

5852

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES

AUG 2 1935

Acc. No. \_\_\_\_\_

Form 504  
Rev. Dec. 1933  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
R. S. PATTON, DIRECTOR

## DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 5  
Hydrographic }

State Louisiana

### LOCALITY

(Western Part) of

Atohafalaya Bay

1935

CHIEF OF PARTY

Thos. B. Reed

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

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REG. NO.

Acc. No. \_\_\_\_\_

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. 5

REGISTER NO. **5852**

State Louisiana

General locality Atchafalaya Bay <sup>15</sup>

Locality <sup>12</sup> (Western Part) of Atchafalaya Bay

Scale 1:20,000 Date of survey Jan. 26, to July 11, 1935

Vessel Field Party No. 4.

Chief of Party Thos. B. Reed

Surveyed by E. H. Maher, J. F. McIlwain, J. C. Tribble, H. W. Richards.

Protracted by H. L. Proffitt, T. F. Donlon.

Soundings penciled by H. L. Proffitt

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by E. H. Maher and C. F. McKenney

Verified by E. H. Maher

Instructions dated June 26, Sept. 15, 1934; Jan. 19, 1935

Remarks: \_\_\_\_\_

DESCRIPTIVE REPORT  
to accompany

Hydrographic Sheet No. 5, Western Part of Atchafalaya Bay.

Louisiana

Field Party No. 4.

Thos. B. Reed, Chief of Party.

Project H. T. 156

DATE OF INSTRUCTIONS: June 26, September 15, 1934; January 19, 1935. ✓

DATE OF SURVEY: January 26 to July 11, 1935.

SURVEY METHODS:

This survey was made by the usual launch hydrographic methods, using a pole marked to feet for the shoal soundings and a standard lead line for the deeper sounding. Oyster reefs which were too shoal to be crossed by the sounding launch were sketched on the boat sheet by the hydrographers. ✓

DISCREPANCIES:

Any discrepancies in positions found by the smooth plotter were noted in the sounding records. Outlines of oyster reefs were transferred from the boat sheet, making changes in some places to correspond with reduced soundings. ✓

GENERAL DESCRIPTION:

This sheet includes the western part of Atchafalaya Bay and the southern part of East Cote Blanche Bay. With the exception of the high trees along the shore between TUCKY and SALT the entire land area is marsh. The sheet includes many shoals and oyster reefs, which were developed as closely as thought economically advisable considering the relative unimportance of the area. ✓

COMPARISON WITH PREVIOUS SURVEYS:

Copies of the old surveys in this region are not available for making a comparison. A large amount of change in the area is evident from a comparison with Chart No. 199. ✓

Bird Key and Little Rabbit Island (shown on Chart No. 199) have entirely washed away and there are no longer any high water features in these positions. ✓

JUNCTION WITH CONTEMPORARY SURVEYS:

This sheet joins on the west with sheet No. 7, on the north with sheet No. 12, on the east with sheets Nos. 3, 4 and 6 and on the south with surveys of the Ship HYDROGRAPHER, 1935. ✓

*See R. S. Verifiers Report L.S.F.*

GEOGRAPHIC NAMES:

This topic is covered in the descriptive report  
of Topographic sheet "J". ✓

TIDE REDUCERS:

Tidal reductions are shown on the attached sheets. ✓

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Thos. B. Reed", with a long horizontal flourish extending to the right.

Thos. B. Reed,  
Lieut., C. & G. Survey,  
Chief of Field Party No. 4.

