ REGISTERED MAIL☐ EXPRESS☐ GBL (Give number) \_\_\_\_\_

DATE FORWARDED

15 DEC 1988

NUMBER OF PACKAGES

Two (2)

TO:

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

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

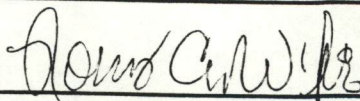
H-10261 (HFP-20-4-87)  
OPR-J217-HFP-84, Alabama--Mississippi,  
Gulf of Mexico,  
Petit Bois Pass to Petit Bois Island

PKG. 2 (BOX) CONT:

- 1 BINDER containing CALIBRATION DATA
- 1 ACCORDION FILE containing MASTER TAPE PRINTOUTS, CORRECTOR TAPE PRINTOUTS, and FATHOGRAMS for following VESNO 1257: JD's: 338, 344-345, 351-352, 356

FROM: (Signature)

NORRIS A. WIKE



Return receipted copy to:

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

RECEIVED THE ABOVE  
(Name, Division, Date)

D. S. Clark  
1-3-89



ATLANTIC MARINE CENTER  
EVALUATION REPORT

SURVEY NO.: H-10261

FIELD NO.: HFP-20-4-87

Alabama--Mississippi, Gulf of Mexico, Petit Bois Pass to Petit Bois Island

SURVEYED: 4 December through 22 December 1987

SCALE: 1:20,000

PROJECT NO.: OPR-J217-HFP-84

SOUNDINGS: RAYTHEON DSF-6000N Fathometer

CONTROL: MOTOROLA Mini-Ranger Falcon 484 (Range/Range)

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

Surveyed by.....D. W. Moeller  
.....M. J. Briscoe  
.....G. S. Lloyd  
.....R. W. Ramsey

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

1. INTRODUCTION

a. Additional work to be conducted by the field unit working on the present survey was requested on survey H-10208 (1985). The additional work on survey H-10208 (1985) was conducted under the authority of Change No. 5, dated 14 November 1986 to Project Instructions OPR-J217-HFP-84, dated 29 November 1983. During the evaluation of survey H-10208 (1985) several items were identified as needing additional field work. The items which were identified are the basis for Change No. 5. The additional work was performed by the field unit and incorporated with the present survey.

b. No unusual problems were encountered during office processing.

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

2. CONTROL AND SHORELINE

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

b. Shoreline originates with final reviewed Class III Photogrammetric Manuscript TP-01355 of 1986-88.



c. Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1927 (NAD 27). Office processing of this survey is based on these values. The smooth sheet has been annotated with ticks showing the computed mean shift between the survey datum and the North American Datum of 1983 (NAD 83). To place this survey on the NAD 83 datum move the projection lines 0.726 seconds (22.4 meters or 2.2 mm at the scale of the survey) south in latitude, and 0.040 seconds (1.1 meters or 0.55 mm at the scale of the survey) west in longitude.

### 3. HYDROGRAPHY

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

b. The zero (0) and six (6) foot curves were not delineated because of vessel safety. The standard twelve (12), eighteen (18), thirty (30) and sixty (60) foot curves were drawn in their entirety. A brown curve was added to better show the bottom relief.

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

1) An obstruction located in Latitude 30°08'53.86"N, Longitude 88°21'15.89"W was noted during office processing. A complete discussion of and charting recommendation for the obstruction can be found in section 7.a.4) of this report. A Edm

2) An obstruction located in Latitude 30°09'42.88"N, Longitude 88°21'41.48"W was noted during office processing. A complete discussion of and charting recommendation for the obstruction can be found in section 7.a.5) of this report. A Edm

### 4. CONDITION OF SURVEY

The smooth sheet and accompanying overlays, hydrographic records and reports conform to the requirements of the HYDROGRAPHIC MANUAL.

