

10208

Diagram No. 1115-3

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey .. Hydrographic

Field No. MI-20-2-85

Registry No. H-10208

LOCALITY

State Alabama--Mississippi

General Locality .. Gulf of Mexico

Sublocality Petit Bois Pass

19 85

CHIEF OF PARTY
CAPT. F.T. Smith

LIBRARY & ARCHIVES

DATE December 15, 1986

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

10208

ACR 1115-3

CHTS

11373

11360

11006

411

TO SIGN OFF SEE
"RECORD OF APPLICATION"

HYDROGRAPHIC TITLE SHEET

H-10208

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.

MI-20-2-85

State ALABAMA--MISSISSIPPI

General locality GULF OF MEXICO

Locality PETIT BOIS PASS
~~DAUPHIN ISLAND TO PETIT BOIS ISLAND~~

Scale 1:20,000 Date of survey NOV. 25--DEC. 9, 1985

Instructions dated AUGUST 26, 1985 Project No. OPR-J217-MI-85

Vessel NOAA SHIP MT MITCHELL (S-222)

Chief of party FIDEL T. SMITH, CAPT., NOAA
LT GREENAWALT, LT JOHNSON, LTJG RODRIGUEZ, LTJG RIX

Surveyed by ENS JEFFERS, ENS MONTGOMERY, ENS BRADLEY, ENS SCHATTGEN

Soundings taken by echo sounder, ~~hand track, pole~~ RAYTHEON DSF 6000N
CST HOPKINS, JST ZOBY

Graphic record scaled by CST MARSH, SST GARDNER, AST JONES, AST DEHLINGER, AST STOUT
CST HOPKINS, LTJG RIX, ENS BRADLEY

Graphic record checked by MARSH, GARDNER, JONES, DEHLINGER, STOUT, ZOBY, JOHNSON

Protracted by N/A Automated plot by XYNECIES 1201
AMC

Verification by ~~ATLANTIC MARINE CENTER~~ D. V. MASON

Soundings in ~~XYNECIES~~ feet at ~~MLLW~~ MLLW

Assigned: Chg 5, OPR-J217-HFP-84, 11/14/86

REMARKS: This survey is incomplete. Additional field work is required
to obtain bottom samples, positions on the well heads in the area,
and hydrography in the inshore section of this survey area.

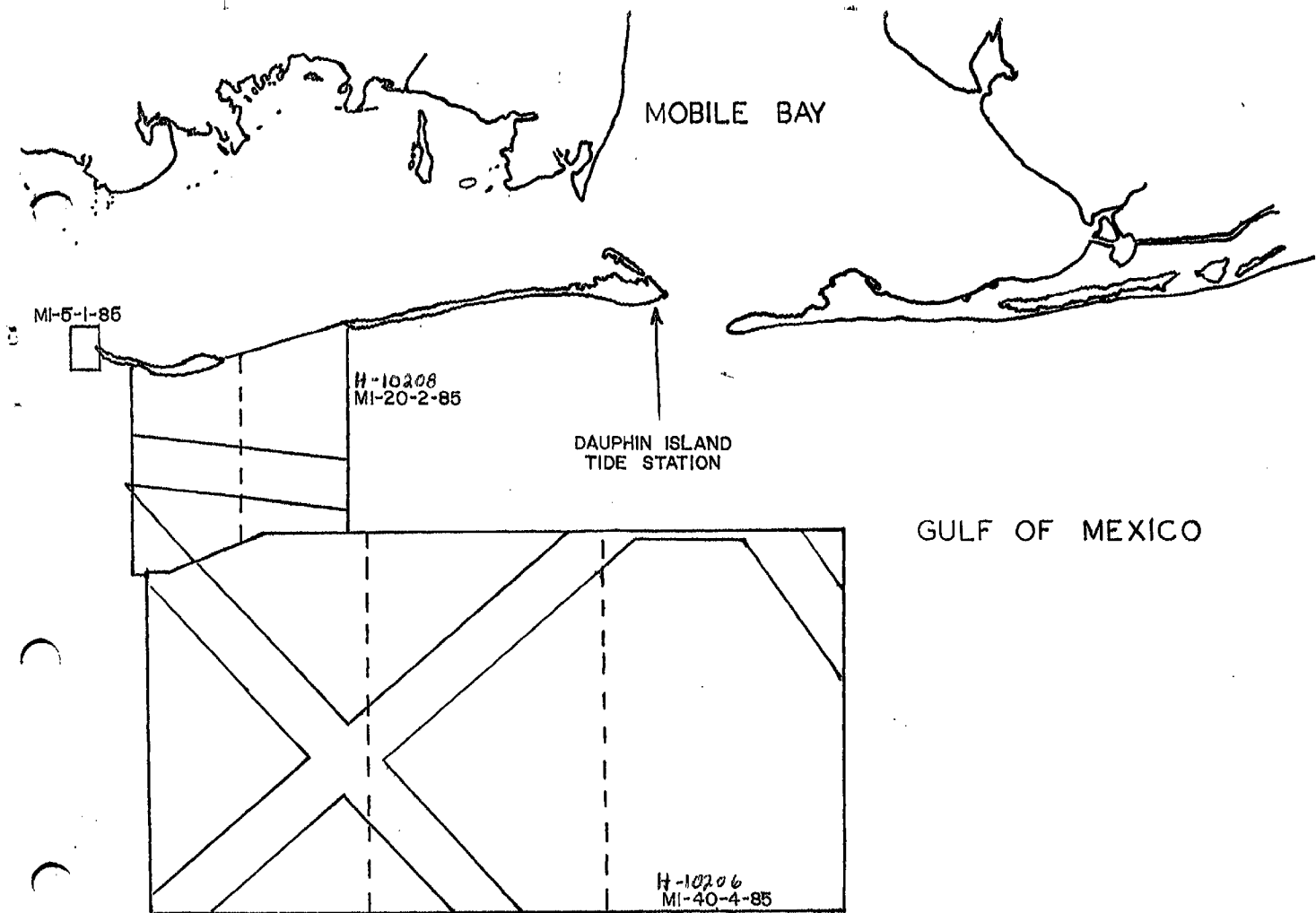
NOTES IN RED IN THE DESCRIPTIVE REPORT WERE
MADE DURING OFFICE PROCESSING.

