8585

Diag. Cht. No. 1266-2.

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-5-2-61 *Office No.* H-8585

LOCALITY

State Alabama

General locality Mobile River

Locality Mobile

1961

CHIEF OF PARTY

J. R. Plaggmier & S. L. Hollis, Jr.

LIBRARY & ARCHIVES

DATE 1-16-62

USCOMM-DC 37022-P66

8585

Form 537
(Ed. June 1946)

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-8585

Field No. ECFP 05-02-61

State Alabama

General locality Mobile Bay River

Locality Mobile ~~River~~

Scale 1:5,000 Date of survey 1/30/61 - 7/18/61

Instructions dated 22/mek, ECFP-2 18 Sept. 1959

Vessel Launch CS-183, Launch CS-1177 & Skiff #2

Chief of party LCDR. John R. Plaggmier & LCDR. Steven L. Hollis, Jr.

Surveyed by R.A. Lewis

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

Fathograms scaled by Party Personnel

Fathograms checked by Party Personnel

Protracted by Guy F. Trefethen

Soundings penciled by Guy F. Trefethen

Soundings in ~~fathoms~~ feet at MLW ~~MLLW~~

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 16—66520-1

DESCRIPTIVE REPORT
TO ACCOMPANY HYDROGRAPHIC SURVEY
H-8585 (Field No. ECFP 05-2-61)

SCALE 1:5,000	1961	EAST COAST FIELD PARTY
CHIEF OF PARTY		JOHN R. FLAGGMIER
SURVEYED BY		R. A. LEWIS

* * * * * * * * * * * *

A. PROJECT

Hydrography was executed under instructions No. 22/mek, ECFP-2 dated 18 September 1959.

B. AREA SURVEYED

This survey is in the vicinity of Mobile Bay, Alabama and covers the area of the Mobile River between lat. 30°-41.3' - 30°-44.8'. Hydrography began 30 January 1961 and ended 18 July 1961.

This survey makes junction with contemporary surveys H-8584(ECFP-05-1-61) scale 1:5,000 - 1961 on the south, H-8586(ECFP 10-13-61) scale 1:10,000 - 1961 on the north.

C. SOUNDING VESSELS

Launch CS-183 was used for the greater portion of the survey. Launch CS-1177 was used for the remainder with the exception of one day of 7 positions accomplished with a 16 ft. aluminum skiff, designated Skiff No. 2.

Following is a list of vessels and identifying colors:

CS-183	violet
CS-1177	blue
Skiff No.2	green

D. SOUNDING EQUIPMENT

An EDO-255C type fathometer, serial No. 13, was used on both launches. Fathometer 808j No. 154 was used on Skiff No.2. A bar check was taken daily to determine instrumental corrections to be applied to the fathometers. No unusual difficulties were encountered with the sounding equipment.

E. SMOOTH SHEET

The smooth sheet projection was made in the Washington Office by ruling machine.

F. CONTROL

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

Appendix A of this report contains a list of control stations and the source of location for each.

An unusual method of positioning the launch, while executing hydrography in pier slips, was necessitated due to inability to obtain a three-point sextant fix. Hydrography was controlled by sextant cuts taken by 2 men stationed at the pier corners. The locations of these stations were determined by a three-point sextant fix and check angle. On a signal, received via radio from the launch, the anglemen occupying these stations would take a sextant cut from a known shore object to the launch. The angles were then relayed to the launch via radio and the cuts were immediately plotted by the hydrographer. The stations were designated on the boat sheet by blue circles and single capital letters.

G. SHORELINE

Shoreline detail was taken from Manuscript T-10938. The shoreline detail was verified by the hydrographer. Piers and seawalls extend along a large area of the shoreline, in other areas the low-water line was not completely defined by soundings due to numerous foul areas that cover most of the shallow water area of the sheet.

There is only one change in the shoreline detail, this feature is described under item (K) of this report.

H. CROSSLINES

Crosslines were run in excess of 20% of the general scheme of sounding lines. Crossings were in good agreement with the exception of (a day) Launch CS-1177, which was a crossline run approximately 2½ months later. During the lapse of time between the crossline and regular hydrography The Mobile River was at flood stage for 2 weeks, at which time the river bottom was probably ~~scoured~~ changed adequately in places by the swift current caused by flood waters. The crossline checks ~~in areas less likely to be scoured~~.

