

8562

Diag. Cht. No. 1266-2.

Form 504	
U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Hydrographic
Field No. <u>ECFP-10-6-60</u>	Office No. <u>H-8562</u>
LOCALITY	
State	Alabama
General locality	Mobile Bay
Locality	West of Mullet Point
<u>1960</u>	
CHIEF OF PARTY	
H.S.Cole, J.R.Plaggmier & S.L.Hollis	
LIBRARY & ARCHIVES	
DATE	October 13, 1961

USCOMM-DC 5087

8562

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-8562

Field No. ECFP-10-6-60

State ALABAMA

General locality MOBILE BAY

Locality West of Mullet Pt.
~~SOUTH-EASTERN MOBILE BAY~~

Scale 1:10,000 Date of survey 30 Sept. 1960-7 Dec. 1960

Instructions dated 22/MK, ECFP 18 SEPTEMBER 1959

Vessel LAUNCH CS-1177, LAUNCH CS-183, SKIFF 758

Chief of party CDR. H.S. COLE, LCDR. J.R. FLAGGMIER, LCDR. S.L. HOLLIS, JR.

Surveyed by MR. ROBERT A. LEWIS

Soundings taken by ~~fathometer~~, graphic recorder, ~~hand lead, wire~~

Fathograms scaled by PARTY PERSONNEL

Fathograms checked by PARTY PERSONNEL

Protracted by GEORGE L. FERNANDES

Soundings penciled by GEORGE L. FERNANDES

Soundings in ~~fathoms~~ feet at MLW ~~MLLW~~ and are true depths

REMARKS:

110

DESCRIPTIVE REPORT
TO ACCOMPANY

Hydrographic Survey H-8562, Field No. ECFP-10-6-60
South-Eastern Mobile Bay
Mobile Bay, Alabama

PROJECT: OPR-410
EAST COAST FIELD PARTY

SCALE: 1:10,000
LCDR. STEVEN L. HOLLIS, Officer-in-Charge

A. PROJECT

Work on Project OPR-410 was executed in accordance with Instructions 22/MEK, ECFP, dated 18 September 1959.

B. AREA SURVEYED

The general locality of this survey is south-eastern Mobile Bay, off Mullet Point. The area surveyed extends from Lat. $30^{\circ} 26' 00''$ to Lat. $30^{\circ} 22' 00''$, and from Long. $87^{\circ} 53' 00''$ and the east shore of Mobile Bay to Long. $88^{\circ} 00' 30''$.

This survey makes junction with contemporary surveys H-8574 (ECFP-10-8-60) (1:10,000-1960) at its northern limit (Lat. $30^{\circ} 26' 00''$), with H-8561 (ECFP-10-5-60) (1:10,000-1960) at its western limit (Long. $88^{\circ} 00' 30''$), with H-8563 (ECFP-20-1-60) (1:20,000-1960) at its southern limit ($30^{\circ} 22' 00''$), and with ECFP-10-6-61 (1:10,000-1961) at its eastern limit (Long. $87^{\circ} 53' 00''$).
and H-8635 (1961) on the southeast.
Junction is made with prior surveys H-4024 (1:40,000-1918) at the northern and western limits, and with H-4023 (1:40,000-1918) at the southern limit.

Work on this sheet commenced on 30 September 1960 and was completed on 7 December 1960.

C. SOUNDING VESSEL

Launch CS-1177 was used for the major part of the hydrography performed on this sheet. Work by CS-1177 is indicated by blue day letters (a-j day).

Launch CS-183 was operated for one days work and is indicated by violet day letters.

For depths less than six feet Skiff 758 was used. Work performed by Skiff 758 is indicated by red day letters.

All sounding vessels were based in Fowl River throughout survey operations.

D. SOUNDING EQUIPMENT

The EDO 255C no. 15 Depth Recorder, with Static Inverter no. 8, was used exclusively on both CS-1177 and CS-183. The EDO 255C no. 16 Depth Recorder, with Static Inverter no. 22, was used on Skiff 758.

Also sounding Pole.

No bar checks were taken on this survey because the maximum depth is 12 feet. Echo sounder corrections were determined from daily simultaneous comparisons, and were found to be 0.0 feet for the entire survey.

E. SMOOTH SHEET

The projection was made in the Washington office by a projection ruling machine. The shoreline and control signals were transferred in the usual manner and were verified in accordance with 757 of the Hydrographic Manual.