STANDARDS CK'D 12-17-86

C. Log

SC 1-31-87 AWOIS / SURF m&m 12/31/86

XWW 4-12-91



APPROACHES TO MOBILE BAY, ALABAMA

PROGRESS SKETCH
 HYDROGRAPHIC OPERATIONS
 NOAA SHIP MT. MITCHELL S-222
 FIDEL SMITH, CAPT., NOAA
 COMMANDING OFFICER

OCTOBER	NOVEMBER	DECEMBER	
0	74.5	56.6	LNM HYDRO (LAUNCH)
0	2.4	2.3	SNM HYDRO (LAUNCH)
736.5	3410.7	455.0	LNM HYDRO (SHIP)
72.5	273.8	430.6	SNM HYDRO (SHIP)
0	47.0	47.0	MISC NM (LAUNCH)
157.3	421.2	371.0	MISC NM (SHIP)
2	0	54	BOTTOM SAMPLES
1	2	1	NANSEN CASTS
0	12.2	28.2	SIDESCAN SONAR (LAUNCH)
0	0	0	SIDESCAN SONAR (SHIP)

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- I. LANDMARKS FOR CHARTS
- J. APPROVAL SHEET

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

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY
H-10208

A. PROJECT

The purpose of this project was to provide contemporary hydrographic survey data for existing nautical charts covering portions of the Gulf of Mexico from Dauphin Island to Petit Bois Island. This survey increased the level of confidence of bottom mapping by reducing the hydrographic line spacing from 1/2 mile as recorded in the prior surveys, to 200 meters as recorded in the current work. In addition, the modern techniques and equipment provided more accurate information to replace the hydrography conducted during the 1920 and 1940 prior surveys.

This survey was conducted in accordance with Project Instructions OPR-J217-MI-85, issued August 26, 1985, and amended by Change No. 1, dated September 5, 1985 (Attachment 1).

This survey is incomplete. *SEE ALSO SECTION 9. OF THE EVALUATION REPORT.*

B. AREA SURVEYED

The survey area is in the Gulf of Mexico and consists of the portion from Dauphin Island to Petit Bois Island from the northern limit of the east-west safety fairway, south to the junction with survey H-10206. The survey is bounded as follows:

- 1) 30° 09.5' N, 088° 28.7' W,
- 2) 30° 08.5' N, 088° 18.9' W,
- 3) 30° 05.2' N, 088° 20.0' W,
- 4) 30° 05.3' N, 088° 23.0' W,
- 5) 30° 04.1' N, 088° 24.2' W,
- 6) 30° 04.4' N, 088° 28.8' W.

The survey area is on the continental shelf which is the remnant of an ancient coastline inundated by the ocean's transgression. The ocean transgression was the result of the melting of the last great continental ice sheet. The bottom is composed of fine sand and silt. All of this ancient shoreline material is being carried westward by the prevailing longshore current. *SEE ALSO SECTIONS 4.C. AND 6.A. OF THE EVALUATION REPORT.*

Petit Bois Island and Dauphin Island form the nearest land about 6.5 miles north of the area surveyed. They are long low barrier islands about 10 miles off the coast of Alabama and Mississippi. The islands are composed of fine to medium grain sand and shells. Both of the islands are being eroded by the longshore current on their eastern ends. The eroded material is being

deposited on the western ends. Therefore Petit Bois Island, Dauphin Island, and the pass between them are moving westward.

The field work was conducted between 25 November 1985 and 08 December 1985.

This survey area, like most of the Gulf of Mexico, is subjected to hurricanes and other tropical storms during the June to November hurricane season. Three such storms raked the area in 1985, two of which occurred late in the season. Hurricane Juan caused the MT MITCHELL to seek shelter in Pensacola Bay for 6 days from October 27 to November 1. Hurricane Kate sent the ship to Pascagoula to seek shelter for 2 days from November 20 to November 21. Both storms delayed the start of this survey.

C. SOUNDING VESSELS

The NOAA Ship MT MITCHELL was used as a sounding vessel for this survey. The vessel number and the days it conducted operations follows:

EDP#	VESSEL	HULL NO.	DAY
2220	MT MITCHELL	S-222	329,330,340-342

The NOAA Ship MT MITCHELL is a Class II hydrographic survey ship. No special or unusual modifications were made, and no problems were encountered.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

This survey was conducted using predicted tides on-line. Tide tapes were generated using Mobile, Alabama as the reference station for daily tide predictions. The control for datum determination was at Dauphin Island Alabama (873-5180) and was operated and maintained under contract by Chapin and Associates, Inc., 4951 Woodlane Circle, Tallahassee, Florida. See the Field Tide Note included in Appendix B.

