5868

U. S. COASI & GEODETIC SURVE

SEP 6 1935

Noc. No.

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

DESCRIPTIVE REPORT

Hydrographic }	Sheet No. 12
	· · · · · · · · · · · · · · · · · · ·

·	
State Florida	
LOCALITY	
Gulf CoastOchlockonee Bay.	
OHIEF OF PARTY	
C A Forman	

U.S. GOVERNMENT PRINTING OFFICE: 198

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. 12 5868

REGISTER NO.

DESCRIPTIVE REPORT

HYDROGRAPHIC

SHEET 12.

Instructions

Supplemental, Dated June 5, 1935. These followed the original Instructions of Nov. 30, 1934 calling for a continuation of work eastward to St. Marks Lighthouse.

Purpose

To revise existing surveys.

Limits

This sheetc covers Ochlockonee Bay completely and carries up the Ochlockonee River to a junction with Sheet 20, as well as other minor streams in that section. It was laid out to form a junction with proposed sheet #16 (1/20000) in the open area to the eastward, and to carry far enough around into Dickson Bay to join with sheet#13.

Since no work has been done on Nos. 20, 16, and 13, and since work on this sheet #12 is still incomplete, those junctions are left for future determination.

Sheet Incomplete

Due to the sudden termination of the work, the sheet is still incomplete, there being work still to do near the junction with all of the adjacent sheets. The main body of Ochlockoneee Bay is, however, now nearly complete except for some minor development and investigations. It is being forwarded to the office with the note that it should be sent to the field again when work in this locality is resumed. Since all adjacent sheets are now laid out (except #16) and the shoreline placed on them by the photo-compilation party, it will be more convenient to send the sheet back to the field than rebuild the adjacent sheets with other limits.

Methods

The work was all done with a 23 ft. Gondola type of large,

flat-bottomed skiff driven by a 9 H. P. outboard motor. The area is all shoal enough for sounding with the hand lead. The usual personnel and equipment of a small launch sounding party were employed.

Fixed sextant positions were used throughout, controlling lines spaced about 100 meters apart in a N. & S. direction across the Bay. In general, compass courses were steered, though in some cases natural ranges were available. Cross lines were spaced $\frac{1}{2}$ mile apart in an E. & W. direction, and the channels developed by lines run along the axes.

Control--Horizontal_

Several "breakdown" stations of 2nd order triangulation were established in this locality in 1935 by the party of Lt. These were located from the 1st order arc of 1934. On this sheet the following stations were in this group: Bald, Dickson, Chaires (recov. 1959), Myers, Ochlock. