

6492

6492

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Topographic~~ Sheet No. **H-6492**
Hydrographic

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
JUL 25 1940
Acc. No.

State Louisiana

LOCALITY
Mississippi River Delta
East Bay, Gulf of Mexico

1939

CHIEF OF PARTY
G.C. Mattison

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.

Field No. 2439

H6492

REGISTER NO. **H-6492**

State Louisiana

General locality Mississippi River Delta- ~~Gulf of Mexico~~

Locality East Bay

Scale 1:20,000 Date of survey August 7 to Oct. 25, 39

Vessel HYDROGRAPHER

Chief of Party G.C. Mattison

Surveyed by Edwin C. Raum

Protracted by E.C. Raum, S.A. Felner & M.J. Timmerman

Soundings penciled by M.J. Timmerman

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by G.C. Wright and Harold W. Murray

Verified by (do)

Instructions dated June 24, 1939, Sup. Inst. July 1, 19 39

Remarks: Project HT-236 Hydrography complete during 1939 field season.

DESCRIPTIVE REPORT

TO ACCOMPANY HYDROGRAPHIC SHEET NO.H-6492 (1939)

EAST BAY

MISSISSIPPI RIVER DELTA

LOUISIANA

SCALE 1:20,000

SEASON 1939

INSTRUCTIONS DATED JUNE 24,1939
AND

SUPPLEMENTAL INSTRUCTIONS DATED JULY 1,1939.

PROJECT HT-236

Surveyed by: Edwin C.Baum,
Jr.H.&G.E.,
In Charge Sub-Party,
Launch FARIS.

Party of Ship HYDROGRAPHER
G.C.Mattison,
H.&G.E.,
Commanding.

This report refers only to the hydrography executed during the 1939 field season in East Bay and is considered to be adequately surveyed in accordance with instructions.

GENERAL LOCATION:

The area surveyed lies in East Bay mainly at its head and extending southward along the eastern shore together with holidays, from previous surveys, lying along the west shore.

SURVEY METHODS:

The Launch FARIS and a Higgins built 16 foot skiff, spoon bow, with outboard motor were used to survey the entire area.

Standard Hydrographic survey methods were used thruout. Handlead (phosphorus bronze center tiller rope) was used to obtain depths from the Launch FARIS; whereas a sounding pole was used exclusively from skiff.

DISCREPANCIES:

Junctures with previously accepted hydrography for this area are in close agreement. The areas where the ship and launch

hydrography are coincident shows satisfactory agreement.

All chartered information was minutely compared with the present survey and two discrepancies were noted.

This close agreement is due to two facts: first that the northern portion of East Bay shows no soundings with which to make a comparison and second that the shoreline is of recent date being obtained from the 1934 Air-Photo Compilations. T-5403, T-5404 and T-5407

The two exceptions noted above are first the displacement of an extensive sand bar lying in an northwest-southeast direction approximately 3 miles long. This bar or sand spit has its inshore origin about 0.6 mile southwest of South Pass Lighthouse. The displacement being 1/8 mile to the northeast. The second change is the emergence of a sand bar in Customhouse Bayou lying on the west shore of East Bay. This sand bar bearing at M.L.W. and lying in an northeast-southwest direction extends offshore for approximately 1 3/4 miles.

In the Review of Hydrographic Survey No.6174 (1936) Field No.22, pg.3 par.7c attention is called to a 60 foot sounding (charted) in latitude 28 54.1' longitude 89 21.8' on H-4175 (1921-22) and additional field work is recommended in par.10b. A thorough investigation was made of the immediate area in question and no evidence was revealed to warrant retention of 60 foot sounding. (see sounding records vol.1 pg.3-7 incl. dated Aug.7,1939) *Sdg considered disproved. H.W.M. See Rcv., par.5c*

DANGERS:

No dangers were found to exist in this area. Cognizance should be taken of the two sand bars referred to under "DISCREPANCIES" this report.

ANCHORAGES:

Protection from E.N.E., N., N.W. and W. winds for large or small craft may be had in East Bay by selecting the proper depth on the lee shore. Small craft are afforded protection from all weather except N.W.'ly by anchoring in 3 feet of water to northeastward of north tangent of sand bar lying on the East shore of East Bay. Whole fleets of shrimp boats were observed to have sought overnight refuge there rather than run into the passes during moderate weather.

SIGNALS OUTSIDE HIGHWATERLINE:

Topographic signals PEL and YU were located on a sand bar and are not of a permanent nature.