### 5. JUNCTIONS

H-10208 (1985) 1:20,000 to the south  
H-10247 (1987) 1:20,000 to the east

A junction was effected between the present survey and H-10247 (1987).

A junction could not be effected with junctional survey H-10208 (1985). The junctional survey is archived at National Ocean Service (NOS) Headquarters, Rockville, Maryland. The



junctional survey is in substantial agreement with the present survey. Depths general agree to within one (1) foot. Any adjustments to the depth curves in the junctional areas of the present survey and junctional survey H-10208 (1985) will be made at headquarters on the chart during compilation.

As discussed in section 1.b. of this report additional work was requested by Change No. 5, dated 14 November 1986 of Project Instructions OPR-J217-HFP-83, dated 29 November 1983. One of the items in Change No. 5 is a holiday bounded by the following geographic positions:

<u>Latitude (N)</u>	<u>Longitude (W)</u>
30°07'24"	88°27'18"
30°06'36"	88°27'18"
30°07'12"	88°25'42"
30°06'24"	88°25'42"

Present survey junctional soundings in area where the holiday area and the present survey adjoin are in excellent agreement.

There are no contemporary surveys to the west of the present survey. Charted hydrography and present survey soundings are in general harmony.

## 6. COMPARISON WITH PRIOR SURVEYS

### a. Hydrography

H-4020 (1917-18)	1:40,000
H-4171 (1920)	1:80,000
H-8647 (1961-62)	1:20,000
H-9118 (1970)	1:20,000

The four (4) prior surveys listed above cover the present survey in its entirety.

Prior survey depths from H-4020 (1917-18) compare favorably with present survey soundings and show a general trend of being one (1) to three (3) feet shoaler than the present survey. The soundings in the following vicinities from prior survey H-4020 (1917-18) are eight (8) to fourteen (14) feet shoaler than present survey soundings:

<u>Prior Depths</u>	<u>Latitude (N)</u>	<u>Longitude (W)</u>	<u>Present Depths</u>
9	30°11'38"	88°27'06"	17-19
11-15	30°11'39"	88°26'48"	17-23
9-11	30°11'38"	88°26'32"	20-23

Prior survey depths from H-4171 (1920) compare favorably with present survey soundings and show a general trend of being 1 foot deeper than the present survey. There



are some scattered depths from prior survey H-4171 (1920) that are two (2) to three (3) feet deeper than present survey soundings.

Prior survey depths from H-8647 (1961-62) compare favorably with present survey soundings and show a general trend of being one (1) to two (2) feet shoaler than the present survey.

Prior survey depths from H-9118 (1970) compare favorably with present survey soundings and show a general trend of being one (1) to two (2) feet shoaler than the present survey. The following should be noted:

1) Shoreline from prior survey H-9118 (1970) in the vicinity of Latitude 30°12'00"N, Longitude 88°25'30"W has receded approximately 100 meters to the north.

2) Shoreline from prior survey H-9118 (1970) in the vicinity of Latitude 30°12'01"N, Longitude 88°28'00"W has accreted approximately 70 meters to the south.

3) Depths from prior survey H-9118 (1970) in the vicinity of the following areas are three (3) to eight (6) feet shoaler than present survey soundings.

<u>Latitude (N)</u>	<u>Longitude (W)</u>
30°11'27"	88°23'23"
30°11'35"	88°22'48"

4) Depths from prior survey H-9118 (1970) in the vicinity of Latitude 30°12'26"N, Longitude 88°20'13"W range from eight (8) feet shoaler to eight (8) feet deeper than present survey soundings.

The differences between the above prior surveys and the present survey depth can be attributed to improved hydrographic surveying methods and equipment, numerous hurricanes and tropical storms in the area, and to subsidence due to the withdrawal of gas and oil from the region.

