

# 8645

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. ECFP-10-14-63 Office No. H-8645

### LOCALITY

State ..... Mississippi

General locality Mississippi Sound

Locality Bayou Casotte to Middle River

1961-62

CHIEF OF PARTY

S. L. Hollis, Jr.

LIBRARY & ARCHIVES

DATE ..... Dec. 12, 1963

USCOMM-DC 37022-P66

# 8645

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-8645

Field No. ECP 10-14-61

State MISSISSIPPI

General locality MISSISSIPPI SOUND

Locality BAYOU CASOTTE TO MIDDLE RIVER

Scale 1:10,000 Date of survey 9 Nov. 1961 to 25 May 1962

Instructions dated 22/MEK, ECFP, DATED 18 SEPTEMBER 1959 AND 22/MAY, ECFP, DATED 11 APRIL 1961.

Vessel LAUNCH CS-183, LAUNCH CS-1177, SKIFF 758, SKIFF NO. 2

Chief of party LCDR. STEVEN L. HOLLIS, JR.

Surveyed by LT. W.V. Hull, LT. G.S. Brown, LT. (jg) HARRY W. FLOYD, Lt. J.W. Blumer

Soundings taken by fathometer, graphic recorder, hand lead, ~~and~~ SOUNDING POLE

Fathograms scaled by PARTY PERSONNEL

Fathograms checked by PARTY PERSONNEL

Protracted by Harry R. Smith (Norfolk Records Processing Unit)

Soundings penciled by Alpha G. Atwill " " " "

Soundings in ~~fathoms~~ feet at MLW ~~MKKKX~~ are true depths.

REMARKS:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

... with records ...  
" ...  
... MIM ...

*Handwritten initials*

DESCRIPTIVE REPORT  
TO ACCOMPANY HYDROGRAPHIC SURVEY H-8645  
(Field No. ECFP 10-14-61)  
Project OPR-410

SCALE:1:10,000

EAST COAST FIELD PARTY

CHIEF OF PARTY:

LCDR. STEVEN L. HOLLIS, JR.

\* \* \* \* \*

A. PROJECT

Work on Project OPR-410 was executed in accordance with instructions 22/MEK, ECFP, dated 18 September 1959 and 22/MMY, ECFP, dated 11 April 1961. ✓

B. AREA SURVEYED

This is a survey of that part of Mississippi Sound off of Pascagoula, Mississippi, from Bayou Casotte to Middle River. The limits are included between latitudes  $30^{\circ}17'45''$  to  $30^{\circ}21'30''$  and longitudes  $88^{\circ}30'00''$  to  $88^{\circ}37'35''$ . ✓

The survey was conducted from 9 November 1961 thru 25 May 1962.

This survey makes junction with contemporary surveys ECFP <sup>H-8645 (1961)</sup> 10-1-62 on the north, ECFP <sup>H-8645 (1961)</sup> 20-2-61 on the east, ECFP <sup>H-8645 (1961)</sup> 10-15-61 on the southeast, ECFP <sup>H-8645 (1962)</sup> 10-4-62 on the southwest and ECFP 10-2-62 on the west. ✓

This survey makes junction with prior surveys H-4021, scale 1:40,000 dated 1917, and H-4020, scale 1:40,000 dated 1917 and 1918. ✓

C. SOUNDING VESSELS

Vessels used for sounding were Launch CS-183, Launch CS-1177, Skiff 758, and a 14 foot aluminum skiff designated as Skiff No. 2. The following colors were used: ✓

Launch CS-183	Violet
Launch CS-1177	Blue
Skiff 758	Red
Skiff No. 2	Green

The shoreline <sup>LWL</sup> between longitudes  $88^{\circ}31'20''$  and  $88^{\circ}33'45''$  was walked along at ~~low water~~ and sextant fixes and check angles were taken along the water line. ✓

D. SOUNDING EQUIPMENT

EDO

The EDO 255c, No. 15, depth recorder was used on Launch CS-183 "a" thru "k" days, and "s" thru "x" days. The EDO 255c, No. 13, was used on "l" thru "r" days. ✓

Launch CS-1177 used the EDO 255c, No. 16, Depth Recorder on "a" thru "f" days, and No. 13 on "g" thru "p" days. ✓

Skiff 758 used the 808j fathometer No. 113s on "a" thru "d" day, "h" thru "k" day, "w", "x", "aa", and "ba" days. ✓  
The 808 fathometer No. 154 was used on "g", "l" thru "r", "t" thru "v" and "y" and "z" days.

A 16 foot aluminum Skiff designated as Skiff No. 2 was used one day to outline spoil banks that bare. (See Volume 12). ✓

A sounding pole was used on "e", "f", "s" and "ca" days.

A sounding pole was used in depths of less than 6 feet on the Launches, and in depths of less than 2 feet on Skiff 758. ✓

Echo sounder corrections were determined from daily bar checks and/or simultaneous comparisons. These corrections are tabulated in Appendix A "Abstract of Corrections to Echo Soundings" attached to this report. ✓

E. SMOOTH SHEET

The projection was made in the Washington Office by a projection ruling machine. ✓

F. CONTROL

Horizontal control was obtained by standard visual three-point fix methods as described in the Hydrographic Manual. ✓

Between the longitudes  $88^{\circ}31.5'$  and  $88^{\circ}34.0'$  the <sup>1/2 foot</sup> low water line was delineated by walking along the water's edge taking a three point fix with a check angle. ✓

Advance Photogrammetric Manuscripts Nos. T-10749, T-10750, and T-10751 compiled in 1959 were used for transfer of signals. ✓

Appendix B of this report contains a complete list of control used and the quality and source. ✓

#### G. SHORELINE

The shoreline detail was transferred from blue-line prints of Advance Manuscripts listed in Item F. *Shoreline in spoil areas longitude 88°30'25" from T-10751 and 10769 was revised from hydrographic information*

The shoreline has changed considerably in the vicinity to reflect of Bayou Casotte since the original survey in 1917-1918. *conditions of 1962.* All shoreline and along shore features were checked and verified.

#### H. CROSSLINES

Crosslines were run to the extent of seven percent of the regular system of sounding lines. Crossings checked within one foot, and are considered in good agreement.

#### I. JUNCTIONS

The depths at the junctions of the surveys listed in Section "B" are within one foot agreement and the depth curves can be adequately drawn.

#### J. COMPARISON WITH PRIOR SURVEYS

A comparison was made with Prior Surveys H-4020, 1917-1918, scale 1:40,000 and H-4021, 1917, scale 1:40,000, and are found to be in good agreement with the exception of the man-made changes, namely, the dredged channels and spoil banks leading to Pascagoula, Mississippi, and the Bayou Casotte industrial area.

The above items are discussed under item "L" Adequacy of the Survey.

There are no pre-survey review items.

#### K. COMPARISON WITH CHART

This survey was compared with C&GS Chart 414, 1st edition, 22 February 1960, scale 1:20,000, and a good agreement was found with the following exception:

The 10 foot depth charted in latitude 30°18.40' longitude 88°32.70' was found to be 8 foot on this survey.

#### L. ADEQUACY OF SURVEY

This survey is considered complete and adequate to supercede prior surveys for charting purposes, with the following exceptions:

L. ADEQUACY OF SURVEY (Cont.)

1. The spoil areas west of the Pascagoula Ship Channel. ✓
2. The spoil areas east of the Bayou Casotte Ship Channel. ✓
3. The depths in the Pascagoula Ship Channel and the Pascagoula River. ✓
4. The depths in the Bayou Casotte Ship Channel and turning basin. ✓

Sounding lines in the above reference areas should be disregarded as they were run prior to and during the Corps of Engineers dredging operation. ✓

Corps of Engineers after dredging survey should be referred to for proper channel depths and spoil limits for charting. ✓

M. AIDS TO NAVIGATION

There are 12 fixed aids to navigation maintained by the U. S. Coast Guard within the limits of hydrography. ✓

The floating aids maintained by the U. S. Coast Guard should be taken from positions given by the Coast Guard, as the dredging operations and the constant changing of aids during this survey make a comparison impossible. ✓

The fixed aids adequately serve the purpose for which they were established. ✓

N. STATISTICS

<u>Vessel</u>	<u>No. of Positions</u>	<u>Nautical Miles of Sounding Line</u>
Launch CS-183	647	102.6
Launch CS-1177	493	73.2
Skiff 758	1367	176.5
Skiff No. 2	73	-
Totals	2580	352.3

Total area surveyed - 18.0 square miles.

A portable tide gage, located at Pascagoula, Mississippi, furnished tide control for this survey, see Appendix C of this ✓

N. STATISTICS (Cont.)

report for additional information on this station. ✓

There are 25 bottom samples on this sheet.

Submitted by,

*P. A. Stark*  
For Wesley V. Hull  
Lt. C&GS

*Hull transferred before  
typing of this report completed*



INDEX OF APPENDICES

- A. ABSTRACT OF CORRECTIONS ✓
- B. LIST OF SIGNALS ✓
- C. TIDAL NOTE ✓
- D. APPROVAL SHEET ✓

APPENDIX A

ABSTRACT OF CORRECTIONS TO ECHO SOUNDINGS

<u>FATHOMETER DEPTH (ft.)</u>	<u>CORRECTION (ft.)</u>
-------------------------------	-------------------------

Launch CS-183

"a" day thru "h" day

0.0 to 17.9	0.0
20.0 and deeper	+0.2

"j" day and "k" day

6.0 to 11.5	-0.2
11.6 to 18.8	0.0
18.9 to 23.6	+0.2
23.7 to 27.0	+0.4
27.1 and deeper	+0.6

"l" day

5.0 to 18.0	+0.2
18.1 and deeper	+0.4

"m" day and "n" day

5.0 to 20.0	0.0
-------------	-----

"p", "q" and "r" days

0.0 to 11.0	0.0
11.1 to 20.0	+0.2
20.1 to 22.5	+0.4
22.6 to 25.8	+0.6
25.9 to 27.4	+0.8
27.5 to 31.0	+1.0
deeper	+1.2

"a" day

0.0 to 16.0	0.0
16.1 to 23.0	+0.2
23.1 and deeper	+0.4

"t" day and "x" day

5.0 to 7.0	-0.2
7.1 to 11.0	0.0
11.1 to 22.0	+0.2
22.1 to 25.0	+0.4
25.1 to 28.0	+0.6
28.1 to 30.0	+0.8
30.1 and deeper	+1.0

APPENDIX A (Cont.)

FATHOMETER DEPTH (ft.)                      CORRECTION (ft.)

Launch Cs-183

"u", "v" and "w" day

5.0 to 8.0	-0.2
8.1 to 21.0	0.0
21.1 and deeper	+0.2

Launch CS-1177

"a" day and "b" day

6.0 to 14.0	0.0
14.1 to 17.2	+0.2
17.3 to 19.4	+0.4
19.5 to 24.0	+0.6

"c", "d", "e", and "f" days

5.4 to 6.4	-0.4
6.5 to 8.0	-0.2
8.1 to 10.4	-0.0
10.5 to 15.5	+0.2
15.6 to 19.2	+0.4
19.3 to 22.2	+0.6
22.3 to 25.6	+0.8
25.7 to 28.4	+1.0
28.5 to 31.2	+1.2
31.3 to 33.4	+1.4
33.5 and deeper	+1.6

"g" day

6.0 to 6.5	-0.4
6.6 to 8.0	-0.2
8.1 to 10.5	0.0
10.6 to 15.0	+0.2
15.1 and deeper	0.0

APPENDIX A (Cont.)

<u>FATHOMETER DEPTH (ft.)</u>	<u>CORRECTION (ft.)</u>
<u>Launch CS-1177</u>	
"h", "j" and "k" days	
0.0 to 8.0	0.0
8.1 to 13.0	-0.2
13.1 to 21.0	-0.4
21.1 to 24.0	-0.2
24.1 to 30.0	0.0
"l" and "m" days	
7.0 to 7.6	0.0
7.7 to 17.5	-0.2
17.6 to 18.0	0.0
"n" day and "p" days	
4.0 to 16.0	0.0
16.1 to 21.0	+0.2
21.1 to 25.0	+0.4
25.1 and deeper	+0.6
<u>Skiff 758</u>	
"a", "b", "c" and "d" days	
2.0 to 7.0	+0.4
7.1 to 12.0	+0.6
12.1 to 17.0	+0.8
17.1 to 24.0	+0.6
"e" and "f" days	
Sounding Pole Used	
"g" day	
5.5 to 15.2	+0.2
15.3 to 18.0	+0.4
"h", "j" and "k" days	
2.0 to 15.0	+0.4
15.1 to 19.0	+0.2
19.1 and deeper	0.0
"l" day	
All Depths	0.0

APPENDIX A (Cont.)

FATHOMETER DEPTH (ft.)

CORRECTION (ft.)

Skiff 758

"m", "n", "p", "q", "r", "t", "u", "v", "y" and "z" days

0.0 to 21.0	+0.4
21.1 and deeper	+0.6

"s" day

Sounding Pole Used

"w" day

2.0 to 21.0	+0.4
21.1 to 25.0	+0.6
25.1 and deeper	+0.8

"x", "aa" and "ba" days

2.0 to 5.0	+0.4
5.1 to 9.0	+0.6
9.1 to 16.0	+0.8
16.1 to 24.0	+1.0
24.1 and deeper	+1.2

"ca" day

Sounding Pole Used

Skiff No. 2

"a" and "b" days

Sounding Pole Used

APPENDIX B  
LIST OF SIGNALS

8645

61-62

TRIANGULATION STATIONS

BEA	Pascagoula River Entrance Beacon C, 1935 <i>Pascagoula Channel Lt "32"</i>
CON	Pascagoula River Entrance Beacon B, 1935 <i>Pascagoula Channel Lt "26"</i>
LAND	Round Island Lighthouse (Abandoned L.H. TOWER) (landmark)
LIG	Pascagoula Channel Range C, Rear Light, 1958
MUN	Pascagoula South Municipal Tank 1958 (landmark)
NEL	Pascagoula Ch. Range A, Rear Light 1958
PAS	Pascagoula Ch. Range A, Front Light 1958
PIT	Round Island Spit Light 1958
PORT	Pascagoula Port Authority Grain Elevator 1961 (landmark)
RAD	Pascagoula County Police Radio Station KKC 635 Mast 1958 (landmark)
RAN	Pascagoula Ch. Range C, Front Light 1958
TAN	Bayou Casotte H. K. Porter Co. Tank 1958 (landmark)
TRA	Pascagoula River Entrance Beacon D, 1935 <i>Pascagoula Channel Lt "34"</i>
WAT	Pascagoula Port Facilities Water Tank 1958 (landmark)

