

8924

Diag. Cht. No. 1267.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. HFP-742-20-2-66 Office No. H-8924

LOCALITY

State Mississippi

General locality Mississippi Sound

Locality Approaches to Biloxi Bay

1967-68

CHIEF OF PARTY

A. J. Patrick

LIBRARY & ARCHIVES

DATE 2-2-70

USCOMM-DC 37022-P66

8924

HYDROGRAPHIC TITLE SHEET

H-3924

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 742-20-2-66

State Mississippi

General locality Mississippi Sound

Locality Approaches to Biloxi Bay
~~Ship Island~~

Scale 1:20,000 Date of survey 1/12/67 - 3/5/68

Instructions dated 20 September 1966 & 12 October 1967 (Supp.) Project No. OPR 468

Vessel Hydrographic Field Party 742 (Lch.CS-1177, Lch.CS-183, Skiff 758)

Chief of party LCDR. Archibald J. Patrick

Surveyed by Robert A. Lewis

Soundings taken by echo sounder, hand lead, pole

Graphic record scaled by Party Personnel

Graphic record checked by Party Personnel

Protracted by Gerber Digital Plotter Automated plot by Pacific Marine Center
Verified by Atlantic Marine Center

Soundings penciled by Gerber Digital Plotter

Soundings in ~~fathoms~~ feet at MLW ~~MLLWX~~

REMARKS: _____

KWM 9/20/91

DESCRIPTIVE REPORT

TO ACCOMPANY

Hydrographic Survey H=8924 (HFP 742-20-2-66)

Project OPR 468

SCALE: 1:20,000

HYDROGRAPHIC FIELD PARTY 742

CHIEF OF PARTY:

ARCHIBALD J. PATRICK

SURVEYED BY:

ROBERT A. LEWIS

* * * * *

A. PROJECT

Work on Project OPR-468 was executed in accordance with \checkmark Instructions dated 20 September 1966, and Supplemental Instructions dated 12 October 1967.

B. AREA SURVEYED

This survey is in the vicinity of Ship Islands, Mississippi Sound, Mississippi, and covers the area ^{to Horn} between latitudes $30^{\circ}-13'$ to $30^{\circ}-22'$, longitudes $88^{\circ}-45'$ to $88^{\circ}-53'$.

This survey makes junction with contemporary Survey H-8922 (HFP-10-2-66) scale 1:10,000 on the north, Survey H-8650 (ECFP-10-2-62) Project OPR 410, scale 1:10,000 on the East, Survey H-8651 (ECFP-10-3-62) Project 410, scale 1:10,000 on the east.

C. SOUNDING VESSELS

Launch CS-183, Launch CS-1177, and Skiff CS-758 were used in this survey.

<u>Vessel</u>	<u>Identifying Color</u>
Launch CS-183	violet
Launch CS-1177	blue
Skiff CS-758	red

D. SOUNDING EQUIPMENT

A Raytheon fathometer, DE-723, serial No. 263, was used on Launch CS-1177 and fathometer No. 806 was used on Launch CS-183. A sounding pole ^{lead line} was used to obtain soundings in depths less than 6 ft.

Skiff CS-758 used a Raytheon fathometer, model DE-723, No. 549 and No. 927.

E. SMOOTH SHEET

The smooth sheet ^{was} ~~will be~~ plotted by ^{Pacific} Atlantic Marine Center, Norfolk, Va. ~~Seattle, Wash. and verified in the Atlantic Marine Center.~~

F. CONTROL

Horizontal control was obtained by standard visual three-point sextant fix methods. Appendix "A" of this report contains a complete list of control used and the quality and source of control.

It should be noted that visibility was a problem on this particular sheet. Therefore it was imperative hydro buoys be planted for control. It should also be noted that when more than 1 hydro signal was used for a fix it was a necessity, not a choice.

G. SHORELINE

Shoreline detail was taken from manuscripts T-11815; T-13035; T-13033; T-13034; T-11814. There are no changes in the shoreline to be reported.

H. CROSSLINES

Crosslines were run at approximately 10-15% of the regular system of sounding lines. Crossings were in good agreement.

I. JUNCTIONS

Depths at the junctions with the surveys listed in Section "B" are in good agreement and depth curves can be adequately drawn at these junctions.

