

9118

Diag. Cht. No. 1267.

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT (HYDROGRAPHIC)

Type of Survey HYDROGRAPHIC
Field No. 742-20-1-70
Office No. H-9118

LOCALITY

State MISSISSIPPI
General Locality MISSISSIPPI SOUND
Locality .. HORN ISLAND PASS AND PETIT BOIS PASS

1970

CHIEF OF PARTY
Mark E. Harbert

LIBRARY & ARCHIVES

DATE 5/4/75

☆U.S. GOVERNMENT PRINTING OFFICE: 1974-763-098

414
574
1268

HYDROGRAPHIC TITLE SHEET

H-9118

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.

742-20-1-70

State Mississippi

General locality Mississippi Sound

Locality Horn Island Pass and Petit Bois Pass

Scale 1:20,000 Date of survey 21 April to 15 June 1970

Instructions dated 25 Oct. 1968, 3 Sept. 1969,
30 Oct. 1969, 17 Nov. 1969, Project No. OPR-468
and tel. inst. from AMC 24 Oct. 1969

Vessel Launches CS-1247 and CS-1259

Chief of party LT Mark E. Harbert

Surveyed by LTJG John P. Campton and Walter H. Piner

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

Graphic record scaled by Party Personnel

Graphic record checked by Party Personnel

~~Positions verified~~ H. R. Smith Automated plot by AMC-CALCOMP 618

~~Soundings penciled by~~ H. R. Smith

Soundings in 4 fathoms feet at MLW 223W

REMARKS:

Applied to stls 5/16/75
CRB

RWW 4-12-91

DESCRIPTIVE REPORT
TO ACCOMPANY
Hydrographic Survey H-9118
Project OPR-468

SCALE: 1:20,000 Hydrographic Field Party 742
CHIEF OF PARTY: LT Mark E. Harbert
SURVEYED BY: LTJG John P. Campton and
 Walter H. Piner

* * * * * * * * *

A. Project

Work on project OPR-468 was executed in accordance with instructions dated 25 October 1968, Supplemental instructions dated 3 September 1969, 30 October 1969, 17 November 1969, and telephone instructions from Atlantic Marine Center on 24 October 1969. ✓

B. Area Surveyed

This survey is in the vicinity of Horn Island Pass and Petit Bois Pass, Mississippi. It covers the areas between Horn Island and Petit Bois Island, between Petit Bois Island and Dauphin Island, and the north shore of Petit Bois Island. This area is between Latitude 30°11'N. and 30°14'N. and between Longitudes 88°18'W. and 88°35'W. ✓

C. Sounding Vessels

Launches CS-1247 and CS-1259 were used on this survey. Position numbers for Launch 1247 are in violet and those for Launch 1259 are in red. Positions obtained by walking the shoreline are in blue. ✓

D. Sounding Equipment

Raytheon Fathometers, type DE-723, serial number 1995 and serial number 1888 were used on launch 1259. Raytheon Fathometer, type DE-723, serial number 1885 was used on Launch 1247. ✓

Sounding poles were used in depths less than six feet.

Corrections applied to echo soundings were obtained by averaging the results of daily bar checks for each fathometer. An abstract of these corrections is tabulated in APPENDIX "B" of this report. ✓

No unusual difficulties were encountered with the sounding equipment.

E. Smooth Sheet

The smooth sheet will be plotted by Atlantic Marine Center using punched tape made by party personnel. Two identical boatsheets (designated "A" and "B") were used, to allow simultaneous operations of the two launches. ✓

F. Control

Horizontal control was provided by a type DR-S Raydist system on a frequency of 3306.4 kilocycles. Shore station locations are given in APPENDIX "A" of this report. Daily calibration was accomplished by running the launches as close as possible to daybeacon calibration points of known position. On days when work was done in areas behind land masses, a few simultaneous Raydist and three point sextant fixes were taken. These visual fixes are a part of the original raw data record, but were not logged. A comparison of plotted visual fixes and their corresponding Raydist positions revealed a minor displacement of about 20 meters, but this was not considered significant. An accurate determination of the displacement could be determined only by mathematical computation. ✓

G. Shoreline

No manuscripts are presently available and no shoreline is plotted except in areas where visual control was established. ✓

~~F-10765, F-10766, F-10767, F-10768, F-10770~~
See Review

H. Crosslines

Crosslines were run at ten times the regular sounding line interval. They are in generally good agreement. ✓

I. Junctions

Not applicable.