Smooth tides were requested from Chief, Sea and Lake Levels Branch, (N/OMS12) in a letter dated December 17, 1985. A copy of this letter is included in Appendix B.

For a list of the sounding equipment and corrections to echo soundings, see the SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS REPORT for OPR-J217-MI-85. The original report was submitted to the Atlantic Marine Center on 13 February 1986 (LTD #86-03). A photostatic copy is included with this report. *See also section*

4. a. of the EVALUATION REPORT.

All survey records were scanned by the Survey Department personnel, Commissioned Officers, and were checked by the Officer -in-Charge. In scanning the DSF 6000N data, all significant peaks and deeps occurring between soundings, as well as incorrectly

digitized soundings, were inserted and corrected on the electronic corrector tape. Survey depths ranged from 40 to 69 ft.

Soundings were collected and plotted in feet. The final field sheet was plotted using predicted tides, velocity of sound correctors, and draft correctors.

E. HYDROGRAPHIC SHEETS

All field sheets were made aboard the MT MITCHELL with the PDP8/e computer and Hydroplot system. Hydrographic data is presented on one final 1:20,000 scale field sheet showing all mainscheme soundings and crosslines.

The field sheets contain some overprints due to overlap of sounding lines. No concentrated effort was made to eliminate the overprints since this work can be more efficiently accomplished at the Marine Center with excessing programs.

Parameter tape printouts for all plotted sheets are included in Appendix A. All field records and tapes will be forwarded to the Atlantic Marine Center, 439 West York Street, Norfolk, Virginia for verification and smooth plotting.

F. CONTROL STATIONS

Horizontal control was established in the survey area for the placement of ARGO navigation stations and the placement of Mini-Ranger Falcon stations used for electronic calibration of the ARGO equipment. All control stations used the North American Datum of 1927. A list of all signal names and geographic positions is included in Appendix F of this report. *SEE ALSO SECTION 4.d. OF THE EVALUATION REPORT.*

A detailed description of all geodetic work used for this project can be found in the Horizontal Control Report which was forwarded to N/MOA2x1, Atlantic Marine Center on 13 February 1986. A copy is included as Attachment 3.

G. HYDROGRAPHIC POSITION CONTROL

A complete description of the position control for this survey is included with this report as Attachment 5, HYDROGRAPHIC POSITION CONTROL REPORT. The original report, strip chart records, and calibration data were submitted to the Atlantic Marine Center under transmittal # 86-09. The calibration values were checked by three different methods during operations: range-range, range-azimuth, and circle calibration. The checks were in agreement and the calibration data are adequate to apply to the raw positioning data and to provide assurance of acceptable electronic position control.

The ANDIST corrector used was +6.0. *SEE ALSO SECTION 4.b. OF THE EVALUATION REPORT.*

H. SHORELINE *SEE ALSO SECTION 2. b. OF THE EVALUATION REPORT.*

No shoreline exists in the area surveyed. Petit Bois Island and Dauphin Island will form the northern limit when the field work is resumed. Note: recent shoreline manuscripts of Petit Bois Island were not available at the time of this survey. No control stations exist seaward of the shoreline.

I. CROSSLINES

A total of 37.2 miles of crosslines were surveyed. This represents 7% of the total mainscheme lines and satisfies the criteria of the Hydrographic Manual, Section 1.4.2 (5 to 6% required). Crosslines were run between 45 degrees and 90 degrees to the mainscheme orientation.

Crossline and mainscheme hydrography were in agreement in accordance with the criteria of the Hydrographic Manual Section 1.1.2 Part B.II.1.

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

This survey junctions with the following survey:

REG. NO.	FIELD NO.	AREA OF JUNCTION	SCALE	DATE
H-10206	MI-40-4-85	Southern limit	1:40,000	1985

There is excellent agreement between the depth soundings obtained by this survey and all junction soundings. These junctions meet the criteria of the Hydrographic Manual Section 1.1.2 Part B.II.1.

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

Prior surveys available for comparison are as follows:

REG. NO.	SCALE	YEAR SURVEYED
H-4171	1:80,000	1920
H-6552	1:40,000	1940
<i>H-9420WD</i>	<i>1:40,000</i>	<i>1974 (UNPROCESSED)</i>

This survey did not compare favorably with the prior in the following cases:

1) Sixteen of the soundings from this survey were 1-4 feet shoaler than the soundings from survey No. H-4171. This is attributed to the shifting sands and newer, more accurate survey methods. It is recommended that the soundings from this survey supersede those of survey H-4171.

2) In general the soundings from this survey tended to be 2-4 feet deeper than those soundings found in survey H-6552. This is probably due to more advanced survey methods. This survey should supersede survey H-6552.

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

This survey was compared with the following charts:

CHART	EDITION	DATE	SCALE
11360	28th	10 DEC 83	1:40,000
11373	29th	01 SEP 84	1:80,000

The charted soundings originated from the prior surveys discussed in section K. No further comparisons of soundings were made.

There are 9 AWOIS items within the survey limits: 00443*, 00448*, 03592*, 03594*, 03595*, 03597*, 03598*, 03599, and 03602*. None of these items were investigated during the 1985 field season. AWOIS item 03599 was reported as a steel hulled vessel, and was cleared to 30 ft by the NOAA Ship HECK in 1974. It is recommended that the survey requirements for this item be changed from a full investigation to a limited investigation. It is also recommended that all other items be investigated as per the AWOIS Listing instructions when hydrographic work resumes on this survey. *SEE ALSO SECTIONS 4.f AND 6.b. OF THE EVALUATION REPORT.*

Attachment 6 contains a listing of "Hangs and Bottom Obstructions of the Mississippi/Alabama Gulf, Loran C" was obtained from the Mississippi-Alabama Sea Grant Consortium. Additional information may be obtained from:

Alabama Sea Grant Advisory Service
3940 Government Blvd.
Mobile, Alabama 36609

The purpose of this listing is to accumulate and disseminate locations of bottom fishing obstructions in shrimping grounds. The information was obtained primarily by fishermen. *PUBLICATION FORWARDED TO*

N/CG 241 ROCKVILLE, MARYLAND.

M. ADEQUACY OF SURVEY

This survey is incomplete. No inshore launch hydrography was accomplished due to sea conditions and the ship's schedule. No bottom samples were obtained. No survey lines were run parallel to the north-west; south-east safety fairway. *SEE ALSO SECTION 9. OF THE EVALUATION REPORT.*

** THESE AWOIS ITEMS DO NOT FALL INSIDE THE LIMITS OF HYDROGRAPHY RUN ON THIS SURVEY.*

N. NAVIGATIONAL AIDS *SEE ALSO SECTION 7.b. OF THE EVALUATION REPORT.*

No fixed or floating aids to navigation, overhead pipelines or cables, submerged pipelines or cables, bridges, or ferry routes exist in the area surveyed.

Section 4.2.1.2 of the Project Instructions requested that Third Order, Class I positions be established on 10 aids to navigation outside the project area. Seven of the aids were located. See the Horizontal Control Report for details.

O. STATISTICS

MT MITCHELL - VESNO 2220

Total number of positions	1357
Linear nautical miles of mainscheme hydrography	528.1
Linear nautical miles of crosslines	37.2
Total linear nautical miles of hydrography	565.3
Total square nautical miles of hydrography	37.1
Tide Stations	0
Oceanographic Casts	3
Total Bottom Samples	0

P. MISCELLANEOUS

Loran C comparisons were made by the MT MITCHELL and will be forwarded to the U.S. Coast Guard through the Atlantic Marine Center. Loran C rates in the survey area compared well with satellite, radar, visual, and ARGO positioning and provided accurate navigational fixes.

Numerous well heads exist in the area bounded by: 1) $30^{\circ} 07.4' N$, $088^{\circ} 27.3' W$, 2) $30^{\circ} 06.6' N$, $088^{\circ} 27.3' W$, 3) $30^{\circ} 07.2' N$, $088^{\circ} 25.7' W$, and 4) $30^{\circ} 06.4' N$, $088^{\circ} 25.7' W$. Safe navigation precluded getting hydrographic positions on these wellheads. Soundings and detached positions on the wellheads within this area should be obtained when the field work is resumed. This field work must be done from a survey launch for safety considerations. *SEE ALSO SECTION 1.a. OF THE EVALUATION REPORT.*

Included in Attachment 2 of this report are two letters. The first, dated 10 October 1985, to the Commander of the Eighth U.S. Coast Guard District, contains information regarding the project for the Local Notice to Mariners. The second is a letter to Mr. Fred Rees, Operations Director of Dauphin Island Sea Lab, requesting use of the Air Force radar dome building for a Mini-Ranger site. Verbal permission was granted by Mr. Rees but no written reply was received.

Q. RECOMMENDATIONS

This survey is incomplete. Additional field work is required to obtain bottom samples, positions on the well heads in the area, and soundings in the inshore section of this survey area.

SEE ALSO SECTION 9. OF THE EVALUATION REPORT.

R. AUTOMATED DATA PROCESSING

The following HYDROPLOT programs were used to acquire and process the survey data:

PROGRAM	PROGRAM NAME	VERSION
RK 112	Hyperbolic, Range/Range Hydroplot	04/23/84
RK 201	Grid, Signal, and Lattice Plot	02/13/84
RK 211	Range/Range Non-Real Time Plot	02/13/84
RK 300	Utility Computations	10/21/80
RK 330	Data Reformat and Check	05/04/76
PM 360	Electronic Corrector Abstract	02/02/76
RA 362	Combined RK 330/AM 602	08/20/84
AM 500	Predicted Tide Generator	11/10/72
RK 530	Layer Correction for Velocity	05/10/76
RK 561	Hyperbolic and Range/Range Geodetic Calibration	12/01/82
AM 602	Extended Line Oriented Editor	12/08/82

S. REFERRAL TO REPORTS

<u>TITLE</u>	<u>TRANSMITTAL INFO & DATE</u>
Horizontal Control Report for OPR-J217-MI-85	N/MOA 2X1 Atlantic Marine Center 439 West York Street Norfolk, Virginia Transmittal 86-04 Dated 13 February 1986
Sounding Equipment and Corrections to Echo Soundings Report for OPR-J217-MI-85	N/MOA 23 Atlantic Marine Center 439 West York Street Norfolk, Virginia Transmittal 86-03 Dated 13 February 1986