J. COMPARISON WITH PRIOR SURVEYS

A comparison was made with prior survey, register No. 4021, dated 1917, scale 1:40,000. In general, soundings are in good agreement and depth curves are relatively unchanged, however, in the area between Horn Island and Ship Island there are considerable changes due to the shifting of the sand bars in this vicinity. Notable changes are as follows:

<u>Prior Survey Feature</u>	<u>Position</u>	<u>Remarks</u>
7 ft. sdg.	30° -20.7' 88° -51.55'	Close spaced hydro in this vicinity shows depths of 8 ft. 7 has been deleted from chart
6 ft. shoal	30° -13.7' 88° -50.05'	Least depth in this vicinity is 10 ft. Bottom change
6 ft. shoal	30° -13.85' 88° -49.6'	9 ft. least depth found. Bottom change

11 ft. shoal	30° -16.3' 88° -47.1'	11 ft. shoal is approx. 200 meters in diameter and consists of hard clay. Vol. 17, pg. 46. <i>Charted</i>	✓
10 ft. shoal	30° -16.35' 88° -46.05'	10 ft. shoal, 200 meters long, 100 meters wide, consists of hard clay. Vol. 17, pg. 56. <i>Charted</i>	✓
10 ft. shoal & 9 ft. shoal	30° -17.5' 88° -46.7'	There are 3 shoals in this vicinity to be charted. <i>Charted</i>	✓
3 ft. sdg.	30° -20.15' 88° -46.95'	The pass thru the spoil area southwest of Lt. 10 has 3 ft. soundings. <i>Charted</i>	✓
Iron pipes	30° -14.8' 88° -52.8'	2 iron pipes, 5" diameter, bare 10 ft. MHW, one used as signal SIN. <i>Charted as markers</i>	✓

L. ADEQUACY OF SURVEY

This survey is considered adequate to supersede prior surveys for charting purposes.

M. AIDS TO NAVIGATION

There are 4 floating aids to navigation maintained by the U.S. Coast Guard. The Harrison County Development Commission maintains 4 fixed aids and 10 floating aids within the limits of this survey. It should be noted that maintenance on these private aids leaves much to be desired. Biloxi East Channel Buoy 1 hasn't been on station during the entire period of this survey, lighted buoy No. 2 has been extinguished for this period and light No. 4 has been destroyed and missing during the 1967-68 season.

N. STATISTICS

<u>Vessel</u>	<u>No. Positions</u>	<u>Nautical miles sdg. line</u>
Launch CS-1177	2224	648.0
Launch CS-183	394	127.1
Skiff CS-758	282	56.1
	<u>2900</u>	<u>831.2</u>

Total area 59.0 square nautical miles
Bottom samples 59

A portable bubbler tide gage, located at Pt. Cadet, Biloxi, Mississippi, furnished tide control for the survey. Data for reduction of soundings were taken directly from the station records without time or range corrections. See Appendix "C", TIDAL NOTE, for additional information on this station.

O. MISCELLANEOUS

An attempt was made to use raydist for horizontal control on this sheet, however excessive interference on all available frequencies made the use of this equipment impossible.

Due to the unreliability of the raydist signal, all raydist hydro was rejected (days a-17g, h-k Launch CS-1177).

Submitted by,

Robert A. Lewis

Robert A. Lewis
Cartographer

APPENDIX A

LIST OF SIGNALS H-8924

Triangulation Stations

✓ LAN Island, 1966
✓ HIP Ship Island Light, 1902
Topo Stations

ATE Biloxi East Channel Lt.8
FOR Biloxi East Channel Lt.4
LIG Biloxi East Channel Lt.14
TEN Biloxi East Channel Lt.10
TOO - T-13035 Horn Island Lt. 2
WED Biloxi Channel Lt.2
RIO " " DAY BN. 1

Photo-Hydro

T-11814
ACE IVY
HEX NAG

T-11815
CAR KEN
GIL HED

T-13033
DOC TOM
RIM WAX
SIN WES

T-13035
GUT RED
LAG TRE
ORN BAR

T-13034
SHY

Hydro Signals

* BAT Vol. 6, pg. 43
BOY Vol. 16, pg. 4
* CAT Vol. 16, pg. 4
009 DOG Topo Vol. 6, pg. 16 T-13035
* GAL Vol. 18, pg. 3
019 * JOE Vol. 14, pg. 5
* PIP Vol. 8, pg. 25
RAK Vol. 3, pg. 8 - vol. 2, pg. 62

* Computed hydrographic

* Sextant angles inadequate -
"006" located by Photo Branch AMC.
14 L.R.