TOPOGRAPHIC STATIONS

CAS	T-10751 Bayou Casotte (turning basin) Range B, Rear <del>D. Bn.</del> 1959 <i>Light</i>
OTT	Bayou Casotte Range A, Front Light 1959
REA	Bayou Casotte Range A, Rear Light 1959
SOT	Bayou Casotte (turning basin) Range B, Front <del>D. Bn.</del> 1959 <i>Light</i>
SAX	

APPENDIX B (Cont.)

LIST OF SIGNALS

PHOTO-HYDRO STATIONS

T-10749

TIT *YAK*

T-10750

CAB QUO  
MOT RAG  
NUT SIP  
PUG SKY

~~T-10741~~

~~YAK~~

T-10751

ACE PIN  
COP PUP  
*EVA* → HAL SAM  
IVY SHE  
LUG TOM  
NAT USE  
NAY VAL  
WED

T-10760

NEW OLD

APPENDIX C

TIDAL NOTE

GAGE LOCATION: Pascagoula, Mississippi  
Lat.  $30^{\circ}20.42'$   
Long.  $88^{\circ}32.05'$

GAGE TYPE: Portable Automatic

STAFF: Mean Low Water corresponds  
to 1.2 feet on the staff.

CORRECTION: No time or height correction  
was applied to the results  
obtained from the gage in  
reducing soundings.

The 90th meridian time was used at this station.



APPENDIX D

APPROVAL SHEET TO ACCOMPANY

Hydrographic Sheet H-8645 (ECFP 10-14-61)

Project OPR-410

The records, corrections, and all field and office work was supervised by LCDR Steven L. Hollis, Jr.

Boat sheets and records were checked at least once a week by Officer-in-Charge, ECFP.

This survey and the records are complete and adequate to the best of my knowledge.

Approved and forwarded,

*Pentti A Stark*  
Pentti A. Stark,  
LCDR. C&GS  
Officer-in-Charge

NORFOLK RECORDS PROCESSING UNIT  
ADDENDUM  
To Accompany

HYDROGRAPHIC SURVEY H-8645 (ECFP-10-14-61)

GENERAL

This appears to be an excellent basic survey. Soundings agree to within one foot at crossings, and depth curves form a normal pattern except in some areas of flat bottom where minor depth differences cause some irregularities. One-half foot soundings were used to smooth curves where possible.

As noted in the body of this report, dredging operations were in progress in the vicinity of channels at the time of this survey and floating aids were constantly being moved. Buoys, when located by the field party, were plotted on the smooth sheet but they usually do not check the charted locations. For this reason a tabulation of buoy locations was not made for this survey.

CHART COMPARISONS

(Charts 414, 12/17/62 & 1267, 11/5/62)

<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>CHART DEPTH</u>	<u>SMOOTH SHEET DEPTH</u>
30-19.72'	88-32.44'	3'	6'
19.88'	32.44'	3'	6'
20.18'	33.04'	4'	7'✓
20.06'	33.26'	2'	5'✓
20.75'	33.70'	7'	6' Chan. to Lake Yazoo
21.07'	33.95'	-	17'

Note: Pascagoula Rear Beacon C was rebuilt and relocated on May 24, 1962. See pos. 62ba (red).

Respectfully submitted,

*Hugh L. Proffitt*  
Hugh L. Proffitt  
Cartographer

Norfolk, Va.  
Dec. 5, 1963

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 5, 1964

Nautical Chart Division: R. H. Carstens

Plane of reference approved in  
16 volumes of sounding records for

HYDROGRAPHIC SHEET 8645

Locality Pascagoula Channel  
Mississippi Sound, Mississippi

Chief of Party: S. L. Hollis (1961-62)

Plane of reference is Mean low water, reading

1.2 ft. on tide staff at Pascagoula, Mississippi

5.8 ft. below B. M. 2 (1961)

0.4 ft. on tide staff at Bayou La Batre, Alabama

5.3 ft. below B.M. 1 (1961)

Height of mean high water above Plane of reference is 1½ feet.

Condition of records satisfactory except as noted below:

Tide reducers for the following positions have been revised  
in red and verified.