U. Comparison with chart

A comparison was made with chart 874-SC. Soundings are in good agreement south of the 18 foot curve and north of the 12 foot curve. Areas around the ends of the islands and shoal areas in the passes between the islands show considerable changes. Shoals have shifted markedly and are generally deeper than prior to Hurricane Camille which hit the area in August 1969.

Features to be charted:

<u>Feature</u>	<u>Location</u>	<u>Remarks</u>
Wreck awash	Lat. $30^{\circ}12.89^{\circ}N$. Long. $88^{\circ}25.48^{\circ}W$.	This wreck is most likely the one reported sunk at $30^{\circ}14.9^{\circ}N$, $88^{\circ}26.0^{\circ}W$. in "Local Notice to Mariners" dated May, 1970. It was apparently towed to this present position and its gear salvaged. Recommend charting in present position.
<i>Visible wreck located on survey - Retain on chart.</i>		
Wreck	Lat. $30^{\circ}12.58^{\circ}N$. Long. $88^{\circ}24.27^{\circ}W$.	First sighted 8 June 1970 lying on side, exposed 2 feet in 11 feet of water. This wreck appeared to be breaking up and will most likely drift away from this position. Recommend that it not be charted.
<i>Visible wreck located on survey - Retain on chart.</i>		
Obstruction	Lat. $30^{\circ}13.56^{\circ}N$. Long. $88^{\circ}18.18^{\circ}W$.	Previously charted as wreck. Unable to identify but established to be covered only 4.2' at MLW, not 5.0' as charted.
<i>Sunken wreck (steel hull) brought forward from H-8647</i>		<i>Retain on chart - least depth 3 feet.</i>
Obstruction	Lat. $30^{\circ}13.36^{\circ}N$. Long. $88^{\circ}29.16^{\circ}W$.	Previously charted but established to be covered only 2' MLW, not 3' as reported.
<i>Retain on chart - least depth "covered 1 ft. at MLW."</i>		

Anchored
Floating
barrel

Lat. 30°13.71'N.
Long. 88°34.68'W.

Anchored by a long length
of heavy hauser for un-
known purpose. Recommend
that it be charted as a
danger to navigation. ✓

Chart Anchored Barrel
posit. 480

Snags and
Stumps

Lat. 30°13.71'N.
Long. 88°33.90
to 88°34.80'W.

Numerous snags & stumps *Position*
exist along the south *2915*
shore of Horn Island. ✓

Presently charted as Rock.

L. Adequacy of Survey

This survey is complete and adequate to supercede
prior surveys for charting purposes. ✓

M. Aids to Navigation

There are 23 floating aids and 4 fixed aids to nav-
igation (3 range lights and 1 light marking an obstruc-
tion) within the limits of this survey. They adequately
serve the purpose intended. ✓

N. Statistics

<u>Launch</u>	<u>Total number of positions</u>	<u>Miles of sounding line</u>
1247	1458	399.4
1259	943	270.5
walking	43	--
shoreline		

This survey covers 30 square nautical miles.

Portable bubbler tide gages at the Pascagoula, Mis-
sissippi Coast Guard Pier and at Pt. Cadet, Biloxi, Mis-
sissippi provided tidal control for this survey. During
the period 4 May 1970 through 11 May 1970 only, Pt. Cadet
tides were used while the Pascagoula gage was inoperative. ✓

When the Pt. Cadet tides were reduced for field use,
the value of MLW on the staff used was incorrect. As a
result, all boatsheet soundings for 4 May 1970 through 11
May 1970 are shown 0.6' too deep. The area involved are
position numbers 774 through 1048 on sheet "A" (through the
center of Petit Bois Pass) and position numbers through
369 on sheet "B" (through the center of Horn Island Pass).
This error has been corrected in the tabulated tides.

Respectfully submitted,

John P. Campton
LTJG, USESSA

APPENDIX "A"

Raydist Stations and Calibration Points

Broadwater Temp 1969 (green station)

(2) Lat. $30^{\circ}23' 16.125''$ N.
Long. $88^{\circ}57' 43.245''$ W.

Pins 2, 1935 (red station)

(1) Lat. $30^{\circ}22' 26.351''$ N.
Long. $88^{\circ}18' 33.446''$ W.

	<u>Cal. Point</u>	<u>Red</u>	<u>Green</u>
"A"	Lat. $30^{\circ}16' 14.130''$ Long. $88^{\circ}29' 52.054''$	473.30 lns	1026.02 lns
"B"	Lat. $30^{\circ}13' 04.527''$ Long. $88^{\circ}30' 03.542''$	557.98	1063.21
"C"	Lat. $30^{\circ}13' 29.883''$ Long. $88^{\circ}32' 06.662''$	602.35	989.70
"D"	Lat. $30^{\circ}12' 59.243''$ Long. $88^{\circ}30' 15.786''$	565.71	1057.99

APPENDIX "A" Cont.

List of Signal Origins

<u>Signal</u>	<u>Origin of Position</u>
001✓	Post 1970 <i>check 16</i>
002	*
003	*
004✓	*
005✓	*
006✓	Wet 2, 1935, ¹⁹⁶² 1970 <i>check</i>
008✓	*
009✓	*
010✓	*
011✓	*
012✓	*
101	*
102✓	Dauphin 1935 - check 1958
103✓	*
104✓	*
105	**
201✓	*
202✓	*
203✓	*
501✓	Artificial Signal
502✓	Artificial Signal
503✓	Artificial Signal
504✓	Artificial Signal

* These signals were established by Photo Party 61. Some positions were computed using unadjusted field positions of new stations set in 1969 by Geodesy Party G19 and are subject to final verification.

** Signal 105 was established by party personnel to be 1358.0' from signal 104. The horizontal angle from signal 102 to signal 105, as measured to the right from signal 104, is $198^{\circ} 42' 15''$. The position of signal 105 was computed by Photo Party 61 from these data.

APPENDIX "A" Cont.

List of Signals

<u>Signal</u>	<u>Lat.</u>	<u>Long.</u>
001	30° 13' 18.11 "N.	88° 33' 58.43 "W.
002	30° 13' 29.883"	88° 32' 06.662"
003	30° 16' 14.034"	88° 29' 52.108"
004	30° 13' 04.527"	88° 30' 03.542"
005	30° 12' 59.172"	88° 30' 15.781"
006	30° 12' 44.57 "60.00	88° 29' 56.81 "821
008	30° 12' 49.014"	88° 30' 19.130"
009	30° 12' 32.596"	88° 29' 31.616"
010	30° 12' 27.635"	88° 29' 04.107"
011	30° 13' 08.667"	88° 34' 52.267"
012	30° 13' 10.492"	88° 34' 26.021"
101	30° 13' 48.978"	88° 17' 47.865"
102	30° 13' 49.573"	88° 18' 15.159"
103	30° 13' 47.515"	88° 18' 46.646"
104	30° 13' 53.536"	88° 19' 10.184"
105	30° 13' 58.883"	88° 19' 24.386"
201	30° 12' 22.822"	88° 24' 22.065"
202	30° 12' 27.847"	88° 24' 56.265"
203	30° 12' 02.197"	88° 25' 25.558"
501	30° 13' 00.000"	88° 24' 00.000"
502	30° 13' 00.000"	88° 20' 00.000"
503	30° 14' 00.000"	88° 20' 00.000"
504	30° 15' 00.000"	88° 20' 00.000"

APPENDIX "B"

Corrections to Echo Soundings

Launch 1247

Fathometer DE-723, Ser. No. 1885

Table 1

<u>Depth (ft.)</u>	<u>Correction (ft.)</u>
0.0 to 19.2	+0.2
19.3 to 25.2	+0.4
25.3 to 31.2	+0.6
31.3 to 37.0	+0.8
37.1 to deeper	+1.0

Launch 1259

Fathometer DE-723, Ser. No. 1995

Table 2

<u>Depth (ft.)</u>	<u>Correction (ft.)</u>
0.0 to 15.0	-0.4
15.1 to 28.0	-0.2
28.1 to deeper	0.0