APPENDIX B

Abstract of Corrections to Echo Soundings

LAUNCH CS-1177

①

g thru t days		Corr.
Depth		
4.0 to 10.0		-0.4
10.1 to 12.0		-0.2
12.1 to 18.0		-0.4
18.1 to deeper		-0.6

u.v.w.x days

②

3.0 to 7.3	-0.2
7.4 to 13.8	0.0
13.9 to 18.2	+0.2
18.3 to 24.0	+0.4
24.1 to 28.6	+0.6
28.7 to 36.0	+0.8
36.1 to deeper	+1.0

③

z - ua days		
3.0 to 9.0		-0.2
9.1 to 15.0		0.0
15.1 to 19.7		+0.2
19.8 to 22.6		+0.4
22.7 to 25.4		+0.6
25.5 to 28.4		+0.8
28.5 to 31.6		+1.0
31.7 to deeper		+1.2

④

va thru db days		
4.0 to 8.0		-0.4
8.1 to 12.0		-0.2
12.1 to 16.1		0.0
16.2 to 20.1		+0.2
20.2 to 24.0		+0.4
24.1 to 27.0		+0.6
27.1 to 29.1		+0.8
29.2 to 31.0		+1.0
31.1 to deeper		+1.2

SKIFF CS-758

⑤

a thru f days		
1.0 to 2.7		0.0
2.8 to 4.8		+0.2
4.9 to 6.8		+0.4
6.9 to 9.4		+0.6
9.5 to 13.9		+0.8
14.0 to 17.0		+1.0
17.1 to deeper		+1.2

⑥

g day		
0.0	all depths	

LAUNCH CS-183

⑦

a,b,c day		
6.0 to 6.8		-1.0
6.9 to 9.8		-0.8
9.9 to deeper		-0.6

⑧

f thru k days		
0.0	all depths	

APPENDIX C

GAGE LOCATION:

Pt. Cadet, Biloxi,
Mississippi.
latitude 30° -23.38'
longitude 88° -51.45'

GAGE TYPE:

Portable, pressure
bubble gage

STAFF:

MLW corresponds to 2.6 ft.
on staff during the 1966 -
1967 season. 2.5 ft. on
staff during the 1967 - 1968
season.

CORRECTION:

No time or height corrections
applied to the results
obtained from the gage in
reducing soundings.

The 90th meridian time was used at this tide station.

APPENDIX D

APPROVAL SHEET TO ACCOMPANY

Hydrographic Survey H-8924 (HFP 742-20-2-66)

Project 468

The field and office work was accomplished under my supervision.

The hydrography and descriptive report was done by Robert A. Lewis.

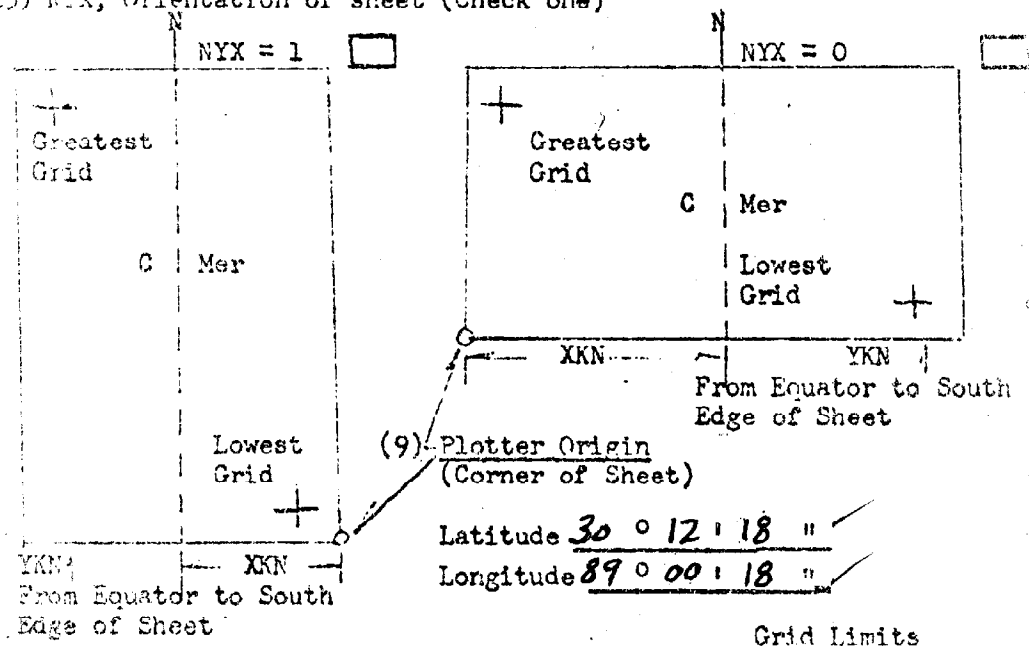
The report and records for this survey are complete and adequate to the best of my knowledge.