I. JUNCTIONS

Junction was made on the south with contemporary Survey H-8584(Field No. ECFP 05-1-61) scale 1:5,000 - on the north with contemporary Survey H-8586(Field No. ECFP 10-13-61) scale 1:10,000. Agreement at these junctions is good and depth curves can be adequately drawn.
Latest soundings retained

J. COMPARISON WITH PRIOR SURVEYS

A comparison was not made with prior survey Register No. 228, dated 1850. No other prior surveys are available.

K. COMPARISON WITH THE CHART

A comparison with Chart 1266, 16th edition, Jan. 30, 1961 indicates good agreement for the most part with this survey. The four pier slips

K. COMPARISON WITH THE CHART (CONT'D)

on the west bank of the river at lat. 30°-42.5' are approximately 5 feet deeper than shown on the chart. Threemile Creek is shown on the chart as having a controlling depth of 16 feet, this survey reveals a controlling depth of 13 feet.

Chart review item No. 36 - There is only one change in the shoreline detail to be charted. This change is a new pier on the east bank of the river at lat. 30°-41.7'. The location of this pier is shown on the smooth sheet and manuscript T-10933.

Chart review item No. 37 - The "cable poles" mentioned in this review item are no longer in existence.

L. ADEQUACY OF THE SURVEY

This survey is considered adequate to supercede prior surveys.

M. AIDS TO NAVIGATION

There are two aids to navigation within the area covered by this survey. A comparison with the Light List and Chart 1266 indicate these aids adequately serve the purpose for which they were established.

N. STATISTICS

VESSEL	NO. OF POSITIONS	NAUTICAL MILES OF SDGS.
Launch CS-183	569	48.4
Launch CS-1177	118	8.2
Skiff No. 2	7	0.5
TOTALS	694	57.1

Total area surveyed: 1.1 sq. nautical mile

One tide station was used for control of the entire survey. This was a portable automatic tide gage located at the Alabama State Docks, Mobile. Data for reduction of the soundings was taken directly from the station records without time or range corrections. See Appendix C. TIDAL NOTE, for additional information.

O. MISCELLANEOUS

The channel area covered by this survey was dredged shortly after completion of hydrographic operations.

Submitted by,
Robert A. Lewis
Robert A. Lewis
Cartographic Tech.

APPENDIX D

APPROVAL SHEET TO ACCOMPANY

Hydrographic Sheet H-8585 (Field No. ECFP 05-2-61)
Project OPR-410

The records, corrections, and all field and office work was supervised by LCDR. John R. Plaggmier.

The Descriptive Report was written by R.A. Lewis.

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., C&GS
Officer In Charge

APPENDIX A

LIST OF SIGNALS

ABE	Topo Sheet #3
AERO	Bank Building, Aero Beacon, 1935
AMY	Topo Sheet #3
CAR	" " "
CAT	" " " .
CUPO	Mobile Railroad Station Cupola, 1935
DOCK	Mobile State Docks Tank, 1935
DRUG	Mobile Drug Co., Water Tank, 1935
EGO	Topo Sheet #3
FOE	" " "
GUY	" " "
IVER	Mobile River, North Bridge, East Light Pole, 1935
KID	Hydro. - Vol. 1, page 45
KRAF	Southern Kraft Paper Co. Tank, 1935
LIT	Topo Sheet #4
NEO	" " "
NEW	Topo Sheet #3
NIG	Hydro. - Vol.1, page 52
NOR	Topo Sheet #2
OTT	Topo Sheet #4
PAP	Topo Sheet #4
PER	" " "
REV	Topo Sheet #2
RIVE	Mobile River, North Bridge, West Light Pole, 1935
SAM	Topo Sheet #3
STAT	Mobile State Docks, North Tank, 1935
TOP	Topo Sheet #3
WEE	Hydro. - Vol. 1, page 31