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

b. Wire Drag

FE-309WD (1974) 1:40,000

Comparison between the present survey and prior survey FE-309WD (1974), formerly H-9420WD (1974), reveals one hang in the common area. FE-309WD (1974) covers AWOIS item # 3599. AWOIS item # 3599, a charted dangerous sunken wreck with a wire drag clearance depth of 30 feet, was identified as a barge in Latitude 30°09'15.00"N, Longitude 88°28'28.80"W during field



operations on prior survey FE-309WD (1974) and cleared to a depth of 30 feet. Subsequent office processing revised the position of the wreck to Latitude 30°09'13.9"N, Longitude 88°28'29.7"W. A fathometer search was performed during present survey operations with negative results. Present survey depths in the area range from forty-four (44) to forty-seven (47) feet. The wreck was brought forward from the prior survey to supplement the present survey. It is recommended that the charted dangerous sunken wreck with the legend (cleared to 30 feet 1974) be charted in Latitude 30°09'13.9"N, Longitude 88°28'29.7"W in concurrence with the recommendation found in the Modified Evaluation Report for FE-309WD (1974).

There are no conflicts between prior survey FE-309WD (1974) effective depths and the present survey soundings.

7. COMPARISON WITH CHART 11374 (20th. Edition, 29 Dec. 1984)  
11373 (30th. Edition, 6 Sept. 1986)

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys and requires no further consideration. The following should be noted:

1) AWOIS item # 3602, an uncharted visible wreck, identified as the F/V "LITTLE TUB", in Latitude 30°11'42.00"N, Longitude 88°27'30.00"W, originates with Local Notice to Mariners 48 of 1983 (LNM 48/83). A visible wreck was located by the field unit in Latitude 30°11'48.58"N, Longitude 88°26'40.61"W, bearing 3 feet at MHW. A telephone conversation with Mr. Clinton Collier, (1-205-694-4480), U. S. Food and Drug Administration, Dauphin Island, Alabama, revealed that the wreck located by the field unit is the only wreck in the area. The present survey position is approximately 1330 meters northeast of the AWOIS listing position. The method used to locate the visible wreck was not commensurate with the methods required by the HYDROGRAPHIC MANUAL for determining the location of a wreck. A request for the determination of a more accurate position of the visible wreck was submitted. The NOAA Ship HECK performed the additional work and located the wreck. A location and charting recommendation will be submitted with the Descriptive Report/Evaluation Report for FE-314SS (1988).

2) AWOIS item # 4755, a charted dangerous Obstn, PA, (3 ft rep), with a danger curve, in Latitude 30°09'36"N, Longitude 88°25'12"W originates with Local Notice to Mariners 25 of 1986 (LNM 25/86). The obstruction was neither verified nor disproved by present survey. It is recommended the dangerous Obstn, PA, (3 ft rep), with a danger curve be retained as charted.

3) A charted platform, identified as "CHEVRON-MO-861-5", in Latitude 30°07'08"N, Longitude 88°26'55"W, was located by



the field unit in Latitude 30°06'57.25"N, Longitude 88°27'04.97"W. The field unit determined a different name OCS-G-5062-5, for the platform. A telephone conversation with LT Doyle, (1-504-589-6236), Eighth Coast Guard District, Private Aids Section, determined that both of the names belong to the same platform. The charted platform is approximately 425 meters northeast of the present survey position. It is recommended that the charted platform be deleted and a platform be charted in present survey location with the charted name "CHEVRON-MO-861-5".

4) A probable uncharted obstruction in Latitude 30°08'53.86"N, Longitude 88°21'15.89"W was noted during office processing. The obstruction was neither verified nor disproved by the field unit. The obstruction has a fathometer depth of forty-five (45) feet in present survey surrounding depths of fifty-one (51) to fifty-six (56) feet. It is recommended that an obstruction with a depth of 45 feet, (45 Obstr) and a danger curve be charted in present survey location. It is also recommended that a side scan sonar investigation of the item be conducted at an opportune time.