Approved and forwarded,

Archibald J. Patrick
Archibald J. Patrick
LCDR., USC&GS
Officer in Charge

PARAMETERS FOR DIGITAL COMPUTING
POLYCONIC PROJECTION

- (1) Project No. DPR-468
- (2) H No. H-8924 ✓
- (3) Field No. 742-20-2-66 ✓
- (4) Requested by - AMC
- (5) Ship or Office Party 742
- (6) Date Required _____
- (7) Visual
- (8) Electronic (fill out)
- (10) XKM (SP 5) Distance from CMER to East Edge (NYX = 1) or West Edge (NYX = 0). 14925.6 ✓
- (11) YKN (SP 241) Distance from Equator to South Edge of Sheet. 3,342,657.631 M ✓
- (12) Central Meridian 88° 51' 00" ✓
- (13) Survey Scale 1: 20,000 ✓
- (14) Size of Sheet (Check one) 36x60 42x60
- (15) NYX, Orientation of sheet (Check one)



- Grid Limits
- (16) Greatest Latitude 30° 22' 00" ✓ (Project)
 - (17) Lowest Latitude 30° 13' 00" ✓ (Inter-)
 - (18) Difference 00° 09' 00" ✓ (19) 01' 00" ✓
 - (20) 9 ✓
 - (21) Greatest Longitude 89° 00' 00" ✓
 - (22) Lowest Longitude 88° 42' 00" ✓ (24) 01' 00" ✓
 - (23) Difference 00° 18' 00" ✓ (25) 18 ✓

Comp. by - H. L. P.
✓ by - W. L. J.

NPO 8/4

LIST OF SIGNALS FOR
H-8924

001	30	21	0865	088	48	0781	ACE
002	30	19	1384	088	46	0792	ATE
003	30	15	0298	088	48	0830	BAR ✓
004	30	15	1504	088	49	0845	BAT
005	30	15	1078	088	49	1430	BOY
006	30	21	1007	088	45	1394	CAR
007	30	18	0833	088	49	0482	CAT
008	30	14	0115	088	53	0113	DOC ✓
009	30	14	1758	088	43	1450	DOG
010	30	18	1020	088	46	0797	FOR
011	30	15	0154	088	49	1132	GAL
012	30	22	0043	088	46	0609	GIL
014	30	14	1170	088	45	0708	GUT
015	30	20	1632	088	44	1478	HED
016	30	21	1482	088	49	0900	HEX
017	30	12	1390	088	57	1547	HIP ✓
018	30	22	0080	088	50	0072	IVY
019	30	20	1288	088	52	0687	JOE
020	30	21	0772	088	45	0933	KEN
021	30	15	0482	088	47	0552	LAG
022	30	14	1648	088	51	1382	LAN ✓
023	30	21	0767	088	47	0050	LIG
024	30	21	1064	088	49	0070	NAG
025	30	14	1266	088	46	0548	ORN
026	30	14	1340	088	49	1545	PIP
027	30	18	0235	088	45	1193	RAK
028	30	14	1268	088	45	0090	RED
029	30	14	0115	088	53	0864	RIM
030	30	21	1202	088	54	0347	RIO
031	30	14	1248	088	52	0418	SHY ✓
032	30	14	1583	088	52	1291	SIN ✓
033	30	20	0641	088	46	0792	TEN
034	30	14	0864	088	52	1479	TOM ✓
035	30	14	1302	088	46	0674	TOO
036	30	14	1068	088	46	0000	TRE
037	30	14	0844	088	52	1100	WAX ✓
038	30	21	1205	088	54	0203	WED
039	30	13	1256	088	53	1316	WES