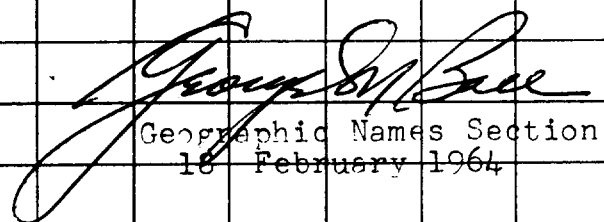
<u>Vol.</u>	<u>Position</u>
3	lj- 23j
	lk- 39k
6	lf- 12f

*J. M. Symons*  
Chief, Tides and Currents Branch

GEOGRAPHIC NAMES

Survey No. H-8645

Name on Survey	<div style="display: flex; justify-content: space-around; font-size: small;"> <span>On Chart No. <b>414</b></span> <span>On previous survey No.</span> <span>On U. S. quadrangle Maps</span> <span>From local information</span> <span>On local Maps</span> <span>P. O. Guide or Map</span> <span>Rand McNally Atlas</span> <span>U. S. Light List</span> </div>										
	A	B	C	D	E	F	G	H	K		
Bayou Casotte	x										1
Bayou Chico	x								x		2
Greenwood Island	x										3
Lake Yazoo	x								x		4
Middle River	x										5
Mississippi Sound	x										6
Pascagoula	x										7
Pascagoula Bay	x										8
Pascagoula River	x										9
Rabbit Island	x										10
Round Island	x										11
South Pascagoula	x										12
Spanish Point	x										13
Twin Islands	x										14
											15
											16
											17
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											26
											27

  
 Geographic Names Section  
 18 February 1964

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8645

Records accompanying survey: Smooth sheets 1;  
 boat sheets 2; sounding vols. 16; wire drag vols. ....;  
 Descriptive Reports 1; graphic recorder envelopes 12;  
 special reports, etc. 1-Overlay tracing (paper).  
 .....

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

Number of positions on sheet		<u>258.6</u>
Number of positions checked		<u>258</u>
Number of positions revised		<u>2</u>
Number of soundings revised (refers to depth only)		<u>90.6</u>
Number of soundings erroneously spaced		<u>none</u>
Number of signals erroneously plotted or transferred		<u>2</u>
Topographic details	Time	<u>3.4 hrs</u>
Junctions	Time	<u>1.8 hrs</u>
Verification of soundings from graphic record	Time	<u>3.0 hrs</u>
Special adjustments	Time	<u>2 hrs</u>

Verification by William K. Roberts Total time 36.0 hrs Date 1/18/68

Reviewed by [Signature] Time 12.5 hrs Date June 4, 1968  
 ck Review [Signature] 41 5-24-68

OFFICE OF HYDROGRAPHY AND OCEANOGRAPHY

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8645

FIELD NO. ECFP 10-14-61A

Mississippi -- Mississippi Sound, Bayou Casotte to  
Middle River

SURVEYED: November 9, 1961 -- May 25, 1962

SCALE: 1:10,000

PROJECT NO. OPR-410

SOUNDINGS: 808 Fathometer  
EDO Depth Recorder  
Sounding Pole

CONTROL: Sextant angles  
on shore signals

Chief of Party .....	S. L. Hollis
Surveyed by .....	W. V. Hull
	L. S. Brown
	H. Blumer
	H. W. Floyd
Protracted by .....	H. R. Smith
Soundings Plotted by .....	A. G. Atwill
Verified and Inked by .....	W. K. Roberts
Reviewed by .....	G. K. Myers
	Date: 6/4/68
Inspected by .....	R. H. Carstens

1. Description of the Area

This is an inshore survey of that part of the Mississippi Sound between Bayou Casotte and Middle River. Located approximately midway between the extremities of the survey is Pascagoula River. Survey work in this river extended to a limit of lat. 30°21'30" at the northern boundary. The southern limit of the survey is bounded approximately by lat. 30°17'45". In the southwest corner of the survey lies Round Island.

The offshore portions of the Sound present a gently sloping bottom configuration except for dredged channels leading from the rivers to the Gulf of Mexico. These channels during survey operations were in the process of being dredged.

In the eastern portion of the survey spoil areas appear which extend intermittently within the 3-foot depth curve from the shoreline to the southern extremity of the survey. Three spoil banks also exist about  $\frac{1}{2}$  mile west of the Pascagoula Channel within a shallow area extending the length of the channel. The bottom in this area consists of soft mud.

In the vicinity of Round Island appearing on the survey is a flat, shallow area protruding about 1 mile in a northwesterly direction into the Mississippi Sound. The bottom along the northeastern shore of the island consists of sand ridges.

West Pascagoula River, with depths as great as 18 feet at its mouth, is of little navigational value as its entrance from the Sound is controlled by 2-foot depths. Here, the bottom is hard sand.

## 2. Control and Shoreline

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

Pascagoula Range Entrance Beacon C, 1935, signal BEA, in lat.  $30^{\circ}20.4'$ , long.  $88^{\circ}33.8''$  was moved about 18 meters northeast of its original position by the U.S. Coast Guard during the period of the survey, and subsequently relocated by the field party.