APPENDIX B

ABSTRACT OF CORRECTIONS TO ECHO SOUNDINGS

Hydrographic Survey H-8585
Project OPR - 410
East Coast Field Party

Field No. ECFP 05-2-61
Mobile Bay, Alabama
1961 Field Season

* * * * * * * * * * * *

Launch CS-183 day & date	Recorder No.	Fath. Depth (ft.)	Fath. Corr. (ft.)
a - 1/30/61	EDO 255C #13	0.0 - 14.0	0.0
		14.1 - 23.0	+0.2
		23.1 - 28.0	0.0
		28.1 - 32.0	+0.2
		32.1 - 35.0	+0.4
		35.1 - 38.0	+0.6
		38.1 - 41.0	+0.8
		41.1 - 44.0	+1.0
		44.1 - Deeper	+1.2
b - 1/31/61	EDO 255C #13	0.0 - 30.0	0.0
		30.1 - 43.0	+0.2
		43.1 - Deeper	+0.4
c - 2/1/61	EDO 255C #13	0.0 - 19.0	0.0
		19.1 - 23.0	+0.2
		23.1 - 25.0	+0.4
		25.1 - 28.0	+0.6
		28.1 - Deeper	+0.8
d - 2/2/61	EDO 255C #13	0.0 - 13.0	0.0
		13.1 - 15.0	-0.2
		15.1 - 17.0	-0.4
		17.1 - 19.0	-0.6
		19.1 - 22.0	-0.4
		22.1 - 26.0	-0.2
		26.1 - 31.0	0.0
		31.1 - 34.0	+0.2
		34.1 - Deeper	+0.4
Launch CS-1177			
a - 4/10/61	EDO 255C #13	0.0 - 15.0	-0.6
b - 4/11/61		15.1 - 19.0	-0.4
		19.1 - 22.0	-0.2
		22.1 - 25.0	0.0
		25.1 - 36.0	+0.2
		36.1 - Deeper	0.0

APPENDIX C

TIDAL NOTE

GAGE LOCATION:	Mobile River, Mobile, Alabama Lat. 30°-42.45' N Long.88°-02.6' W
GAGE TYPE:	Portable Automatic
STAFF:	Vitrified scale - MLW corresponds to 2.4' on staff
CORRECTION:	NONE

90th meridian time was used at this station

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-8585

Name on Survey	A On Chart No. 1266	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	G Rand McNally Atlas	H U. S. Light List	K BGN	
Blakely Island	x									1
Chickasaw Creek	x								x	2
Industrial Canal	x									3
Magazine Point	x									4
Mobile	x								x	5
Mobile River	x									6
St. Louis Point	x									7
Threemile Creek	x									8
										9
PINTO PASS	RHC X									10
										11
										12
										13
										14
										15
										16
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										23
										24
										25
										26
										27

Geographic Name Section
25 January 1962

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. Apr. 1950

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~ February 8, 1962

Division of Charts: R. H. Carstens

Plane of reference approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 8585

Locality Mobile River, Alabama

Chief of Party: J. R. Plaggmier and S. L. Hollis, Jr. (1961)
Plane of reference is mean low water, reading
2.4ft. on tide staff at Mobile, Alabama
11.0ft. 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.~~

U. S. GOVERNMENT PRINTING OFFICE 877933

Form 946

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-8585

Records accompanying survey: Smooth sheets 1;

boat sheets 1; sounding vols. 4; wire drag vols. ;

Descriptive Reports 1; graphic recorder envelopes 4;

special reports, etc. .....

.....

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

Number of positions on sheet		694
Number of positions checked		202
Number of positions revised		10
Number of soundings revised (refers to depth only)		2
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	32
Junctions	Time	20
Verification of soundings from graphic record	Time	28 ~~135~~
Special adjustments	Time	0

Verification by Jayne B. Powers J. Cosgrove Total time 135 98 Date 7-2-65 10-29-68

Reviewed by A. B. Gardner Time 108 12 Date Nov. 2, 1972 5/25/73

Insp Carlson

US COMM C&GS DC

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8585 FIELD NO. ECFP-05-2-61

Alabama, Mobile River, Mobile

SURVEYED: January 30, 1961 through July 18, 1961

SCALE: 1:5,000 PROJECT NO.: OPR-410

SOUNDINGS: EDO 255c Depth Recorder, 808j Depth Recorder CONTROL: Sextant angles on shore signals

Chief of Party	J. R. Plaggmier
	S. H. Hollis, Jr.
Surveyed by	R. A. Lewis
Protracted by	G. F. Trefethen (AMC)
Soundings plotted by	G. F. Trefethen
Verified and inked by	F. B. Powers
	J. H. Cosgrove
Reviewed by	S. Baumgardner
	Date: November 2, 1972
Inspected by	R. H. Carstens

1. Description of the Area

The survey covers a section of Mobile River and Channel at Mobile. The major portion of the area is a Federal Project.

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-10933 of 1957-61. Minor shoreline revisions in red are by the hydrographer.

3. Hydrography

A. Depths at crossings are in good agreement.

B. The usual depth curves were adequately delineated except in some inshore areas which were foul.

C. The development of the bottom configuration and the investigation of least depths are considered adequate, however, moored ships prevented soundings in some areas. Additional soundings in the Industrial Canal would have been desirable.