D
THERE IS NO SIGNAL NUMBER 013

NONFLOATING AIDS ~~ON RECONSTRUCTION~~ FOR CHARTS

Photo Party at Biloxi, Mississippi March 14, 1967

TO BE CHARTED
~~REPEATED~~
~~REPEATED~~ } STRIKE OUT TWO

I recommend that the following objects which have ~~(removed)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted)~~ the charts indicated.

The positions given have been checked after listing by Dale M. Fuller

Ensign W. R. Cameron, USRSSA
Chief of Party

STATE	Mississippi	T-11815 & S	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION SURVEY	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
						LATITUDE *	LONGITUDE *	DATUM	D.M. METERS						
			LIGHT	Biloxi East Channel Light 4	FOR	30 18	88 46	N.A.	33.122	29.826	1927	X			1267, 876
			LIGHT	Biloxi East Channel Light 8	ATE	30 19	88 46	"	44.947	29.660	"	X			1267, 876
			LIGHT	Biloxi East Channel Light 10	TEN	30 20	88 46	"	20.829	29.687	"	X			1267, 876
			LIGHT	Biloxi East Channel Light 14	LIG	30 21	88 47	"	61.387	50.019	"	X			1267, 876
			LIGHT	Biloxi East Channel Light 18	LIG	30 21	88 47	"	7.67	59.3	"	X			1267, 876
			LIGHT	Biloxi East Channel Light 18	BIL	30 22	88 47	"	10.8	1583	"	X			1267, 876

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

GEOGRAPHIC NAMES

Survey No. H-8924

Name on Survey											
	A	B	C	D	E	F	G	H	K		
✓ Bellefontaine Point											1
✓ Deer Island											2
✓ Horn Island											3
✓ Mississippi Sound											4
✓ Ship Island											5
✓ Little Dog Keys Pass				✓							6
✓ Northwest Bluff				✓							7
✓ West Point				✓							8
✓ Dog Keys Pass				✓							9
Biloxi Bay				✓							10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

PREPARED BY

Francis W. Pickett
CARTOGRAPHIC TECHNICIAN

APPROVED BY

A. J. Wright
CHIEF GEOGRAPHER



TIDE NOTE FOR HYDROGRAPHIC SHEET

9/11/68

~~Nautical Chart Division:~~ Atlantic Marine Center

Plane of reference approved ~~to~~ for
~~Hydrographic Sheet No. 8924~~

HYDROGRAPHIC SHEET 8924

Locality: Mississippi Sound, Miss.

Chief of Party:

Plane of reference is mean low water

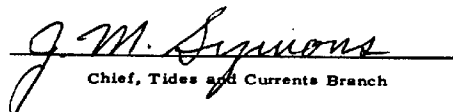
Tide Station Used (Form C&GS-681):

Point Cadet, Biloxi, Miss.

Height of Mean High Water above Plane of Reference is as follows:

1.8 feet

Remarks Tide reducers for position No. 2123 have been revised in red and verified.


Chief, Tides and Currents Branch

FORM C&GS-946
(REV. 11-65)
(PREP. BY
HYDROGRAPHIC
MANUAL 20-2,
6-64, 7-13)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY
NAUTICAL CHART DIVISION

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. H-8924

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET & Pos. Overlay	/	BOAT SHEETS	/
DESCRIPTIVE REPORT	/	OVERLAYS	<u>7 sheets</u>

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES	8					
CAMERS	1		8			
VOLUMES	18					
BOXES			2			

T-SHEET PRINTS (L.141)

SPECIAL REPORTS (L.141)

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				2900
POSITIONS CHECKED		290		
POSITIONS REVISED		170		
DEPTH SOUNDINGS REVISED		102		
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				

PROCESSING ACTIVITY	TIME (MANHOURS)			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
TOPOGRAPHIC DETAILS		6		
JUNCTIONS		4		
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS <i>Logging & Prelim</i>	150	20		
SPECIAL ADJUSTMENTS				
ALL OTHER WORK		236		
TOTALS		266	179	