The shoreline originates with reviewed photogrammetric manuscripts T-10749 (1957-1962), T-10750 (1957-1962), T-10751 (1957-62), T-10760 (1957-1962), and T-10769 (1958-1959). Shoreline in spoil areas, long.  $88^{\circ}30'25''$  from T-10751 and 10769, was revised from hydrographic information to reflect conditions of 1962. The spoil bank in lat.  $30^{\circ}18'$ , long.  $88^{\circ}32.2'$ , and northwestward also reflect 1962 conditions.

## 3. Hydrography

A. Depths at crossings are in good agreement.

B. The usual depth curves are adequately delineated except that the zero depth curve was not completely defined in those areas where spoil banks and mud flats exist.

The 3-foot depth curve was added to define the bottom configuration more distinctly.

#### 4. Condition of the Survey

The field plotting, sounding records, and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual, except for the following:

A. The sounding volumes were not signed by either the Officer-In-Charge or the Chief of the Party.

B. A number of sounding volumes did not include the vessel's speed or the geographic positions of lines as required by Section 5-97 of the Hydrographic Manual.

C. Data regarding bar checks -- Stamp No. 35 -- was not completely recorded in accordance with Section 5-93 of the Hydrographic Manual.

D. The recorder inserted MRV (middle reed vibrating) and frequency meter readings in only a few of the volumes. These statements should be recorded when an actual check is made.

E. A number of spoil areas were not delineated on the survey by the hydrographer either by fixes or by sketches. The word "spoil" has been placed in those areas where spoil is known to exist in accordance with statements made in the sounding volumes.

#### 5. Junctions

Adequate junctions were effected with H-8648 (1961-62) on the east, H-8649 (1961-62) on the north, H-8650 (1962) on the west, H-8652 (1962) on the southwest and H-8646 (1961-62) on the south.

The spoil area of the present survey which lies west of Pascagoula Ship Channel supersedes the hydrography on H-8646 (1961-62) in the junctional area.



## 6. Comparison with Prior Surveys

A.	H-328	(1853)	1:20,000
	H-365	(1853 & 1889)	1:20,000
	H-4020	(1917)	1:40,000
	H-4021	(1917)	1:40,000

These prior surveys cover the area of the present survey. A comparison of the prior and present depths indicates a general shoaling of 1 to 2 feet, except in the areas of dredged channels and spoil banks. In 1917 the Pascagoula Ship Channel had a dredged depth of 15-18 feet shoaler than that of present depths of 32-37 feet. The area east of this channel was 3-4 feet deeper than that of the present survey. This difference is considered to have been caused by the shifting of sediment from the spoil areas by current action.

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

## 7. Comparison with Chart 414 (latest print date 1-15-68)

### A. Hydrography

Most of the charted hydrography originates with the previously discussed surveys which require no further consideration, supplemented by partial application of depths from the boat sheet of the present survey and from prior and subsequent information furnished by the Corps of Engineers. Special mention is made of the following:

1. A few soundings west of Pascagoula Ship Channel and east of Bayou Casotte Ship Channel have been charted from subsequent U.S. Corps of Engineers 1964 surveys (Bp-66590, 66591, 66593) and shall be retained on the chart.

2. Soundings charted along the channel edge in Pascagoula River originate with a subsequent U.S. Corps of Engineers 1965 survey (Bp-69032) and should be retained on the chart.

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

## B. Topography

1. The spoil areas west of Pascagoula Ship Channel and east of Bayou Casotte Ship Channel which were charted from subsequent U.S. Corps of Engineers 1964 surveys (Bps-66590, 66591, 66593) should be retained on the chart. The islet (spoil) charted in lat.  $30^{\circ}18.5'$ , long.  $88^{\circ}30.42'$  from T-10769 (1958-59) has been discredited by hydrographic information on the present survey and should be deleted from the chart. *Deleted 414*

2. The piles, wharf and slip charted in lat.  $30^{\circ}20.4'$ , long.  $88^{\circ}30.5'$  originate with Bps 63983 and 63984 (1962) and chart letter 763, 1967 subsequent to the present survey and should be retained on the chart. *Retained 414*

3. The piles charted in lat.  $30^{\circ}21.35'$ , long.  $88^{\circ}30.4'$  apparently originating with air photos (Bp-59062) were neither verified nor disproved by the present survey and should be retained on the chart. *Retained 414*

4. The wharf and turning basin located at lat.  $30^{\circ}20.7'$ , long.  $88^{\circ}30.3'$  originate with BP-67387 subsequent to the present survey and should be retained on the chart. *Retained 414*

5. The shoreline charted in the area of Bayou Casotte originates with 1963 air photos (BP-98087) and should be retained on the chart. *also new photo revisions 414*

6. The marine railway ruins charted at lat.  $30^{\circ}21.6'$ , long.  $88^{\circ}33.8'$  originate with 1963 air photos (Bp-98087) and should be retained on the chart. *Retained 414*