Launch 1259

Fathometer DE-723, Ser No. 1888

Table 3

<u>Depth (ft.)</u>	<u>Correction (ft.)</u>
0.0 to 9.0	-0.4
9.1 to 13.6	-0.2
13.7 to 16.6	0.0
16.7 to 30.0	+0.2
30.1 to 36.0	+0.4
36.1 to 38.0	+0.6
38.1 to 39.5	+0.8
39.6 to 41.5	+1.0
41.6 to 42.0	+1.2
42.1 to 46.0	+1.4
46.1 to deeper	+1.6

APPENDIX "B" CONTINUED

Sounding pole correction for Launch 1259

(This correction is made necessary by a wake depression at the launch's aft quarter, where pole soundings are taken).

1000 RPM

No correction

2400 RPM

Table 4

<u>Depth (ft.)</u>	<u>Correction (ft.)</u>
0.0 to 5.0	+0.4
5.0 to deeper	+0.2

Settlement and squat correction for launch 1259

No correction

Settlement and squat correction for launch 1247

1400 RPM

No correction

2000 RPM

Table 10

<u>Depth (ft.)</u>	<u>Correction (ft.)</u>
0.0 to 7.0	+0.4
7.1 to deeper	+0.2

APPENDIX "C"

Tidal Note

Gage Location: Pascagoula, Mississippi Coast
Guard Pier
Lat. $30^{\circ}20.70'N$.
Long. $88^{\circ}33.74'W$.

Gage type: Portable, pressure bubbler gage

Staff: MLW corresponds to 3.2' on staff

Correction: No time or height corrections were applied to the results obtained from the gage in reducing soundings

For the period 4 May 1970 through 11 May 1970 only, the following gage was used:

Gage location: Pt. Cadet, Biloxi, Mississippi
Lat. $30^{\circ}23.38'N$.
Long. $88^{\circ}51.45'W$.

Gage type: Portable, pressure bubbler gage

Staff: MLW Corresponds to 2.5' on staff

Correction: No time or height corrections were applied to the results obtained from the gage in reducing soundings

90th Meridian time was used at these stations.

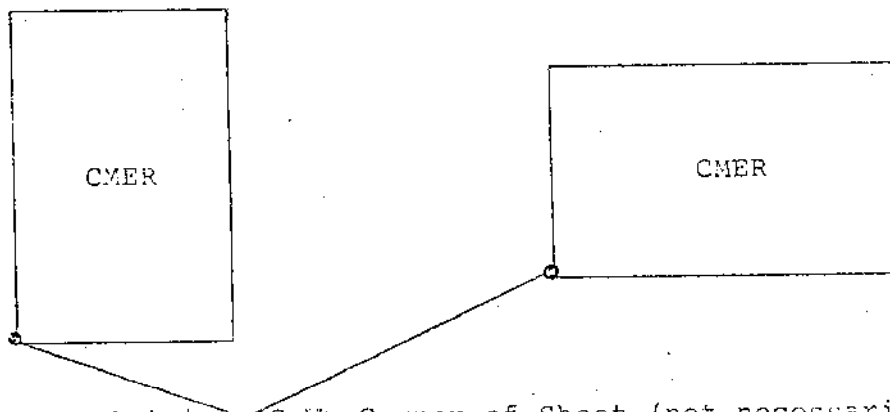
CAM3-1
1/31/74

ATLANTIC MARINE CENTER

PROJECTION PARAMETERS

POLYCONIC OR MODIFIED TRANSVERSE MERCATOR

1. Project No. OPR-428 4. Requested By Verification Branch
2. Reg. No. H-9118 5. Ship or Office AMC
3. Field No. 742-20-1-70 6. Date Required Smooth Sheet
7. Polyconic ☒ Modified Transverse Mercator ☐
8. Central Meridian of Projection 88 ° 27 ' 00 "
9. Survey Scale: 1: 20,000
10. Size of Sheet (check one):
36 x 54 ☐ 36 x 60 ☒ Other ☐ Specify _____
11. Sheet Orientation (check one):
NYX = 1 ☐ NYX = 0 ☐
N N



12. Plotter Origin: S.W. Corner of Sheet (not necessarily a grid intersection)
Latitude 30 ° 09 ' 35 "
Longitude 88 ° 36 ' 10 "
13. C.P.'s of triangulation and/or signals attached ☐
14. Material Desired: Tracing Paper ☐ Mylar ☒
Smooth Sheet ☒ Other ☐ Specify _____
15. Remarks: _____

ATLANTIC MARINE CENTER
VERIFICATION OF SMOOTH TIDES

SURVEY H- 9118

PLANE OF REFERENCE: MLW OR MLLW

TIME MERIDIAN: 90th

HEIGHT DATUM ON STAFFS: 1. 2.4 2. 3.2 3. 4.