PRE-VERIFICATION BY <u>D.R. Munford</u>	BEGINNING DATE <u>17 Oct. 1968</u>	ENDING DATE <u>18 Dec 1969</u>
VERIFICATION BY <u>F. Bean</u>	BEGINNING DATE <u>17 Dec 1969</u>	ENDING DATE <u>16 Jan 1970</u>
REVIEW BY <u>S.P. Baumgardner</u> <i>Insp. Carstens & Mr. Insp. D.R. Engle</i> <u>12-17-73 30 hrs.</u>	BEGINNING DATE <u>May 15, 73</u>	ENDING DATE <u>July 5, 1973</u>

FIG. 18.

DESCRIPTIVE REPORT DATA RECORD		
PART I SMOOTH SHEET PREPARATION		
	PREPARED BY/OPERATOR	DATE
A. PLOTTER OPERATOR	EDAT	
B. DISTORTION MARKS PLOTTED	EDAT	
C. PROJECTION INTERSECTIONS PLOTTED	EDAT	
D. POINTS OF ELECTRONIC CONTROL ARCS PLOTTED	(NONE)	
E. OVERLAYS PREPARED BY		
1. POSITION NUMBER	EDAT	
2. EXCESS SOUNDINGS	EDAT	
3. PRELIMINARY SMOOTH PLOT	EDAT	
4. LIST OTHERS		
A.		
B.		
F. SOUNDING SELECTION BY	EDAT	
G. PLOTTER INPUT	PREPARED	EDAT
H.	CHECKED	EDAT
I. DESCRIPTIVE REPORT ADDENDUMS	F. Bean	14 Jan 1970
PART II SMOOTH SHEET COMPLETION		
	CARTOGRAPHER	DATE
A. DISTORTION SCALE TICKS IDENTIFIED BY NOTE	F. Bean	18 Dec 1969
B. PROJECTION INTERSECTIONS VERIFIED BY	F. Bean	18 Dec 1969
C. PROJECTION LINES RULED BY	F. Bean	18 Dec 1969
D. ELECTRONIC CONTROL ARCS RULED AND LOCATION VERIFIED	(NONE)	
E. OVERLAYS COMPLETED BY		
1. POSITION NUMBER LEADERS ADDED	F. Bean	12 Jan 1970
2. EXCESS SOUNDING OVERLAY COMPARED	D.R. Munford	12 Sept 1969
3. PRELIMINARY SMOOTH PLOTS COMPARED	D.R. Munford	18 Dec 1968
4. OTHERS UTILIZED		
A.		
B.		
F. DESCRIPTIVE REPORT ADDENDUM	F. Bean	14 Jan 1970
G. CONTROL STATIONS VERIFIED	D.R. Munford	17 Oct 1968
H. POSITIONS MANUALLY PLOTTED	D.R. Munford	18 Dec 1968
I. MANUAL PLOT VERIFIED	D.R. Munford	18 Dec 1968
J. SHORELINE APPLIED	F. Bean	13 Jan 1970
K. BOTTOM CHARACTERISTICS ADDED	F. Bean	31 Dec 1969
L. NOTES AND DEPTH CURVES ADDED	F. Bean	15 Jan 1970

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8924

FIELD NO. HFP 742-20-2-66

AREA: Mississippi, Mississippi Sound, Approaches to Biloxi Bay

SURVEYED: January 12, 1967 - March 5, 1968

SCALE: 1:20,000

PROJECT NO: OPR-468

SOUNDINGS: DE 723 Depth Recorder
Sounding Pole and Lead
Line

CONTROL: Sextant Angles on
Shore Signals

Chief of Party..... A. J. Patrick
Surveyed By..... R. A. Lewis
Protracted By..... Gerber Digital Plotter
Soundings Plotted By..... Gerber Digital Plotter
Verified and Inked By..... F. Bean (Norfolk)
Reviewed By..... S. R. Baumgardner
..... Date: July 5, 1973
Inspected By..... D. R. Engle

1. Description of the Area

This survey is located in Mississippi Sound, southeast of Biloxi, Mississippi, and includes Biloxi East Channel, Dog Keys Pass, and Little Dog Keys Pass.