Electronic Position Control Report
for OPR-J217-MI-85

N/MOA 23
Atlantic Marine Center
439 West York Street
Norfolk, Virginia

Transmittal 86-09
25 February 1986

Coast Pilot Report

N/MOA 2X1
Atlantic Marine Center
439 West York Street
Norfolk, Virginia

Transmittal #95-85
Dated 19 December 1985

Submitted by:

Fidel T. Smith *LTD NOAA by direction*

Fidel T. Smith, Captain, NOAA
Commanding Officer
NOAA Ship MT MITCHELL

STATION LIST: H-10208

100	7	30	20	40824	088	33	35603	250	0000	164860	✓
200	7	30	13	36331	088	01	31070	250	0000	164860	✓
001	7	30	14	55100	088	11	31996	139	0010	000000	✓
030	7	30	14	59369	088	04	42042	139	0025	000000	✓
202	4	30	13	36897	088	01	30164	139	0010	000000	✓
004	7	30	12	07171	088	27	54586	139	0000	000000	✓
005	4	30	12	11828	088	28	08766	139	0000	000000	✓

STA	NAME	PURPOSE	SOURCE	YEAR
100	FORD ECC	(LEFT ARGO)	MM	1985 ✓
200	WHITTING 82	(RIGHT ARGO)	WH	1982 ✓
001	HALFWAY 1985	(M/R STA)	NOS	1985 ✓
030	AIR FORCE DOME	(M/R STA)	MM	1985 ✓
202	WHITTING ECC	(M/R STA)	MM	1985 ✓
004	PETIT BOIS 1985	(CALIB)	NOS	1985 ✓
005	PETIT AZ MK	(CALIB)	MM	1985 ✓

9

✓CB

NO FIXED AIDS TO NAVIGATION NOR LANDMARKS EXIST WITHIN THE SURVEY
AREA AND THEREFORE NO NOAA FORM 76-40 WAS SUBMITTED.

APPROVAL SHEET

The field work on this Hydrographic Survey was under my daily supervision. I have reviewed and approved all final field sheets and records. This survey is incomplete. Refer to section Q. of this report for a list of additional field work required.

Fidel T. Smith LIDA NOAA by direction

Fidel T. Smith, Captain, NOAA
Commanding Officer
NOAA Ship MT MITCHELL

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

DATE: March 5, 1986

Marine Center: Atlantic

OPR: J217

Hydrographic Sheet: H-10208

Locality: Dauphin Island AL to Petit Bois Island MS

Time Period: November 25 - December 8, 1985

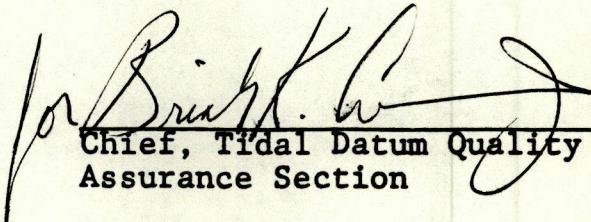
Tide Station Used: 873 5180 Dauphin Island, AL

Plane of Reference (Mean Lower Low Water): 2.68 ft.

Height of Mean High Water Above Plane of Reference: 1.2 ft.

Remarks: Recommended Zoning:

Apply a -15 minute time correction to all heights.


Chief, Tidal Datum Quality
Assurance Section

GEOGRAPHIC NAMES

H-10208

Name on Survey	ON CHART NO. 11365-11373 ON PREVIOUS SURVEY NO.											
	A	B	C	D	E	F	G	H	K			
	CON U.S. QUADRANGLE MAPS FROM LOCAL INFORMATION ON LOCAL MAPS P.O. GUIDE OR MAP RAND McNALLY U.S. LIGHT LIST											
Alabama (title)	X											1
Gulf of Mexico	X											2
Mississippi (title)	X											3
Petit Bois Pass (title)	X											4
												5
												6
												7
												8
												9
												10
												11
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												25

Approved:

Charles E. Harrington

Chief Geographer - N/Cg 2x5

AUG 29 1986

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NO.: H-10208

Number of positions	1336
Number of soundings	10294
Number of control stations	2

	<u>TIME-HOURS</u>	<u>DATE COMPLETED</u>
Preprocessing Examination	19	07 Apr 86
Verification of Field Data	113	22 July 86
Quality Control Checks	29	
Evaluation and Analysis	44	30 Oct 86
Final Inspection	10	30 Oct 86
TOTAL TIME	215	
Marine Center Approval		31 Oct 86

Transmittal letter of survey and survey records will be included in the Descriptive Report to identify the records accompanying the survey.