TIDE STATIONS	POSITION	TYPE GAGE	TIME CORR.		HEIGHT CORR.*	
			H.W.	L.W.	H.W.	L.W.
1. Point Cadet, Miss.	ϕ 30°29'04" λ 88°51'05"	Portable	0.0	0.0	0.0	0.0
2. Pasgagoula, Miss.	ϕ 30°20'07" λ 88°33'07"	Portable	0.0	0.0	0.0	0.0
3.	ϕ λ					
4.	ϕ λ					

HOURLY HEIGHTS: ☐ FROM ROCKVILLE OFFICE

☒ FROM FIELD MARIGRAMS VERIFIED BY: Rockville

TIDE ZONING: ☒ NOT APPLICABLE

☐ BY COMPUTER

☐ FROM TWO OR MORE GAGES

LIMITS AND DESCRIPTION OF ZONING METHODS:

TIDE CORRECTIONS COMPILED: ☒ BY COMPUTER VERIFIED BY: GET

☐ MANUALLY VERIFIED BY:

HEIGHT OF MHW ABOVE PLANE OF REFERENCE: 1.7

TIDE CORRECTIONS VERIFIED ON SOUNDING PRINTOUT BY: GET

DATE OF VERIFICATION: 8/29/74

*OR RATIO

EXAMINED AND APPROVED

ATLANTIC MARINE CENTER
APPROVAL SHEET
FOR
AUTOMATED SURVEY H-9118

- A. All revisions and additions made on the smooth sheet during verification have been entered in the magnetic tape records for this survey. A new final position printout has/has not been made. A new final sounding printout has/has not been made.

Date: April 28, 1975

Signed: P. F. Tupper for.

Title: Chief, Verification Branch

- B. The verified smooth sheet has been inspected, is complete, and meets the requirements of the Hydrographic and AMC Manuals. Exceptions are listed in the verifier's report.

Date: April 28, 1975

Signed: August R. Baus, Lt. Noh

Title: for Chief, Processing Division

6/6/74

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 Form 362

Tide Station Used (NOAA Form 77-12): Point Cadet
Pascagoula

Period: April 21 - June 15, 1970

HYDROGRAPHIC SHEET: H9118

OPR: 468

Locality: Mississippi Sound

Plane of reference (mean ~~lower~~ low water): 2.4 (Point Cadet)
3.2 (Pascagoula)

Height of Mean High Water above Plane of Reference is
1.7 Point Cadet

Remarks:

Recommended Zoning
Zone direct on Point Cadet and Pascagoula

James R. Hubbard
Chief, Tides Branch

GEOGRAPHIC NAMES

H-9118

Name on Survey	A ON CHART NO.	B ON PREVIOUS SURVEY NO.	C ON U.S. QUADRANGLE MAPS	D FROM LOCAL INFORMATION	E ON LOCAL MAPS	F P.O. GUIDE OR MAP ATLAS	G RANDOMLY	H U.S. LIGHT LIST	K
✓ DAUPHIN ISLAND									1
✓ GULF OF MEXICO									2
✓ HORN ISLAND									3
✓ HORN ISLAND PASS									4
✓ HORN ISLAND PASS CHAN									5
✓ MISSISSIPPI SOUND									6
✓ PASCAGOULA CHAN									7
✓ PETIT BOIS ISLAND									8
PETIT BOIS PASS									9
									10
									11
									12
									13
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									16
									17
									18
									19
									20
									21
									22
									23
									24
									25

Approved
Char. E. Harrington
STAFF GEOGRAPHER
6 JUNE 1975

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. H-9118
742-20-1-70

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET		1	BOAT SHEETS (2 parts)		1	
DESCRIPTIVE REPORT		1	OVERLAYS		0	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES		2	1			
CAHIERS	2 Accordion Folders					
VOLUMES	2					
BOXES						