Hydrographic signals MID, DIM, PAL, and MAS were located on poles temporarily driven into the ground or floor of the bay.

CONTROL:

The control for this survey was based on triangulation

previously established and data furnished on Air-Photo Compilation sheet of this area.

Signals PEL and YU were located by topography on T-6723a⁽¹⁹³⁹⁾ during the 1939 season. Signals FAR, RAP, RED, MID, DIM, PAL, MAS, RIG and SKY were located by the hydrographic party and are shown in blue.

MISCELLANEOUS:

Extensive mud flats were located along east shore of East Bay. Usually these areas were confined by zero soundings. In many instances reduced soundings of $\frac{1}{2}$ foot define these mud flats. Observation of grounded snags, birds (principally cranes) standing in the water clearly indicated that the unsurveyed portions between the least depths obtained and the high water line (from air photographs) require no further investigation.

The reduction of soundings for this survey is based on a Standard Automatic Tide Gage No.234 located at Port Eads, Louisiana, at latitude 29°00.9' longitude 89°09.8' . The gage was in continuous operation during this survey.

The entire shoreline consists of mud covered by tall marsh grass. This grass ordinarily grows 20 feet high.

The two sand spits previously referred to are formed by sand.

COMPARISON WITH PREVIOUS SURVEYS:

Where the previous and present surveys are coincident excellent agreement was noted.


GEOGRAPHIC NAMES:

NO NEW NAMES.


RECOMMENDATIONS:

The hydrography in this area is considered complete and no additional development is recommended.

Respectfully submitted,


Edwin C. Baum,
Jr. H. & G. Engr.

Approved and Forwarded,


G.C. Mattison,
H. & G. Engr.,
Commanding.

STATISTICS

H6492

PROJECT HT 236

WEST GULF

HYDROGRAPHIC SHEET NO. H-6492

LAUNCH FARIS AND SKIFF.

DAY	DATE	MILES (STATUATE)	SOUNDINGS	POSITIOS	DAYS RUN
a	8/8/39	30.0	26	26	
b	8/9/39	39.6	1103	184	
c	8/10/39	40.2	854	187	
d	8/19/39	22.5	736	137	
e	8/20/39	28.6	866	149	
f	8/21/39	35.6	1081	194	
g	8/22/39	34.7	990	182	
h	8/23/39	37.4	1165	223	
j	8/30/39	18.6	543	96	
k	9/1/39	38.6	1354	267	
l	9/2/39	32.5	1115	256	
m	9/3/39	36.7	1357	291	
n	10/25/39	32.1	554	108	
		<u>397.1</u>	<u>11,744.</u>	<u>2300.</u>	

Area ----- 32.7 square statute miles.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. ...**H6492**

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

Number of positions on sheet	23.00.
Number of positions checked ⁴²
Number of positions revised ¹²
Number of soundings recorded	11,744
Number of soundings revised ²³
Number of soundings erroneously spaced ⁶
Number of signals erroneously plotted or transferred [✓]

Date: Oct. 11, 1940

Verification by *Harold W. Murray*
G. C. Wright

Time: ³⁶19½

Review by *Harold W. Murray*

Time: 5½

HYDROGRAPHIC SURVEY NO. H6492

Smooth Sheet One

Boat Sheet One

Records; Sounding 6 Vols., Wire Drag Vols., Bomb Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes

Landmarks for Charts (Form 567) Yes

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524)

Special Chart for Lighthouse Service
(Circular Nov.30, 1933)

Hydrography: Total Days 13 ; Last Date Oct. 25, 1939

Remarks

Remarks

Decisions

	Remarks	Decisions
1		290892
2		
3		289-891-94
4		
5		
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27		

GEOGRAPHIC NAMES
 Survey No. **H6492**

Name on Survey	A. On Chart No.	B. On previous survey No.	C. On U. S. quadrangle Maps	D. From local information	E. On local Maps	F. P. O. Guide or Map	G. Rand McNally Atlas	H. U. S. Light List	K.
<u>East Bay</u>									1
<u>Mississippi River Delta</u>									2
<u>South Pass</u>									3
<u>Southwest Pass</u>									4
									5
									6
									7
									8
									9
									10
									11
									12
									13
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									27
									28

✓ L = Heck on 10/18/70

COPY OF DIRECTORS LETTER

Ref.No.30- FLM

April 16, 1959

To: The Commanding Officer,
U.S.C.&G.S.Ship HYDROGRAPHER?
P.O.Box 1828,
Pensacola, Florida.