7. The shoreline charted northwest of Spanish Point originates with 1963 air photos (Bp-98087) and should be retained on the chart. *new photo revisions 414*

8. The pier charted at lat.  $30^{\circ}20.6'$ , long.  $88^{\circ}33.5'$  originates with 1963 air photos (Bp-98087) and should be retained on the chart. *Retained 414*

9. The pier ruins charted at lat.  $30^{\circ}20.5'$ , long.  $88^{\circ}31.55'$  originate with 1963 air photos (Bp-98087) subsequent to the present survey and should be retained on the chart. *Retained 414*

10. The pipe charted in lat.  $30^{\circ}20.22'$ , long.  $88^{\circ}35.6'$  from the boat sheet was plotted in error and should be deleted. The correct smooth sheet position, about 300 meters to the northwestward, is also charted. *Deleted 4/14*

✓11. The following piers first charted in the mid forties from air photos (Bp-41693) and subsequently as pier ruins are considered to be non-existent and should be deleted from the chart:

- a. Pier ruins charted at lat.  $30^{\circ}20.60'$ , long.  $88^{\circ}32.21'$  *Deleted 4/14*
- b. Pier ruins charted at lat.  $30^{\circ}20.59'$ , long.  $88^{\circ}32.95'$  *Deleted 4/14*
- c. Pier ruins charted at lat.  $30^{\circ}20.60'$ , long.  $88^{\circ}33.35'$  *Deleted 4/14*

These do not appear on photographs of 1962 and 1963 and no mention of them was made by the survey party determining the mean low-water line at a minus tide.

✓12. The pier ruins charted at lat.  $30^{\circ}20.50'$ , long.  $88^{\circ}31.70'$  from air photos (Bp-59062) prior to the present survey neither appear on photographs of 1962 and 1963, nor are mentioned by the hydrographer and should be deleted from the chart. *Deleted 4/14*

### C. Controlling Depths

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

### D. Aids to Navigation

The fixed aids to navigation along the channels located on the present survey are in substantial agreement with the chart with the following exceptions:

1. Bayou Casotte Channel Light "6" located on the present survey at lat.  $30^{\circ}18.73'$ , long.  $88^{\circ}30.73'$  was rebuilt 120 meters northward subsequent to the data of the survey. The new position was reported in Notice to Mariners 31 of 1963.

2. Pascagoula Channel Light "34" located on the present survey at lat.  $30^{\circ}20.62'$ , long.  $88^{\circ}33.97'$  was rebuilt 45 meters southeastward subsequent to the date of the present survey and was renumbered "46". The new position was reported in Notice to Mariners 45 of 1963.

3. Pascagoula Channel Light "32" located on the present survey at lat.  $30^{\circ}20.4'$ , long.  $88^{\circ}33.85'$  was rebuilt 20 meters southeastward and renumbered "44" subsequent to the date of the present survey. The new position was reported in Notice to Mariners 12 of 1964.

4. Pascagoula Channel Light "30" located on the present survey at lat.  $30^{\circ}19.75'$ , long.  $88^{\circ}33.22'$  was relocated 300 meters southeastward and renumbered "42" subsequent to the date of the present survey. The new position was reported in Notice to Mariners 3 of 1964.

The charted positions of the aids adequately mark the features intended.

The present survey positions of floating aids along the channels are provisional because of changes due to dredging. Some of the buoys subsequently have been replaced by fixed aids to navigation.


#### 8. Compliance with Instructions


The survey adequately complies with the Project Instructions.

#### 9. Additional Field Work

This survey is considered to be an adequate basic survey and no additional hydrography is recommended.