The bottom is generally flat and slopes gently to the south, except in the southern portion of the survey where sand bars with least depths of two feet between Ship and Horn Islands, and two natural passes with maximum depths of 35 and 37 feet through these bars provide a very irregular and changeable bottom.

The predominate bottom characteristics are mud and sand.

2. Control and Shoreline

The origin of control is adequately covered in Part F of the Descriptive Report.

The shoreline originates with reviewed photogrammetric Manuscripts T-11814, T-11815, T-13033, T-13034 and T-13035 of 1966-67.

3. Hydrography

- A. Depths at crossings are in good agreement.
- B. The usual depth curves are adequately delineated.
- C. The development of the bottom configuration and the determination of least depths are considered adequate.

4. Condition of the Survey

The sounding records, smooth plotting, and Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual and the Instruction Manual - Automated Hydrographic Surveys, except as follows:

A. A holiday exists on the survey in lat. $30^{\circ}20.2'$, long. $88^{\circ}49.3'$. Several soundings have been carried forward from H-4021 (1917) to partially fill this holiday.

B. Two hydrographic signals, Bat and Joe, falling in the water area, have not been described but are assumed to be hydrographic buoys.

5. Junctions

Adequate junctions were made with H-8650 (1962) and H-8651 (1962) on the east. Junctions with H-8971 (1968) on the west and H-8922 (1966) on the north will be considered in the reviews of those surveys. No contemporary surveys junction with the present survey on the south; however, survey depths are in general harmony with charted depths at the southern limit of the present survey.

6. Comparison with Prior Surveys

- A. H-430 (1854) 1:20,000
- H-489 (1855) 1:20,000
- H-4021 (1917) 1:40,000

Comparison of the prior and present surveys reveals major changes throughout the survey area. The western tip of Horn Island has accreted about two and one quarter miles; Ship Island has migrated westerly about half a mile; and the southern tip of Deer Island has eroded more than half a mile since the earliest survey.

The area between Ship and Horn Island, consisting of sand bars and two deep passes through these bars into the Gulf, has changed radically with each survey because of continual shifting of the sand bars.

The area between the mainland^{and}, Ship, and Horn Islands is now one to two feet deeper than the earliest surveys. Between 1854 and 1917 there was a general deepening trend throughout this area. This trend changed after the 1917 survey, evidently because of extensive dredging. Very little change occurred since that time except in the vicinity of East Biloxi Channel where shoaling of one to two feet has occurred.

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

7. Comparison with Charts

874-SC (Latest print date October 14, 1972)
876-SC (Latest print date September 2, 1972)

A. Hydrography

The charted hydrography originates with the previously discussed surveys which require no further consideration, supplemented by information from the boatsheet (Bp 74010) and the unverified smooth sheet of the present survey.

Hydrography subsequent to Hurricane Camille in the vicinity of Ship and Horn Islands (Bp 79211) was applied to the chart. Information from this and later date aerial photography (1969) was used to revise the charted hydrography and shoreline and should be retained on the chart.

Attention is called to the following:

(1) The wreck charted in Lat. $30^{\circ}15.60'$ Long. $88^{\circ}48.80'$, from Notice to Mariners 16 of 1970 subsequent to the date of the present survey, should be retained on the chart. ✓

(2) The following items charted from Chart Letter 1593 of 1967, subsequent to the date of the present survey, should be retained on the chart:

a. The sunken wreck PA in Lat. $30^{\circ}14.15'$ Long. $88^{\circ}49.85'$ ✓

- b. The pole in Lat. $30^{\circ}14.79'$ Long $88^{\circ}49.98'$
- c. The pole in Lat. $30^{\circ}14.51'$ Long. $88^{\circ}49.93'$
- d. The submerged pipe in Lat. $30^{\circ}14.60'$
Long. $88^{\circ}49.45'$
- e. The pole in Lat. $30^{\circ}14.93'$ Long. $88^{\circ}49.21'$

(3) The two submerged wrecks charted in approximate latitude $30^{\circ}18.15'$, longitude $88^{\circ}45.78'$ from H.O.N. to M. 32/66, 34/68, 30/70, and LNM 31/71 appear to be two different positions for the same wreck. It is recommended that the present survey position be used to chart this wreck. 874 A.