T-SHEET PRINTS (List)

T-10765 (5 parts)

SPECIAL REPORTS (List)

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				2444
POSITIONS CHECKED		244		
POSITIONS REVISED		10		
DEPTH SOUNDINGS REVISED		365		
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		8	5	13
JUNCTIONS			0	-
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS			8	8
SPECIAL ADJUSTMENTS			12	12
ALL OTHER WORK		223	115	338
TOTALS		231	140	371
PRE-VERIFICATION BY		BEGINNING DATE	ENDING DATE	
VERIFICATION BY <u>Harry R. Smith</u>		BEGINNING DATE	ENDING DATE	
REVIEW BY <u>David H. Hallgren</u>		BEGINNING DATE	ENDING DATE	

OK. Myer (15 hrs) OK. Myer 39 hrs 1/27/76 OK. Myer 2/9/76

Reg. No. H-9118

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey the following shall be completed:

CARDS CORRECTED

DATE _____ TIME REQ'D _____ INITIALS _____

REMARKS:

Reg. No. H-9118

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made during evaluation and review.

When the magnetic tape has been updated to reflect the final results of the survey, the following shall be completed:

MAGNETIC TAPE CORRECTED

DATE 6-12-78 TIME REQ'D. _____ INITIALS DEW

REMARKS:

H-9118 (1970)

Items for Future Presurvey Reviews

The following significant features are noted for future investigations.

(1) The obstruction covered 1 foot at mean low water located at latitude $30^{\circ}13.38'$, longitude $88^{\circ}29.16'$ on the present survey.

(2) The dredging range piles charted at latitude $30^{\circ}13.98'$, longitude $88^{\circ}29.97'$ and latitude $30^{\circ}14.01'$, longitude $88^{\circ}30.03'$.

(3) The snag charted at latitude $30^{\circ}12.6'$, longitude $88^{\circ}20.18'$ was found to be the only positive hang of a chain-drag investigation of a wreck on H-8647. This wreck was reported in 1938.

(4) The submerged piles located in the immediate vicinity of latitude $30^{\circ}12.6'$, longitude $88^{\circ}29.15'$ on the present survey.

(5) The visible wrecks charted at latitude $30^{\circ}12.58'$, longitude $88^{\circ}24.28'$ and latitude $30^{\circ}12.9'$, longitude $88^{\circ}25.48'$.

Position Index		*Bottom Change Index	Use Index	Resurvey Cycle (Years)
Lat.	Long.			
0301	0882	6	2	25
0301	0883	6	2	25
0301	0884	6	2	25

*A bottom change index in this area of Mississippi Sound is based on differences between prior and present depths due to catastrophic events; i.e., storms and hurricanes. This information does not necessarily provide an accurate source in determining a date for future survey.

OFFICE OF MARINE SURVEYS AND MAPS
MARINE CHART DIVISION
MODIFIED HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9118

FIELD NO. 742-20-1-70

Mississippi, Mississippi Sound, Horn Island Pass and Petit
Bois Pass

SURVEYED: April 21 - June 15, 1970

SCALE: 1:20,000

PROJECT NO.: OPR-468

SOUNDINGS: Raytheon DE-723 Echo
Sounder, Sounding Pole,
Leadline

CONTROL: Raydist
(Range-Range)

Chief of Party	M. E. Harbert
Surveyed by	J. P. Campton
.....	W. H. Piner
Automated Plot by	Calcomp 618 (AMC)
Verified by	H. R. Smith
Reviewed by	D. H. Hallock
.....	Date: July 17, 1975
Cursory inspection made--survey	G. K. Myers
processing considered complete	Date: January 27, 1976

1. Control and Shoreline

The source of control is adequately described in section F of the Descriptive Report. The shoreline originates from second edition Class III maps T-10765(2), T-10766(2), T-10767(2), T-10768(2), and T-10770(2) based on 1969 air photography.

2. Hydrography

Depths at crossings are in good agreement. The usual depth curves on the present survey are adequately delineated, except in the area of latitude 30°12.5', longitude 88°24.2' where sparse soundings fail to portray the limit of the low water line. The 3-foot depth curve was added to define the bottom configuration more distinctly.