## STATISTICS FOR SHEET NO. 5

YEAR 1935	DAY	VOL,	STATUTE MI.	NUMBER	NUMBER	
DATE	LETTER	No.	SDG. LINES	SOUNDINGS	POSITIONS.	
Jan.	26	a	1	5.0	140	15
"	27	b	1	38.2	978	145
"	28	c	1	37.8	960	127
"	29	d	1 & 2	28.0	686	100
"	30	e	2	35.2	818	139
Feb.	5	f	2	23.4	604	80
"	6	g	2 & 3	25.6	657	94
"	7	h	3	42.0	1028	132
"	8	j	3	35.5	895	123
"	9	k	4	37.8	972	137
"	10	l	4	43.8	1125	148
"	13	m	4 & 5	14.0	342	56
"	14	n	5	40.2	990	165
"	21	p	5	37.5	913	135
"	22	q	6	7.6	193	27
"	23	r	6	28.0	695	92
"	25	s	6	15.5	418	58
May	7	a	7	11.4	271	31
"	8	b	7 & 8	104.0	2383	274
"	11	c	8 & 9	60.4	1560	180
"	12	d	9	44.2	1066	126
"	13	e	9 & 10	60.4	1438	171
"	14	f	10 & 11	63.8	1542	172
"	15	g	11	26.1	620	71
"	22	h	11 & 12	56.0	1372	159
"	23	j	12	3.0	73	9
"	24	k	12	61.5	1401	169
"	25	l	12 & 13	31.5	1105	128
"	28	m	13 & 14	43.8	1082	131
"	30	n	14	23.0	704	127
June	12	p	14	20.7	486	62
"	13	q	14 & 15	28.0	748	99
"	19	r	15	7.3	241	32
"	20	s	15	17.2	412	55
"	21	t	15 & 16	30.9	767	108
"	22	u	16	18.7	527	75
"	23	v	16	18.2	512	74
"	24	w	16 & 17	26.1	761	140
"	25	x	17	15.6	418	76
"	26	y	17	16.7	479	88
"	27	z	17 & 18	19.1	477	98
July	8	a'	18	31.0	867	115
"	9	b'	18	20.5	580	80
"	10	c'	18 & 19	38.3	790	109
"	11	d'	19	25.8	662	83

Carried forward ----- 1418.3 35758 4815

## STATISTICS FOR SHEET NO.5

YEAR	DAY	VOL.	STATUTE MI.	NUMBER	NUMBER	
1935						
DATE	LETTER	NO.	SDG. LINES	SOUNDINGS	POSITIONS	
		Brought forward	--	1418.3	35758	4815
June	19	a	20	18.2	476	70
"	20	b	20	19.6	517	88
"	21	c	20	19.3	555	122
"	22	d	20 & 21	34.2	870	149
"	23	e	21	18.2	427	62
"	25	f	21 & 22	35.1	885	141
"	26	g	22	31.7	836	144
"	27	h	22	13.5	372	77
TOTAL			-----	1608.1	40696	5668
SQ. MI. AREA OF SOUNDINGS			-----	160	SQ. MI.	

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. ...5852

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

Number of positions on sheet	5668
Number of positions checked	15
Number of positions revised	3
Number of soundings recorded	40,696
Number of soundings revised	20
Number of signals erroneously plotted or transferred	0

Date: Feb. 17, 1936

Verification by

Inked by *T. J. Strain* and C. F. McKinney

Review by

*R. J. Christman*

Time: 164

364

Time: 16 hrs

Bird Key no longer exists  $\therefore$  Pass Fouchon  
was not miled on H585<sup>16th</sup>



HYDROGRAPHIC SURVEY NO. H5852

Smooth Sheet 1

Boat Sheet 2

Sounding Records 22 Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes in Vol. 1

Landmarks for Charts (Form 567) None

Statistics Yes

Approved by Chief of Party T. B. Reed

Recoverable Station Cards (Form 524) Yes

Special Chart for Lighthouse Service None *No charted aids  
are on this sheet*  
(Circular Nov. 30, 1933)

Remarks

Survey No. H5852

Date. Aug. 6, 1935

GEOGRAPHIC NAMES  
LOUISIANA

Chart No. 1116 199

Diagram No. 1116-2

Approved by the Division of Geographic Names, Department of Interior. ✱

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

[illegible]

RAC

August 19, 1935

## TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Hydrography and Topography:

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in  
22 volumes of sounding records for

HYDROGRAPHIC SHEET 5852

Locality Atchafalaya Bay, Western Part, Louisiana

Chief of Party: Thomas B. Reed in 1935

Plane of reference is mean low water reading

2.6 ft. on tide staff at Point Chevreuil

2.3 ft. below B.M. 1

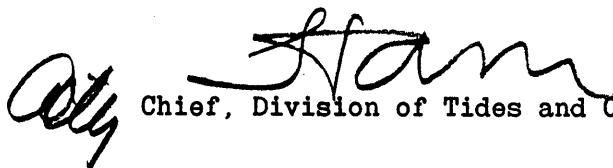
1.4 ft. on tide staff at Eugene Island

4.2 ft. below B. M. 1

Height of mean high water above plane of reference is 1.1 ft at Point  
Chevreuil; 1.3 feet at Eugene Island

Condition of records satisfactory except as noted below:

Changes of tide gages were given on a separate sheet, but should also  
have been entered in sounding volumes.