4. Condition of the Survey

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

A. Bottom samples were not obtained as required in Section 5-76 of the Hydrographic Manual.

B. Some soundings on turns were added by the reviewer to supplement sparse soundings in delineating the bottom.

C. Time was not recorded on soundings between fixes.

5. Junctions

Adequate junctions were made with H-8586 (1961) on the north and H-8584 (1961) on the south.

6. Comparison with Prior Surveys

A. H-228 (1850), 1:10,000
H-229 (1850), 1:10,000
H-737 (1860), 1:10,000

A Federal Project Channel has been established within the common area subsequent to the prior surveys. Dredging and harbor improvements preclude a useful comparison.

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

7. Comparison with Chart 1266 (Latest print date September 4, 1971)

A. Hydrography

Most of the charted hydrography originates from the partial application of depths from the boat sheet and unverified smooth sheet of the present survey. Hydrography was also taken from U.S. Corps of Engineers Surveys of 1928 and 1946 (Bp 22334-42, 44843).

In areas not sounded on the present survey because of moored ships or the foul nature of the bottom depths previously charted should be retained.

1. The following items charted prior to the date of the present survey from 1957-59 photography were neither verified or disproved by the hydrographer and should be retained on the chart:

a. The dolphin charted in lat. 30°41.82', long. 88°02.12'.

b. The pier ruins charted in lat. 30°41.84', long. 88° 02.12'.

c. The two dolphins charted in the vicinity of lat. 30° 41.95', long. 88°02.12'.

d. The three dolphins charted in the vicinity of lat. 30° 44.60', long. 88°03.10'.

e. The two piers charted in the vicinity of lat. 30°43.98', long. 88°02.65'.

f. The dolphin charted in lat. 30°43.03', long. 88°02.50'.

g. The dolphin charted in lat. 30°41.64', long. 88°02.26'.

2. The following items were charted subsequent to the date of the present survey from sources indicated and should be retained on the chart:

a. The wreck in lat. 30°42.98', long. 88°02.30' from Chart Letter 664 of 1967.

b. The pier and dolphins charted in the vicinity of lat. 30°43.60', long. 88°02.78' from Chart Letter 403 "C" of 1963.

c. The two piers charted in the vicinity of lat. 30°42.80', long. 88°02.47' from U.S. Corps of Engineers Bp 81488 of 1971.

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 the Mobile River and Chickasaw Creek Channels are based on data furnished by the U.S. Corps of Engineers subsequent to the date of the present survey and supersede present survey information.

C. Aids to Navigation

The aids to navigation on the present survey adequately mark the features intended.

8. Compliance with Project Instructions

This survey adequately complies with the project instructions except as noted in Par. 4.

9. Additional Field Work

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

Examined and Approved:

Chief,
Marine Chart Division

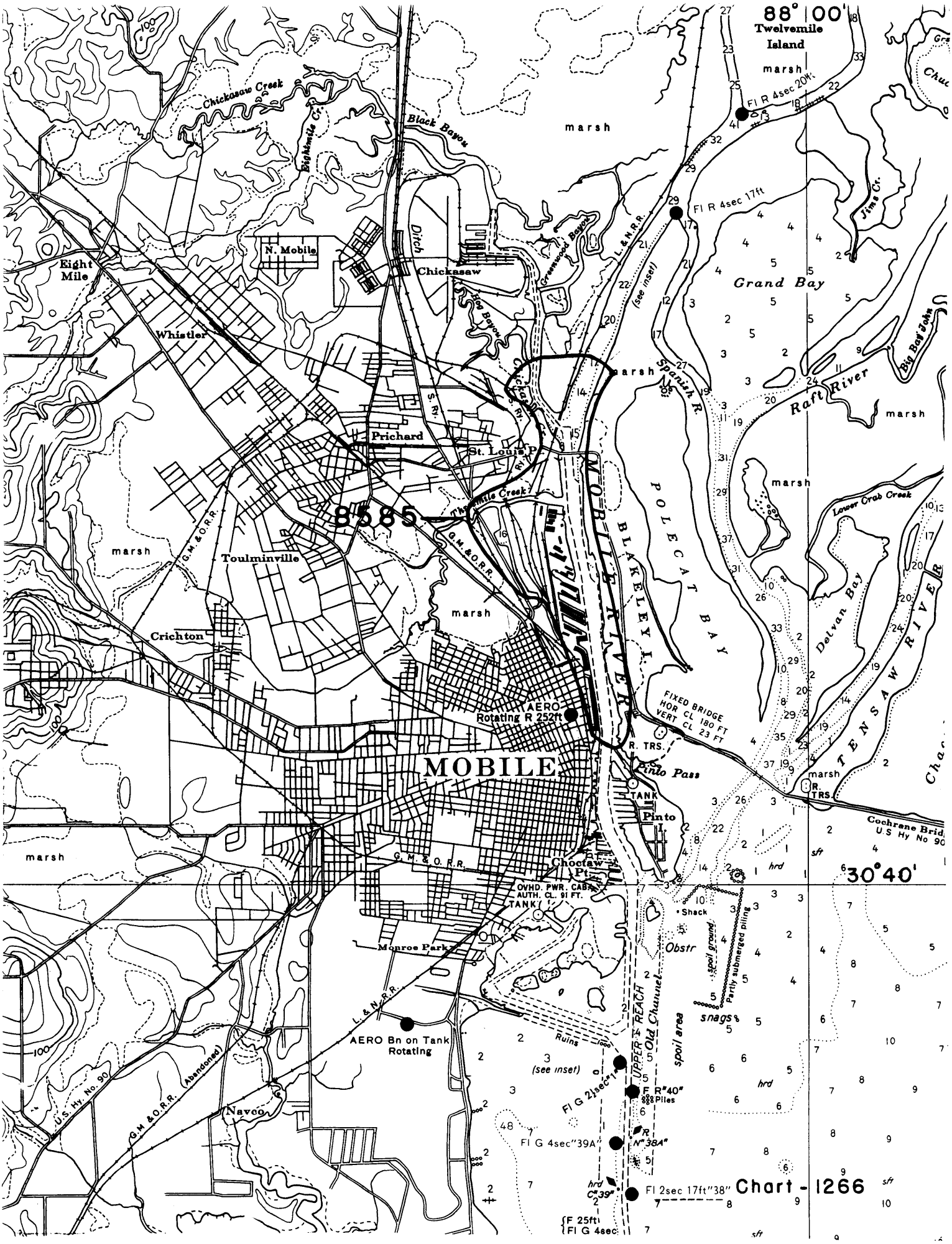
for Associate Director,
Office of Marine Surveys and Maps

H-8585

Items for Future Presurvey Review

This survey covers a ship channel periodically maintained by the Corps of Engineers. The Industrial Canal should be sounded more completely. Four pilings charted in the vicinity of lat. 30°44.25', long. 88°02.70' originated with T-5531 (1934) and should be investigated when the next survey of the area is executed.

Position index - lat. 304, long. 0881
Bottom change index - 3
Use change index - 5
Resurvey cycle - 25 yrs.


88° 00'
Twelvemile Island
marsh
Fl R 4sec 20ft
Fl R 4sec 17ft
Chickasaw Creek
Eighmile Cr.
Black Bayou
Ditch
N. Mobile
Chickasaw
Greenwood Bayou
L & N.R.R.
(see inset)
Jims Cr.
Grand Bay
Eight Mile
Whistler
How Bayou
Chickasaw Cr.
Spanish R.
Raft River
Big Bay John
Prichard
St. Louis Pt.
Fowlstille Creek
8585
MOBILE RIVER
POLECAT BAY
BLAKELEY I.
Lower Crab Creek
Delvan Bay
TENSAW RIVER
G.M. & O.R.R.
Toulminville
Crichton
AERO Rotating R 252ft
MOBILE
FIXED BRIDGE
HOR CL 180 FT
VERT CL 23 FT
R. TRS.
Pinto Pass
TANK
Pinto I.
Cochrane Brid.
U.S Hy No 90
30°40'
Choctaw Pt.
OVHD. PWR. CABLE
AUTH. CL. 91 FT.
Shack
Monroe Park
Obstr
spoil ground
Partly submerged piling
snags
spoil area
UPPER REACH
Old Channel
AERO Bn on Tank
Rotating
Ruins
(see inset)
Fl G 2sec"1A"
F R"40"
Piles
Fl G 4sec"39A"
R
N"38A"
Navco
U.S. Hy. No. 90
(Abandoned)
Fl 2sec 17ft"38"
Chart - 1266
C"39"
F 25ft
Fl G 4sec

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8585

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5-2-62	1266	Lt Haldon H. Jones	Part. App'd. Before [redacted] Verification and Review
3-18-63	1266	J-P. Weis	Part. Applied Before ~~After~~ Verification and Review
5-23-90	11376	L. Ackerman	~~Before~~ After Verification and Review fully applied
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.