3. Condition of the Survey

The sounding records, smooth plotting, Descriptive Report, and various sounding printouts are adequate and conform to requirements of the Hydrographic Manual supplemented by the Instruction Manual for Automated Hydrographic Surveys, except for the following:

A list of significant features located on the survey was not itemized in a separate record.

The bottom trace was lost in the initial in many areas of shoal depths which prevented an accurate rescan of the fathograms.

4. Junctions

There are no contemporary surveys that join the present survey. However, a comparison of adjoining charted depths shows good agreement.

5. Comparison with Prior Surveys

A.	H-1666	(1886)	1:20,000	H-362	(1853)	1:20,000
	H-328	(1853)	1:20,000	H-190	(1846)	1:20,000
	H-329	(1852)	1:20,000	H-4021	(1917)	1:40,000
	H-327	(1852)	1:20,000	H-4171	(1920)	1:80,000

These earlier surveys fall in the area of the present survey but are not discussed in the present review.

B.	H-8647	(1961-62)	1:20,000
	H-8646	(1961-62)	1:10,000
	H-8652	(1962)	1:10,000
	H-4020	(1917-18)	1:40,000

The prior surveys taken together cover the entire area of the present survey. A comparison between prior and present depths indicates no major bottom changes, except at the ends of the islands where extensive shoreline differences occur.

The western end of Dauphin Island has accreted about 350 meters, while the eastern end of Petit Bois Island has eroded as much as 650 meters in the area of Petit Bois Pass. The western end of Petit Bois Island has receded about 170 meters which is evidently due to alterations from dredging created by maintenance of the Federal Project Channel in that vicinity. The eastern end of Horn Island has eroded about 700-750 meters. The westward migration of these islands is considered to have been caused by wind and sea conditions, especially during storms.

The delineation of depth curves within the entrances to Mississippi Sound has essentially remained the same. However, a slight shifting of bottom sediments in shoal depths has occurred.

In addition to bottom characteristics and some depths brought forward from the prior surveys, the present survey is adequate to supersede the prior surveys in the common area.

6. Comparison with Charts 11375 (latest print date May 24, 1975)
11374 (latest print date Oct. 19, 1974)

A. Hydrography

The charted hydrography originates with the prior surveys previously discussed which need no further consideration, supplemented by prior and subsequent Corps of Engineers surveys of 1939-1975 and the present survey boat sheets (Bps 79211 and 81129-30) and the verified smooth sheet.

(1) Some soundings charted in the area of Horn Island Pass Channel originate with Corps of Engineers condition and after-dredging surveys subsequent to the date of the present survey and should be retained on the chart.

(2) The ³²⁴two piles charted at latitude 30°13.67', longitude 88°29.54' and latitude 30°13.63', longitude 88°29.48' from T-7016b neither appear on H-8647 (1961-62) nor are mentioned by the hydrographer and should be deleted from the chart. ⁴⁴²

(3) The dredging range piles charted at latitude 30°13.98', longitude 88°29.97' and latitude 30°14.01', longitude 88°30.03' originate with a Corps of Engineers survey of 1966 (Bp 70141). These pilings were neither investigated nor disproved on the present survey and should be retained as submerged piling. ³⁷⁸

Except as indicated above, the present survey is adequate to supersede the charted information in the common area.

B. Controlling Depths

The table of controlling depths is based on Corps of Engineers data subsequent to the present survey and supersedes the present survey information.

C. Aids to Navigation

The charted aids to navigation adequately serve the purpose and mark the features intended within the area of the present survey.

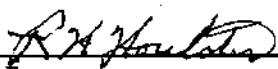
7. Compliance with Instructions

The survey adequately complies with the Project Instructions.

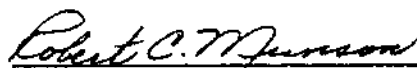
8. Additional Field Work

This is a very good basic survey and no additional field work is recommended.

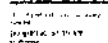
Examined and Approved:



Chief
Marine Chart Division



Associate Director
Office of Marine Surveys
and Maps



LEBENSZEITEN UND VERFAHREN DER VERFAHRER

(Mississippi Sound and Approaches)

Chart - 1267

1257