  
Chief, Division of Tides and Currents.

1-

Section of Field Records.  
Report on Hydrographic Survey No. 5852 (FIELD No. 5.) 1935.

1. Condition of Records:

Where records are neat legible and conform to the requirements of the Hydrographic Manual except that the day letters recorded in the sounding volume, do not always agree with those on the sheet in respect to color and upper or lower case. For example "D day" and "E day" in records in lead pencil (See Vol. 12.) and shown on the sheet as "d" and "e" (green). However this caused no confusion and no changes were made.

2. Shore line and Control.

The shore line and quadrats with T-6325 (1935). Control is from the few topographic signals on T-6325 (1935), supplemented by temporary hydrographic signals established during the progress of the Hydrography.

There are no air photo Compilation surveys within the limits of this Hydrographic sheet. (H 5852-1935)

### 3. Sounding line Crossings.

Sounding line crossings in general are satisfactory, except that line 16' (blue) between 14 and 156' (blue) is consistently 1 foot too deep. This is shown by the numerous crossings of the main system of lines in this section of the sheet. (Long  $91^{\circ}43.4'$  Lat.  $29^{\circ}32.6'$  & Lat.  $29^{\circ}29.1'$ ) This line was inadvertently inked. (16' between 14 & 156' (blue)) It has been expunged from the smooth sheet and an appropriate note has been made in the sounding records.

### 4. Depth Curves

The depth curves are generally irregular throughout the limits of the sheet. An effort was made to smooth the 6 foot curve by inking or not inking the  $\frac{1}{2}$  in this depth. Sudden changes in depth occur, most of which are between shell reefs.

## 5. Junctions With Contemporary Surveys.

- (a) The functions with H-5859 (1935) on the north; H-5837 (1935) on the south, west; and H-5825 (1935) on the south are satisfactory.
- (b) The function with H-5790 (1934-35) on the east is satisfactory but frequent differences in depth of one foot occur. The curves join fairly well. The most unlikely curve is noted in lat.  $29^{\circ}28.25'$ ; long  $91^{\circ}29.3'$ .
- (c) The function with H-5824 (1935) although generally satisfactory shows differences from  $\pm$  1 foot. Some irregularity in the 6 foot curve is noted in lat  $29^{\circ}24.3'$  long  $91^{\circ}29.6'$ . The unnatural curves are not considered serious, since only slight changes in depth causes meandering curves.
6. Field Plotting -  
The field plotting was satisfactory.

## 7. Remarks:

- (a) Shell reefs are in general indicated by a black dashed line except where there are enough "o" soundings to use the yellow curve. Notes pertaining thereto are taken from the records (volumes) and the boat sheet.
- (b) Soundings in large flat areas were thinned in accordance with office procedure.
- (c) A canal <sup>\*3 m.</sup> wide entering Bayou Blanc at  $\Delta$  Sta. Tower E.M.I.D. 1933 is not shown on the Hydrographic Sheet (H-5852) but appears on T-6325 (1935).
- (d) ~~Several geographic names in list should be placed on sheet.~~

\* This has been added  
in the office R.

*Ed. Strout*  
Feb. 12, 1936.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 585Z (1935) FIELD NO. 5

Atchafalaya Bay, Western Part, Louisiana

Surveyed in Jan - July 1935

Instructions dated June 26, Sept. 15, 1934; Jan. 19, 1935

(T. B. REED).

Hand Lead and Pole Soundings.

3 Point fixes on shore signals,  
and temporary signals in the  
water areas.

Chief of Party - Thos. B. Reed.

Surveyed by - E. H. Maher, J. F. McIlwain, J. C. Tribble, H. W. Richards.

Protracted by - H. L. Proffitt, T. F. Donlon.

Soundings penciled by - H. L. Proffitt.

Verified and inked by - L. S. Straw and C. F. McKenney.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. On several days, the day letter was entered in the sounding record in lead pencil, not in color, and the use of lower case and capital letters for day letters was not consistent.
- b. Seconds in meters were not given on the smooth sheet for the triangulation reference station. They have been added in the office.

The Descriptive Report satisfactorily covers the essential items.