ATLANTIC MARINE CENTER
EVALUATION REPORT

SURVEY NO.: H-10208

FIELD NO.: MI-20-2-85

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

SURVEYED: 25 November through 08 December 1985

SCALE: 1:20,000

PROJECT NO.: OPR-J217-MI-85

SOUNDINGS: RAYTHEON DSF-6000N
Fathometer

CONTROL: Cubic Western DM-54
ARGO (Range/Range)

Chief of Party.....F. T. Smith

Surveyed by.....C. B. Greenawalt
.....M. R. Johnson
.....V. M. Rodriguez
.....J. E. Rix
.....C. J. Bradley
.....M. K. Jeffers
.....C. A. Montgomery
.....P. L. Schattgen

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

1. INTRODUCTION

a. The present survey contains a large holiday centered around Latitude 30°06'58"N, Longitude 88°26'30"W. This holiday is approximately 3500 meters long by 1500 meters wide at its widest points. The area is occupied by numerous wellheads. A letter recommending additional work in this area has been forwarded to NOS Headquarters in Rockville, Maryland. The area will be surveyed in the near future; this future survey work will be regarded as a separate 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 not adequately discussed in sections F., or G. of the Descriptive Report. See sections 4.b. and 4.e. of this report. Section S. is adequate for its intended purpose.

b. There is no shoreline within the limits of this survey.

3. HYDROGRAPHY

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

b. The standard 60 foot curve could be drawn in its entirety. Some brown and dashed curves were also drawn to delineate bottom relief.

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

1) A fifty-two (52) foot sounding, in Latitude $30^{\circ}05'47.69''N$, Longitude $88^{\circ}23'06.16''W$ was not investigated by the hydrographer. The soundings on adjacent lines of hydrography on the present survey are fifty-five (55) to sixty (60) feet. This sounding varies significantly enough from the surrounding bottom that additional work has been requested in the area. See Item #3 of letter attached requesting additional work.

2) Reduced line spacing would have been desirable in the southeastern portion of the present survey to better define the 60 foot curves and supplemental curves.

In general, this does not degrade the overall quality of the survey.

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. Section D. of the Descriptive Report did not provide the required information for the sounding equipment used during survey operations. Section 5.3.4.D. of the HYDROGRAPHIC MANUAL outlines the necessary information to be provided in the Descriptive Report.

b. Section G. of the Descriptive Report did not provide the required information for the electronic control equipment used during survey operations. Section 5.3.4.G. of the HYDROGRAPHIC MANUAL outlines the necessary information to be provided in the Descriptive Report.

c. The field unit failed to take bottom samples on the present survey as required by section 6.7. of the Project Instructions and sections 1.6.3. and 4.7.1. of the HYDROGRAPHIC MANUAL. As a result additional time was required to evaluate this survey. See also section 6.a. of this report.

d. Section F. of the Descriptive Report did not provide the required information for the electronic control stations used during survey operations. Section 5.3.4.F. of the HYDROGRAPHIC MANUAL outlines the necessary information to be provided in the Descriptive Report.

f. The field unit failed to investigate Automated Wreck and Obstruction System (AWOIS) item #3599 as required by the AWOIS listing. See also section 6.b. of this report.

5. JUNCTIONS

H- 10206 (1985) 1:40,000 to the southeast

An excellent junction was effected with H-10206 (1985) which junctions to the southeast.

There are no contemporary junctional surveys to the north, east or west of the present survey. Charted hydrography in these junctional areas is in harmony with the present survey.

6. COMPARISON WITH PRIOR SURVEYS

a. Hydrography

H-4171 (1920) 1:80,000

H-6552 (1940) 1:40,000

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

H-4171 (1920) compares favorably with the present survey and shows a general trend of being one (1) to four (4) feet deeper than present survey. A line of soundings from the prior survey H-4171 (1920) from Latitude 30°07'00"N, Longitude 88°24'30"W to Latitude 30°06'56"N, Longitude 88°19'06"W is one (1) to four (4) feet shoaler. A forty-eight (48) and 2 fifty (50) foot soundings in the vicinity of Latitude 30°08'09"N, Longitude 88°23'45"W, and a fifty-two (52) and fifty-five (55) foot sounding in the vicinity of Latitude 30°08'06"N, Longitude 88°23'12"W from prior survey H-4171 (1920) are four (4) to seven (7) foot shoaler than present survey. The soundings discussed above are considered superseded by the present survey.

Bottom samples were brought forward from prior survey H-4171 (1920) to supplement present survey.

H-6552 (1940) compares favorably with the present survey and shows a general trend of being one (1) to two (2) feet shoaler than present survey.

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

b. Wire Drag

H-9420WD (1974) 1:40,000 unprocessed/unverified

A comparison of the present survey and prior wire drag survey H-9420WD (1974) reveals one (1) hang in the common area. Prior wire drag survey H-9420WD (1974) is an unprocessed/unverified survey. A sunken barge was hung at thirty-four (34) feet in Latitude 30°09'13.20"N, Longitude 88°28'28.80"W. The wreck was cleared to a depth of 30.5 feet by two (2) subsequent drag strips. This item corresponds to AWOIS Item #3599, a charted wreck with a wire drag clearance of 30 feet, in Latitude 30°09'15.00"N, Longitude 88°28'28.80"W. The wreck originates with Chart Letter 624 of 1974 (CL 624/74). The field unit did not search for AWOIS Item #3599 as required by the Project Instructions. It is recommended that the presently charted wreck with a wire drag clearance of 30 feet be deleted from the chart and a wreck with a reported wire drag clearance of 30 feet be charted in Latitude 30°09'13.20"N, Longitude 88°28'28.80"W.

7. COMPARISON WITH CHART

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys and no further discussion is required.

The present survey is adequate to supersede the charted hydrography in the common area.

b. 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 except as noted in sections 4. and 9. of this report.