5) A probable uncharted obstruction in Latitude 30°09'42.88"N, Longitude 88°21'41.48"W was noted during office processing. The obstruction was neither verified nor disproved by the field unit. The obstruction has a fathometer depth of forty-two (42) feet in present survey surrounding depths of fifty-one (51) to fifty-two (52) feet. It is recommended that an obstruction with a depth of 42 feet, (42 Obstr) and a danger curve be charted in present survey location. It is also recommended that a side scan sonar investigation of the item be conducted at an opportune time.

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

#### b. Dangers to Navigation

There were no Dangers to Navigation submitted by the field unit on this survey. Two dangers to navigation were noted during office processing of this survey. These dangers are discussed in sections 7.a.4) & 5) of this report. These two dangers are not considered a hazard to surface navigation. A letter has been sent to the appropriate Coast Guard district concerning these dangers.

#### c. Aids to Navigation

There are no fixed or floating aids to navigation within the limits of this survey.

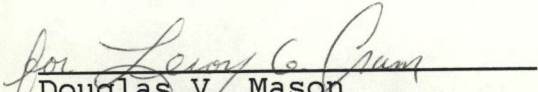


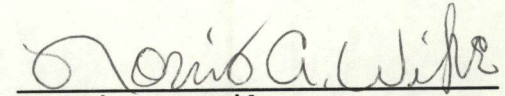
8. COMPLIANCE WITH INSTRUCTIONS

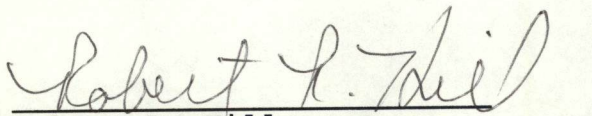
This survey complies with the Project Instructions.

9. ADDITIONAL FIELD WORK

This is a good basic survey. Additional work is requested for section 7.a. of this report at an opportune time.

  
Douglas V. Mason  
Cartographic Technician  
Verification of Field Data

  
Norris A. Wike  
Cartographer  
Evaluation and Analysis

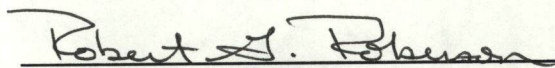
  
Robert R. Hill  
Senior Cartographic Technician  
Verification Check

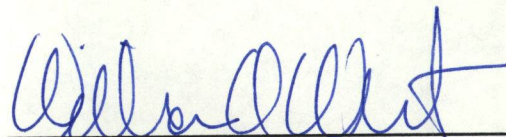


Inspection Report  
H-10261

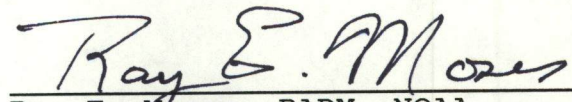
The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. The digital data have been completed and all revisions and additions made to the smooth sheet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

Inspected

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

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

Approved: 27 July 1988

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



## Hydrographic Index No. 86 E





**EXAMINED FOR NM**  
**GDBU**

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10261

ams 10-23-89

1. Letter all information.

2. In "Remarks" column cross out words that do not apply.

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
11374	1-2-90	Ed Martin	Full <del>Part Before</del> After Marine Center Approval Signed Via Drawing No. 23
11375	5-21-90	Peg Diamond	Full <del>Part Before</del> After Marine Center Approval Signed Via Drawing No. 28
11373	6/14/90	Dan Black	Full <del>Part Before</del> After Marine Center Approval Signed Via Drawing No. 55
11360	6-28-90	ELLEN SPENCER	→ Full <del>Part Before</del> After Marine Center Approval Signed Via Drawing No. 45 (applied thru 11373)
11366	10-29-91	John Presce	Full <del>Part Before</del> After Marine Center Approval Signed Via Drawing No. New Chart
			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.
			Full Part Before After Marine Center Approval Signed Via Drawing No.
			Full Part Before After Marine Center Approval Signed Via Drawing No.