2. Compliance with Instructions for the Project.

The plan and character of development are in accordance with the instructions for the project, except that a shoal in latitude 29° 25.8', longitude 91°41.2' was not developed. Several split lines should have been run in this general vicinity to satisfactorily develop this area and the shoal indication about a mile to the southward.

3. Shoreline and Signals.

The shoreline originates with plane table survey T-6325 (1935).

The signals are from T-6325 (1935). Temporary signals in the water areas were located by sextant cuts recorded in the sounding records.

4. Sounding Line Crossings.

The sounding line crossings are satisfactory, the depths generally agreeing within 1 foot or less.

5. Depth Curves.

Within the area surveyed, the usual depth curves can be satisfactorily drawn. There are many shell reefs with 1 foot or less of water over them. Their outline is shown on the sheet by a dashed black line and the notes pertaining to them were taken from the boat sheets and the sounding records.

6. Junction with Contemporary Surveys.

The junctions with H-5859 (1935) on the north, with H-5790 (1934-5) on the east, with H-5824 (1935) and H-5825 (1935) to the southeast and with H-5837 (1935) to the southwest are satisfactory.

The junction with H-5953 (1935) to the south will be considered in the review of that survey.

7. Comparison with Prior Surveys.

H-658 (1858), H-681 (1859), H-682 (1859), H-1831 (1888-89), H-1933 (1889).

These surveys are on a scale of 1:20,000, except H-1831 (1888-89), which is on a scale of 1:80,000. A general comparison with the present survey shows that the area is very changeable. Only a few of the more prominent features (shoals, reefs and deeps) of the above surveys can be definitely identified on the present survey. The only section where radical changes have not taken place is in Bayou Sale Bay, northward of Point Chevreuil, where only a slight shoaling has occurred. The extent of the changes may be seen from the following:

Point Chevreuil has receded to the eastward about 1 mile.

Rabbit Island has less than one-quarter of its former area.

Little Rabbit Island (charted from T-632 of 1856) has entirely disappeared. H-681 (1859) shows depths of 5 to 7 feet in the locality and the present survey shows 3 to 4 feet.

Bird Key also has been washed away, the present survey showing 2 to 3 feet of water in its former location.

The present survey has many more reefs awash or nearly awash than shown on the above surveys and a few of the shoals on the earlier surveys have changed in position or entirely disappeared. It would ~~serve~~ serve no useful cartographic purpose to list these changes in detail. Because of the changeable nature of this area, the lapse of time since the surveys were made and the closer development on the present survey, H-5852 (1935) should supersede the above surveys for future charting.



8. Comparison with Chart 199 (New Print dated Sept. 18, 1935).

a. Hydrography.

Within the area of the present survey, the chart is based on surveys discussed in the foregoing paragraphs and contains no other information that needs consideration in this review.

b. Aids to Navigation.

The charted aids to navigation are in agreement with the positions given on the survey. It is to be noted, however, that "Southwest Reef L. H. 1933" charted as a landmark in latitude  $29^{\circ}23.5'$ , longitude  $91^{\circ}30.25'$ , is no longer maintained as a light.

9. Field Plotting.

The field plotting was satisfactory.

10. Additional Field Work Recommended.

The survey in general is satisfactory but additional work in the vicinity of the shoal indications noted in par. 2 is desirable.

11. Superseding Old Surveys.

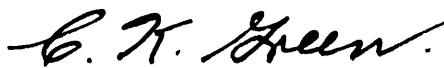
Within the area covered the present survey supersedes the following surveys for charting purposes:

H-658	(1858)	in part
H-681	(1859)	" "
H-682	(1859)	" "
H-1831	(1888-89)	" "
H-1933	(1889)	" "

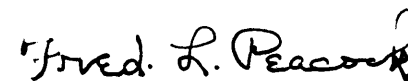
12. Reviewed by - R. J. Christman, April 20, 1936.

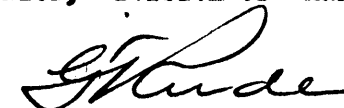
Inspected by - G. Risegari, May 28, 1936.

Examined and approved:

  
C. K. Green,  
Chief, Section of Field Records.

  
Chief, Division of Charts.

  
Chief, Section of Field Work.

  
Chief, Division of H. & T.

Applied to Chart 1050 May 1937 Chas R Bush Jr

" " " 1276 July 1937 H.V.B.

Applied to Chart 1051 Aug 1937 Chas R Bush Jr