9. ADDITIONAL FIELD WORK

This is considered an adequate basic survey based upon the area surveyed and with the addition of prior survey bottom characteristics brought forward. The holiday area in the vicinity of wellheads will be subsequently surveyed. A request for additional work has been submitted to NOS Headquarters. A copy of the request is attached to this report. See also section 1.a. of this report. *Assigned: Chg 5, OPR-5217-HFP-84, 11/14/86*

Douglas V. Mason

Douglas V. Mason
Cartographic Technician
Verification of Field Data

Norris A. Wike

Norris A. Wike
Cartographer
Evaluation and Analysis


Leroy G. Gram

Leroy G. Gram
Senior Cartographic Technician
Verification Check

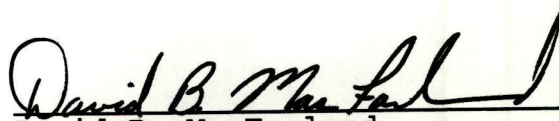
Inspection Report
H-10208

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



David B. MacFarland
Chief, Hydrographic Surveys Branch

Approved: 30 October 1986



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

Assigned 11/14/86

Chg 5 to Prog Instr OPR-J217-HFP-84

H-10208

ADDITIONAL WORK REQUIRED

Additional work is requested to resolve 3 items on survey H-10208, OPR-J217-MI-85. This work is required to resolve one (1) AWOIS Item #3599, an uncharted fifty-two (52) foot sounding, and a holiday. The three (3) items have been assigned a priority numbering of 1 most important and progressing to 3 of the lesser priority.

ITEM #1

Item 1 is a large holiday on survey H-10208 (1985). The area is described as "wellheads" by the hydrographer in the Descriptive Report. The holiday is bounded by:

Latitude	Longitude
30°07'24"N	88°27'18"W
30°06'36"N	88°27'18"W
30°07'12"N	88°25'42"W
30°06'24"N	88°25'42"W

Item 1 Work Requirements:

Run 400 meter spacing lines in the area of the holiday. Then it is desirable to obtain detached positions as close as possible to the wellheads with safety of boat and crew as first consideration. Bottom samples will need to be taken in this area.

ITEM #2

Item 2 in Latitude 30°09'15.00"N, Longitude 88°28'28.80"W, (AWOIS Item #3599), a charted wreck with a depth of 30 feet cleared by wire drag. The item originates with Chart Letter 624 of 1974 (CL 624/74). No investigation was made by the field unit.

Item 2 Work Requirements:

Verify or disprove through 400% side scan sonar search the position and least depth of the wreck with a minimum 250 meter search radius from the reported position listed above. Disproval may also be obtained by salvage documentation. Side scan sonar equipment may need to be rented to aid in the investigation of this item

ITEM #3

Item 3 in Latitude 30 05'47.69"N, Longitude 88°23'06.16"W, an uncharted fifty-two (52) foot sounding originates from the present survey H-10208 (1985).

Some hydrography was run by the field unit in this area on H-10208, but no adequate delineation of the sounding was done.

Item 3 Work Requirements:

It is requested that about 6 to 8 additional lines (25 meters) of hydrography be run across the apparent axis of this feature and one (1) line be run down the center line to determine if the fifty-two (52) foot depth is accurate.

MOA23-131-86

LETTER TRANSMITTING DATA

DATA AS LISTED BELOW WERE FORWARDED TO YOU
BY (Check):

- ORDINARY MAIL AIR MAIL
- REGISTERED MAIL EXPRESS
- OBL (Give number) _____

TO:

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

DATE FORWARDED

1 December 1986

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-10208 (MI-20-2-85)

OPR-J217-MI-85 Alabama--Mississippi, Gulf of Mexico
Petit Bois Pass

PKG. 1 (TUBE)

- 1 ORIGINAL SMOOTH SHEET for H-10208
- 1 ORIGINAL SMOOTH POSITION OVERLAY
- 1 ORIGINAL SMOOTH EXCESS OVERLAY
- 1 SMOOTH FIELD SHEET
- 1 CHART BLOW UP of CHART 11373

PKG. 2 (BOX)

- 1 ORIGINAL DESCRIPTIVE REPORT for H-10208
- 1 CAHIER containing FINAL POSITION PRINTOUT
- 1 CAHIER containing FINAL SOUNDING PRINTOUT
- 1 ENVELOPE containing SUPPLEMENTAL DATA FROM PRINTOUT
- 1 NOAA FORM 77-44 (SOUNDING VOLUME)

FROM: (Signature)

NORRIS A. WIKE

*Norris A. Wike*RECEIVED THE ABOVE
(Name, Division, Date)

Return receipted copy to:

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

Dwayne S. Clark
December 15, 1986
N/CG243

MOA23-131-86

LETTER TRANSMITTING DATA

DATA AS LISTED BELOW WERE FORWARDED TO YOU
BY (Check):

- ORDINARY MAIL
- AIR MAIL
- REGISTERED MAIL
- EXPRESS
- OBL (Give number) _____

TO:

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H-10208 (MI-20-2-85)

OPR-J217-MI-85 Alabama--Mississippi, Gulf of Mexico
Petit Bois Pass

PKG. 2 (BOX) CONT:

- 1 ENVELOPE containing DATA REMOVED FROM ORIGINAL DESCRIPTIVE REPORT
- 1 ACCORDIAN FILE containing MASTER TAPE PRINOUTS, CORRECTOR TAPE PRINTOUTS, FATHOGRAMS FOR FOLLOWING JD,s: VESNO 2220: 329-331, 340-342