F. CONTROL

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

Triangulation dated 1960 was performed by Party 603, Lcdr. Herbert R. Lippold, Chief of Party, and by the East Coast Field Party, Cdr. Howard S. Cole, Officer-in-Charge.

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

All topographic control was located on Advance Manuscript T-10986.

G. SHORELINE

The shoreline was transferred from the blue-line print of Advance Manuscript T-10986. No notable change in the shoreline was observed.

H. CROSSLINES

Crosslines were run to the extent of 12 to 14 percent of the regular system of sounding lines. Favorable crossings were found.

I. JUNCTIONS

The depths at the junctions with the surveys listed in section B are in good agreement and depth curves can be adequately drawn at the junctions.

J. COMPARISON WITH PRIOR SURVEYS

There are no pre-survey review items on this sheet.

A comparison was made with prior survey H-4024 (1:40,000-1918). There is general agreement with the prior survey and the contemporary survey.

A comparison was made with prior survey H-4023 (1:40,000-1918). There is general agreement with the prior survey and the contemporary survey with the following exception:

The 13 foot soundings on the prior survey in the vicinity of Lat. $30^{\circ} 22' 00''$ between Long. $87^{\circ} 58' 00''$ and Long. $88^{\circ} 00' 00''$ are now 11 feet.

H-215(1849)

H-263(1851)

H-2226(1894)

K. COMPARISON WITH THE CHART

The examination of C&GS Chart 1266, 16th edition, 30 January 1961 (1:80,000) show a good comparison with the contemporary survey.

A wreck baring five feet and enclosed by piling was located at Lat. $30^{\circ}23.12'8''$ and Long. $87^{\circ}53.12'2''$. The depth of the water in the surrounding area is six to seven feet. This wreck was located on 14 November 1960. Four detached positions (42 thru 45, "c" day (red), volume 8, page 18) were taken to locate this wreck. It is recommended this wreck be plotted on the chart.

L. ADEQUACY OF SURVEY

This survey is complete and is considered adequate to supercede prior surveys.

M. AIDS TO NAVIGATION

There are eight fixed aids to navigation on this sheet.

AID NAME		LAT. & LONG.	DATE LOCATED	LIGHT LIST NO.
Mobile Channel Light	14	$30^{\circ}24'56''$ $88^{\circ}01'08''$	1960	6633
Mobile Channel Light	15	$30^{\circ}22'31''$ $88^{\circ}01'21''$	1960	6634
Mobile Channel Light	16	$30^{\circ}23'08''$ $88^{\circ}01'08''$	1960	6635
Mobile Channel Light	18	$30^{\circ}24'23''$ $88^{\circ}00'57''$	1960	6636
Mobile Channel Light	19	$30^{\circ}25'05''$ $88^{\circ}01'00''$	1960	6637
Mobile Channel Light	20	$30^{\circ}25'44''$ $88^{\circ}00'45''$	1960	6638
Mobile Bay Light		$30^{\circ}26'14''$ $88^{\circ}00'40''$	1960	6639
Mullet Point Daybeacon		$30^{\circ}24.28'$ $87^{\circ}55.25'$	1960	page 798

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

N. STATISTICS

<u>VESSEL</u>	<u>NO. OF POSITIONS</u>	<u>NAUTICAL MILES OF SOUNDINGS</u>
Launch CS-1177	1136	206.2
Launch CS-183	32	6.5
Skiff 758	170	21.3
	<hr/>	<hr/>
TOTAL	1338	234.0 ✓

Total area of survey - 22.5 square nautical miles

One tide station was used for control of the entire survey. This was a portable automatic tide gage located in Fowl River. Data for reduction of the soundings was taken directly from the station records without time or range corrections. See Appendix B, "Tidal Note", for additional information on this station. *East Falls off Limits of H-8562*

39 bottom samples were obtained on this survey. ✓

There were no current stations within the limits of this survey. ✓

O. MISCELLANEOUS

None

Respectfully Submitted,

George L. Fernandes
George L. Fernandes,
Cartographer, USC&GS

APPENDIX ATTACHMENTS

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

APPENDIX A

LIST OF SIGNALS
Hydrographic Sheet H-8562 (ECFP-10-6-60)