From: The Director,
U.S.Coast and Geodetic Survey.

Subject: Tide data, Louisiana.

Reference is made to your letter of April 10 requisiting a plane of reference for your Port Eads tide station.

The plane of mean low water as determined from tabulated high and low waters for Port Eads furnished with your letter corresponds to a reading of 5.3 feet above the datum of the tabulated heights. It is assumed that tabulated heights are referred to the zero of the tide staff at Port Eads.

J.H.Hawley,
Acting Director.

NOTES BY CHIEF OF PARTY

The records and sheets are approved.

The chief of party did not have an opportunity to supervise the field work, as the launch FARIS worked at a considerable distance from the ship. Office work on records and smooth sheet was done in the Pensacola processing office under supervision of an officer assigned from the ship.

No additional field work is necessary.



G. C. Mattison,
Lt. Cdr., C. & G. S.,
Chief of Party.

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

No. H H6492
~~XXXXX~~

received July 31, 1940
registered Aug. 2, 1940
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25	✓	HK	Pages 2 & 3
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Read
----	------------

✓ JBR

J.D. 11/10/40

POST-OFFICE ADDRESS: U.S.Coast and Geodetic Survey Ship HYDROGRAPHER,
P.O.Box 1828, Pensacola Fla.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

1940 NOV - 12 - PM 3: 44

File in D.R. of H-6492

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

November 9, 1940.

Nov 11-14-40

To; The Director,
Coast and Geodetic Survey,
Washington D.C.

From: Lieutenant j.g.Edwin C.Baum
Coast and Geodetic Survey,
Ship HYDROGRAPHER.

Thru: Commanding Officer,
Ship HYDROGRAPHER,
Coast and Geodetic Survey,

Subject: Discrepancy noted in "Review of Hydrographic Survey
No.6492 (1939) Field No.2439", and reference 80-LEF
dated Nov.4,1940.

The hydrographic signal "SKY" referred to in section 1.
para. 3 is described as follows:

1. Located by sextant cuts from FARIS.
2. Derrick, approximately 100 foot elevation, on U.S.Engineers
work barge.
- 3.Barge moored to eastern side of Southwest Pass.
4. Used for a few days only.
- 5.Position checked daily to insure that barge had not been
changed in position.
6. Not of a permanent nature-- no menance to navigation.

Respectfully submitted,

Edwin C. Baum

Edwin C.Baum,Lieut.j.g.
U.S.Coast and Geodetic Survey.

Approved and Forwarded,

G.C. Mattison
G.C.Mattison,
Commanding, HYDROGRAPHER.

80-DRM

November 14, 1940

To: Lieutenant (j.g.) Edwin C. Baum,
U. S. Coast and Geodetic Survey,
Ship HYDROGRAPHER,
P. O. Box 1828,
Pensacola, Florida.

Through: Commanding Officer,
Ship HYDROGRAPHER.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Hydrographic survey H-6492.

Receipt is acknowledged, with thanks, of your letter dated November 9, 1940, containing information concerning hydrographic signal "SKY". The review will be corrected accordingly.

(Signed) L. H. HAWLEY
Acting Director.

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H 6492(1939)

Verified and Inked by *Mr. Wright*

Date *Oct. 11, 1940*

1. ✓ The descriptive report was consulted and appropriate action taken.
2. ✓ Soundings originating with the survey and mentioned in the descriptive report have been verified, including latitude and longitude.
3. ✓ All references to survey sheets mentioned in the descriptive report include the registry number and year.
4. ✓ Geographic names of hydrographic features are in slanting lettering and of topographic features in vertical lettering.
5. ✓ All items effecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken.
6. ✓ All positions verified instrumentally were check marked in the sounding records.
7. ✓ All critical soundings are clear and legible.
8. ✓ The metal protractor has been checked within the last three months.
9. ✓ The protracting and plotting of all bad crossings were verified.
10. ✓ All detached positions locating critical soundings, rocks or buoys were verified.
11. ✓ The boat sheet was compared with the smooth sheet.
12. ✓ The spacing of soundings as recorded in the records was closely followed.
13. ✓ The bottom characteristics were shown on outstanding shoals.
14. ✓ The reduction and plotting of doubtful soundings were checked.