FROM: (Signature)

NORRIS A. WIKE

Norris A. Wike

RECEIVED THE ABOVE
(Name, Division, Date)

Return receipted copy to:

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

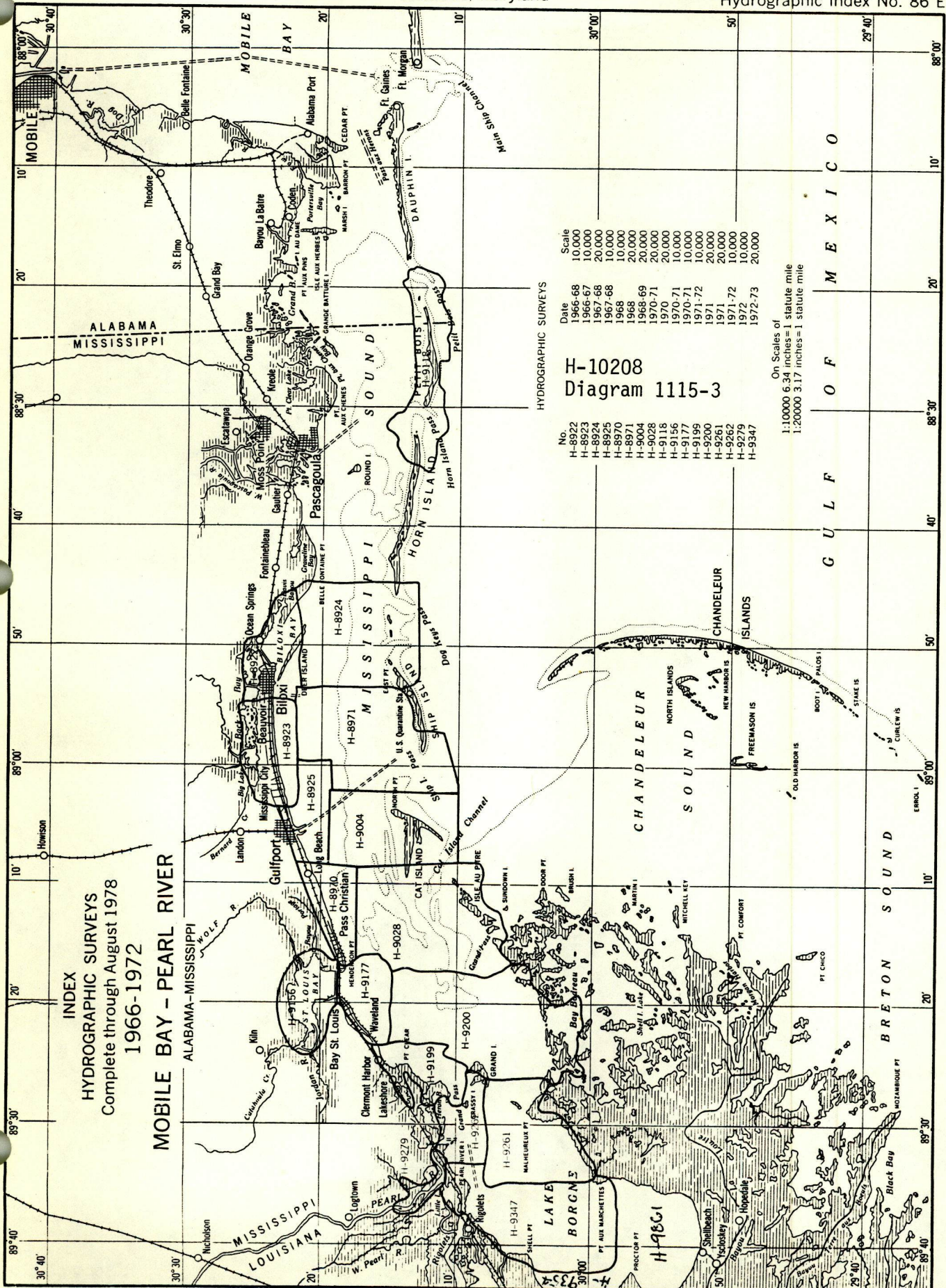
Dwayne S. Clark
December 15, 1986
N/CG243



WELL HEADS IN THE SURVEY AREA

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

Hydrographic Index No. 86 E



INDEX
HYDROGRAPHIC SURVEYS
Complete through August 1978
1966-1972

MOBILE BAY - PEARL RIVER

HYDROGRAPHIC SURVEYS

No.	Date	Scale
H-8922	1966-68	10,000
H-8923	1966-67	10,000
H-8924	1967-68	20,000
H-8925	1967-68	10,000
H-8970	1968	10,000
H-8971	1968	20,000
H-9004	1968-69	20,000
H-9008	1970	20,000
H-9116	1970-71	10,000
H-9117	1970-71	10,000
H-9199	1971-72	10,000
H-9200	1971	20,000
H-9261	1971-72	10,000
H-9262	1972	10,000
H-9279	1972	10,000
H-9347	1972-73	20,000

H-10208
Diagram 1115-3

On Scales of
1:10000 6.34 inches=1 statute mile
1:20000 3.17 inches=1 statute mile

G U L F O F M E X I C O