TRIANGULATION STATIONS

BIL MOBILE BAY, MOBILE CHANNEL LIGHT 19, 1960
FOX MOBILE BAY, MOBILE CHANNEL LIGHT 15, 1960
JOE MOBILE BAY, MOBILE CHANNEL LIGHT 18, 1960
KID MOBILE BAY, MOBILE CHANNEL LIGHT 14, 1960
LET MULLET 2, 1960
LOG MOBILE BAY, MOBILE CHANNEL LIGHT 16, 1960
MOB MOBILE BAY, MOBILE CHANNEL LIGHT 20, 1960
USE LIGHTHOUSE, 1960

MARKED TOPOGRAPHIC STATIONS

EVE EVER, 1959

MANUSCRIPT
T-10986

TOPOGRAPHIC STATIONS

DAY MULLET POINT DAYBEACON, 1960

T-10986

PHOTO-HYDRO STATIONS

MANUSCRIPT T-10986

CEN
COD
COW

EGO
END
MOO

PEA
RED
TIN

HYDROGRAPHIC STATIONS

CAT

✓

APPENDIX B

TIDAL NOTE

Hydrographic Sheet H-8562 (ECP-10-6-60)

GAGE LOCATION : *East* Fowl River, Mobile Bay, Alabama

Lat. 30° 27.0' N
Long. 88° 06.6' W

STAFF : Mean low water corresponds to 0.4 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 tide station.

✓

APPENDIX C

APPROVAL SHEET TO ACCOMPANY
Hydrographic Sheet H-8562 (HCYP-10-6-60)
Project OPR-410

The records, corrections, and all field and office work was supervised by Lcdr. John R. Plaggmier and Lcdr. Steven L. Hollis, Jr.

The descriptive report was written by George L. Fernandes.

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

Approved and Forwarded,

Steven L. Hollis
Steven L. Hollis, Jr.
Lcdr., USC&GS
Officer-in-Charge

✓

GEOGRAPHIC NAMES

Survey No. H-8562

Name on Survey	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On Chart No. 1266</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On previous survey No.</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On U. S. quadrangle Maps</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">From local information</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On local Maps</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">P. O. Guide or Map</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Rand McNally Atlas</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">U. S. Light List</div> </div>										
	A	B	C	D	E	F	G	H	K		
East Fowl River (Tide Stz)	✓										1
Mobile Bay	✓										2
Mullet Point	✓										3
											4
											5
											6
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											27

George W. Beale
Geographic Names
20 Oct 1961

BBW

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. .8562...

Records accompanying survey: Smooth sheets ...¹...;
 boat sheets ...¹...; sounding vols. ⁹.....; wire drag vols.;
 Descriptive Reports ...¹...; graphic recorder envelopes ...⁵...;
 special reports, etc.

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

Number of positions on sheet	.....	1338
Number of positions checked	.....	5
Number of positions revised	.....	1
Number of soundings revised (refers to depth only)	.....
Number of soundings erroneously spaced	.....
Number of signals erroneously plotted or transferred	.....
Topographic details	Time	.....
Junctions	Time	.....
Verification of soundings from graphic record	Time	8 hours
Special adjustments	Time	.....

Verification by Walter Schugeld Total time 46 hours Date 7/1/63

Reviewed by Heinrich Radde Time 98 hr. Date 10-15-63

OFFICE OF CARTOGRAPHY

REVIEW SECTION -- NAUTICAL CHART DIVISION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8562

FIELD NO. ECFP-10-6-60

Alabama, Mobile Bay, West of Mullet Point

SURVEYED: September - December 1960

SCALE: 1:10,000

PROJECT NO. OPR-410

SOUNDINGS: EDO Depth Recorders
Sounding Pole

CONTROL: Sextant Fixes
on shore signals

Chief of Party-----H. S. Cole, J. R. Plaggmier and
S. L. Hollis, Jr.
Surveyed by-----R. A. Lewis
Protracted by-----G. L. Fernandes
Soundings plotted by-----G. L. Fernandes
Verified and inked by-----A. K. Schugeld (Norfolk Office)
Reviewed by-----H. Radden
Inspected by-----R. H. Carstens

Date: 10/15/63

1. Description of the Area

The present survey is located in southeastern Mobile Bay off Mullet Point. The bottom is smooth and characterized by coarse sand within the limits of the 6-ft. curve and soft mud outside the limits of the 6-ft. curve. Depths within the area of the present survey generally range from 1-11 ft.