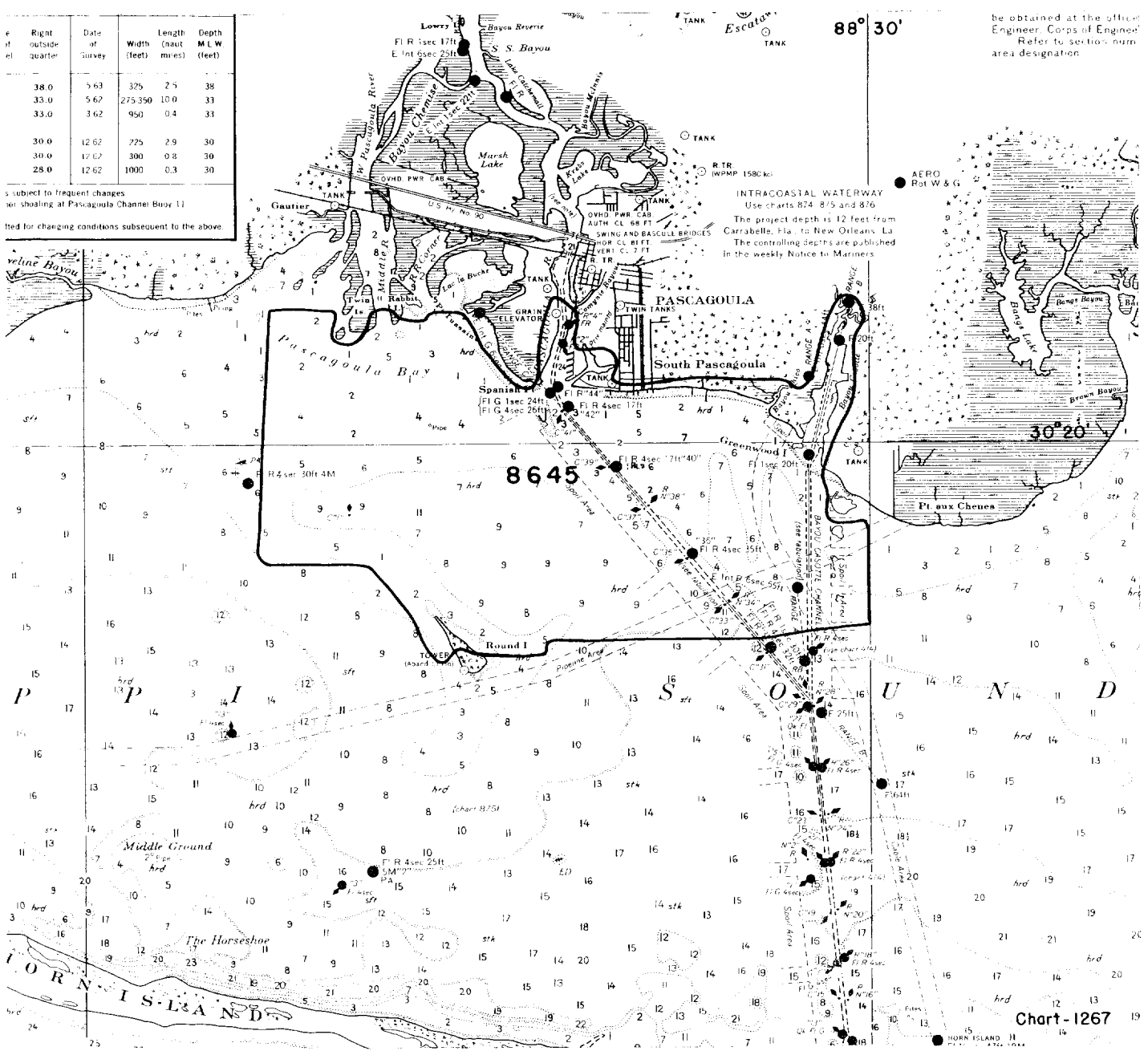
Examined and Approved:

  
 Chief  
 Marine Chart Division

  
 Associate Director  
 Hydrography and Oceanography

Right of outside quarter	Date of Survey	Width (naut miles)	Length (miles)	Depth M.L.W (feet)
38.0	5 63	325	2.5	38
33.0	5 62	275.350	10.0	33
33.0	3 62	950	0.4	33
30.0	12 62	775	2.9	30
30.0	12 62	300	0.8	30
28.0	12 62	1000	0.3	30

is subject to frequent changes  
 on shoaling at Pascagoula Channel Buoy 11  
 listed for changing conditions subsequent to the above.



be obtained at the office of  
 Engineer, Corps of Engineer  
 Refer to section num  
 area designation

Chart-1267

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-8645

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
414	2/4/69	John P. Wein	<del>Full Part Before</del> After Verification Review Inspection Signed Via Drawing No. 4 Revised curves, added a few soundings
875	2-5-64	John P. Wein	<del>Full Part Before</del> After Verification Review Inspection Signed Via Drawing No. 15 Part Applied thru Chart 414 dwg #4
874	6/17/64	Peter Kulberg	<del>Full Part Before</del> After Verification Review Inspection Signed Via Drawing No. thru chart 414 Dwg #4
1267	9/4/64	John P. Wein	<del>Full Part Before</del> After Verification Review Inspection Signed Via Drawing No. 30 Part Applied thru Chart 875 dwg #15
<del>414</del>	<del>10/6/69</del>	<del>H. Quinby</del>	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 10 Consider Adequately applied
<del>1267</del>	<del>10/6/69</del>	<del>H. Quinby</del>	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 37 - Examined thru Chart 414 <del>Before "Camille" 8/18/69 - RD 10/6/69</del>
<del>874-50</del>	<del>10/6/69</del>	<del>H. Quinby</del>	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 5 - Examined - no correction <del>Dwg no 10 - see above.</del>
414	9/17/70	A.E. Lundberg	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 11 Revised soundings and curves, Fully appl.
874	10/15/70	C.S. Fisher	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 6X. Revised soundings and curves, thru 414.
1267	10/15/70	C.S. Fisher	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 38 Revised soundings and curves thru 574