15. ✓The transfer of contemporary topographic information was carefully examined.
16. ✓All junctions were transferred.
17. ✓The notation "JOINS H " was added for all contemporary adjoining or overlapping sheets now registered.
18. ✓The depth curves have been drawn to include the significant depths.
19. ✓All triangulation stations and transfer of topographic and hydrographic signals were checked by the field party.
20. ✓Heights of rocks were checked against range of tide.
none
21. ✓Rocks transferred from topographic survey have a dotted curve where shown thereon.
none
22. ✓Unnecessary pencil notes have been removed.
23. Objects on which signals are located and which fall outside of the low water line have been described on the sheet.
See Rev.
24. ✓The low water line and delineation of shoal areas have been properly shown (see letter of October 20, 1934).
25. ✓Degree and minutes values and symbols have been checked.
26. ✓Source of shoreline and signals (When not given in report).
27. ✓Depth curves were satisfactory except as follows:

28. ✓ Sounding line crossings were satisfactory except as follows:

See Rev.

29. ✓ Junctions with contemporary surveys were satisfactory except as follows:

See Rev.

30. ✓ Condition of sounding records was satisfactory except as follows:

31. ✓ The protracting was satisfactory except as follows:

32. ✓ The field plotting of soundings was satisfactory except as follows:

33. Notes to reviewer:

Mr. Wright verified the entire sheet except Vol. #6. This was verified by Mr. Murray who also added the Junctions and Depth Curves.

RGC
HOC

TIDE NOTE FOR HYDROGRAPHIC SHEET

September 10, 1940

Division of Hydrography and Topography:

✓ Division of Charts: Attention: Mr. H. R. Edmonston

Plane of reference approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 6492

Locality East Bay, Mississippi Delta

Chief of Party: G. C. Mattison in 1939
Plane of reference is mean low water reading
5.3 ft. on tide staff at Port Eads
3.6 ft. below B. M. 1

Height of mean high water above plane of reference is 1.0 foot.

Condition of records satisfactory except as noted below:

Ham

Acting Chief, Division of Tides and Currents.

DIVISION OF CHARTS

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6492 (1939) FIELD NO. 2439

Louisiana, Mississippi River Delta, East Bay
Surveyed in August - October 1939, Scale 1:20,000
Instructions dated June 24 and July 1, 1939 (HYDROGRAPHER)

Soundings:
Hand Lead and Pole

Control:
Three point fixes on shore signals.

Chief of Party - G. C. Mattison.
Surveyed by - Edwin C. Baum.
Protracted by - E. C. Baum, S. A. Felner and M. J. Timmerman.
Soundings plotted by - M. J. Timmerman.
Verified and inked by - G. C. Wright and Harold W. Murray.
Reviewed by - Harold W. Murray, October 14, 1940.
Inspected by - H. R. Edmonston.

1. Shoreline and Signals.

The origin of the shoreline and signals is given in the descriptive report, pages 2 and 3.

Small revisions in the shoreline from T-5403 (1932) (shown in red) were made from hydrographic information in the vicinities of lat. 29°03', long. 89°18' and lat. 29°04', long. 89°16'. The long sand bar (charted) shown on T-5407 (1932) in lat. 29°01', long. 89°12' has shifted about one-eighth mile to the northeastward. The present survey shows depths of 4 feet in the old location. The sand bar in lat. 29°00', long. 89°20' is also a subsequent feature as it is not shown on T-5403 and T-5404 of 1932.

All topographic and hydrographic signals falling outside the high water line are on poles which are of a temporary character and may be disregarded in charting. (See descriptive report, page 2). No information, however, could be found regarding hydrographic signal SKY in Southwest Pass (lat. 29°00', long. 89°21'). This signal falls outside the hydrographic limits of the present survey.

SKY is derrick
on anchored
barge. See
letter of 11/9/40
in D.R.

2. Sounding Line Crossings.

General agreement of crosslines is satisfactory. In the following cases, however, the crosslines disagreed as much as 3 feet with the main system of lines showing depths of 9 to 32 feet and were omitted:

Pos. 1 - 6 h	lat. 28°59.2', long. 89°11.5'
8 - 15 h	lat. 29°00.0', long. 89°12.5'
6 - 8 n	lat. 28°59.8', long. 89°13.2'
9 - 11 n	lat. 28°59.3', long. 89°14.4'

3. Depth Curves.

The usual depth curves may be satisfactorily drawn including portions of the low water line.