(4) The stranded wreck charted in Lat. $30^{\circ}21'$, Long $88^{\circ}50'$ from Notice to Mariners 17 of 1967 has been refloated and removed according to local information acquired by the hydrographer. An investigation of the area revealed no remains. This wreck should be deleted from the chart. 874 B

(5) The pile charted in Lat. $30^{\circ}20.89'$ Long. $88^{\circ}45.05'$ originates with the boatsheet of H-8924 (1966) on which a zero sounding was mistaken for a pile. This pile symbol should be deleted from the chart. 874

(6) The ilets charted in Lat. $30^{\circ}20.78'$ Long. $88^{\circ}45.10'$ from 1963 air photos (Bp 98133) prior to the present survey neither appear on T-11815 (1966-67) nor are mentioned by the hydrographer and should be deleted from the chart. 874

(7) The pipe located on the present survey in lat. $30^{\circ}15.16'$, long. $88^{\circ}48.52'$ should be charted.] LNM
112474 128

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

B. Controlling Depths

The charted controlling depth notes of Biloxi Bay Channel are based on data furnished by the U.S. Corps of Engineers subsequent to the date of the present survey and supersede the present survey information.

C. Aids to Navigation

Many of the aids to navigation have been established or relocated subsequent to the date of the present survey.

The presently charted aids adequately mark the features intended.


8. Compliance with Instructions

This survey adequately complies with the project instructions.

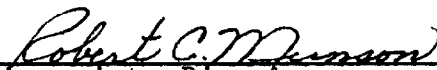
9. Additional Field Work

This a good basic survey of the area prior to Hurricane Camille in 1969 and no additional field work is recommended.

Examined and Approved:



Chief,
Marine Chart Division



Associate Director,
Office of Marine Surveys and Maps

H-8924

Items for Future Presurvey Review

The wreck discussed in par. 7A (3) of this review should be investigated at an opportune time to determine its position and verify the belief that only one wreck (not two) exists. Apparently no trustworthy position was ever determined for this wreck.

874*

Resurvey Cycle Information

			Bottom Change Index	Use Index	Resurvey Cycle	
Lat. 302	Long. 0885		3	2	50	
		302	0890	3	2	50
		301	0885	6	2	25
		301	0890	6	2	25

Reg. No. 8924

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 78 TIME REQ'D _____ INITIALS DEW

REMARKS:

5 piles in line from lat. $30^{\circ}20.82'$ long. $88^{\circ}44.97'$ to lat. $30^{\circ}20.58'$
long. $88^{\circ}45.11'$ should be digitized at time of final update.

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-8924

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
874-SC	5-5-72	William B. Williams	Full Part Before After Verification Review Inspection Signed Via Drawing No. #8 Exam descriptive report, applied critical corrections
876-SC	5-12-72	William B. Williams	Full Part Before After Verification Review Inspection Signed Via Drawing No. #8 Exam descriptive report, applied critical corrections
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
1267	12/19/72	P. Williams	Full Part Before After Verification Review Inspection Signed Via Drawing No. #40 Exam descriptive Report for critical corrections.
11374 (874-SC)	2/26/75	D. Williams	Full Part Before After Verification Review Inspection Signed Via Drawing No. 11
11372 (876)	10-24-76 10+4 Ed Proof	Conditon E. Reed	Full Part Before After Verification Review Inspection Signed Via Drawing No. Fully applied in area of overlap thru Chart 874 DWG # 12. Report applied in full to Chart 876. DWG # 11. Examined Survey for critical corr on Chart 876. 76
11372 876-SC	6-23-77	J. OWYANG	Full Part Before After Verification Review Inspection Signed Via Drawing No. 12A+B
11411	3-27-80	DM PERKINS	Full Part Before After Verification Review Inspection Signed Via Drawing No. 55 EXAM. N/A
111006	4/9/80	DM Perkins	Full Part Before After Verification Review Inspection Signed Via Drawing No. 30 EXAM N/A
11372	5-6-80	J. OWYANG	FULLY APPLIED AFTER REVIEW + INSPECTION VIA DRG # 15A. By O.W
11373	5-10-80	J. OWYANG	FULLY APPLIED AFTER REVIEW + INSPECTION VIA DRG # 47. - applied thru CHT 11372 + 11374
11360	5-10-80	J. OWYANG	EXAMINED SHEET AFTER REVIEW + INSPECTION NO CORRECTION.