2. Control and Shoreline

The source of the control is adequately described in the Descriptive Report.

The shoreline originates with the unreviewed photogrammetric survey T-10986 (1957-59)

3. Hydrography

Depths at crossings are in good agreement. The 6-ft. curve was adequately delineated. The position of the mean low-water curve was not determined.

4. Condition of Survey

- a. The Descriptive Report is complete and comprehensive.
- b. The sounding records are adequate and conform to the requirements of the Hydrographic Manual.
- c. The smooth plotting was accurately done.

5. Junctions

Adequate junctions were effected with H-8574 (1960) on the north, with H-8561 (1960) on the west, with H-8563 (1960) on the south, and with H-8636 (1961) on the east. The junction with unverified survey H-8635 (1961) on the southeast will be considered in the review of that survey.

6. Comparison with Prior Surveys

- A. H-215 (1849), 1:20,000
 H-263 (1851), 1:20,000
 H-2220(1894), 1:40,000

These early prior surveys cover the area of the present survey. A comparison between the prior and present surveys reveals the present survey generally to be 1-2 ft. shoaler except in the area extending about one mile southwest of Mullet Point where the present survey is as much as 2-3 ft. shoaler. An example of this latter shoaling occurs in Lat. $30^{\circ}24.15'$, Long. $87^{\circ}54.81'$ where a prior depth of 9 ft. falls in present depths of 6 ft. The shoreline north of Mullet Point in the vicinity of Lat. $30^{\circ}25.00'$, Long. $87^{\circ}54.53'$ has eroded as much as 70 meters, whereas south of this point in the vicinity of Lat. $30^{\circ}24.00'$, Long. $87^{\circ}54.78'$ it has accreted as much as 100 meters.

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

- B. H-4023 (1917-18), 1:40,000
 H-4024 (1918), 1:40,000

These small-scale prior surveys together cover the area of the present survey. A comparison between the prior and pres-

ent surveys reveals the present depths in random areas to be 1-2 ft. shoaler than the prior depths. In the area referred to in paragraph A above which extends about one mile southwest of Mullet Point the present depths are generally about 1-2 ft. shoaler than the prior survey depths. North of Mullet Point in the vicinity of Lat. $30^{\circ}25.00'$, Long. $87^{\circ}54.53'$ the present shoreline has eroded about 40 meters. South of Mullet Point the position of the shoreline on the prior survey shows little differences with that shown on the present survey.

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

7. Comparison with Chart 1266 (Latest print date 7/8/63)
A. Hydrography

The charted hydrography originates principally with the previously discussed prior surveys which need no further consideration, and with two soundings from the boat sheet (Bp 60965) of the present survey. A comparison between the charted and present survey soundings reveals only minor differences of 1-2 ft. in depths.

The present survey is adequate to supersede the charted information within the common area.

B. Aids to Navigation

The present survey position of the only aid to navigation (Red Daybeacon) falling within the limits of the present survey is in substantial agreement with the charted aid and adequately marks the feature intended.


8. Compliance with Instructions


This survey adequately complies with the project instructions.


9. Additional Field Work


The present survey is considered to be a good basic survey and no additional field work is necessary.

Examined and Approved:


Chief,
Nautical Chart Division


Assistant Director,
Office of Cartography


Projects Officer,
Operations Division


Assistant Director,
Office of Oceanography

Information for Future Presurvey Reviews

Present shoaler depths may in part be due to survey methods. No marked shoaling of area is anticipated. Shoaling off Mullet Point has extended the 6 ft. curve as much as 105 meters. Erosion of shoreline north of Mullet Point is noted. Numerous piers have been built north and south of Mullet Point and in future years may deteriorate and become hazards to small craft.

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~

27 November 1961

Division of Charts: R. H. Carstens

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 8562

Locality South-Eastern Mobile Bay, Alabama

Chief of Party: J. R. Plaggmier (1960)
Plane of reference is mean low water reading
0.4 ft. on tide staff at Fowl River
9.7 ft. below B. M. No. 1 (1960)

Height of mean high water above plane of reference is: 1.5 feet

Condition of records satisfactory except as noted below:

J. M. Symons
Chief, Tides and Currents Branch

~~Chief, Division of Tides and Currents~~

88° 00'

MOBILE BAY

MOBILE BAY

8562

MOBILE

Chart - 1266

30° 20'