4. Junctions with Contemporary Surveys.

- a. The junction of the southwest portion of the present survey with H-6174 (1936) surveyed three years earlier is extensive but satisfactory as to agreement. Several soundings causing unnatural protusions in the depth curves on the present survey were omitted in the common area. In lat. 29°00', long. 89°20', a line of 2-foot soundings on H-6174 extending across the sand bar, awash at M.L.W. on the present survey indicates that the bar as shown is a subsequent feature.
- b. The junction on the southeast with H-6513 (1939) will be considered in the review of that survey.
- c. The junction on the south with H-6553 will be considered when that work is received from the field.

5. Comparison with Prior Surveys.

- a. H-923 (1867), H-924 (1867) and H-991 (1868); scales 1:10,000; 1:20,000 and 1:40,000.

The above surveys are sparsely developed and cover portions of the present survey. A comparison shows that differences of several hundred meters in shoreline and four feet in depths exist in the northern portion of the present survey. More extensive changes, however, are noted in the southeast portion of the present survey where the depth curves (6 to 30-foot curves) on H-991 have receded from 800 to 2800 m. towards South Pass with corresponding changes in depth of as large as 14 feet. The sand bar shown in this vicinity on the present survey has also receded 1-1/3 miles. In addition, H-991 shows a by-pass to South Pass extending along the 89°13' meridian which is entirely obliterated on the present survey. The present survey supersedes these early surveys.

b. H-2888a (1917), scale 1:40,000.

This survey covers a small part of the present survey on the southeast. Consistent changes in bottom are noted throughout most of the common area. The 12, 18 and 30-foot depth curves have receded as much as 400 m. to the northeastward but the actual changes in depth seldom exceed 5 feet. The present survey supersedes this survey.

c. H-4175 (1921-22), scale 1:40,000.

This survey covers a part of the present survey in lat. $28^{\circ}59.5'$, long. $89^{\circ}16.0'$. Agreement of depths is generally quite good since such differences as were noted seldom exceed 3 feet.

The investigation on the present survey in lat. $28^{\circ}54'$, long. $89^{\circ}22'$ was for the purpose of verifying or disproving a charted 60-foot hand lead sounding originating with this older survey. The 60 ("soft" bottom characteristic) is a single sounding on line (pos. 50H) obtained between soundings of 92 feet and was not questioned in the records. In the sounding records, the original entry of the 60, $10-1/6$ fathoms unreduced is smudged and was written over with a 10. It could be read as a 16 which was subsequently changed to 10. The present survey development consisting of one hour of drift soundings revealed no depths shoaler than 90 feet and is considered adequate for disproof of this sounding.

The present survey, within the area covered, supersedes this 1921-22 survey.

6. Comparison with Chart 1272 (New Print dated July 30, 1940)

a. Hydrography.

Hydrography shown on the chart originates with surveys discussed in the previous paragraphs and no further consideration is necessary.

b. Aids to Navigation.

There are no aids to navigation within the hydrographic limits of the present survey.

7. Condition of Survey.

- a. The sounding records are neat and legible and conform to the requirements of the Hydrographic Manual.

- b. The descriptive report is clear and comprehensive and satisfactorily covers all matters of importance.
- c. The field protracting and plotting of the soundings were very good.

8. Compliance with Instructions for the Survey.

The plan, character and extent of the survey satisfy the instructions for the project.

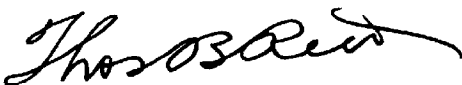
9. Additional FieldWork Recommended.

This is an excellent survey and no additional field work is required.

10. Superseded Surveys.

H-923 (1867) in part	H-2888a (1917) in part
H-924 (1867) in part	H-4175 (1921-22) in part
H-991 (1868) in part	

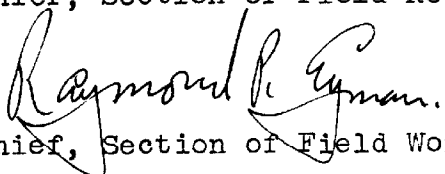
Examined and approved:



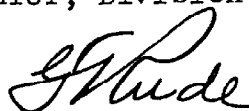
Thos. B. Reed,
Chief, Section of Field Records.



Chief, Division of Charts.



Chief, Section of Field Work.



Chief, Division of H. & T.

Applied to chart dwg. 1272. Feb 15, 1941. L.A. Mch.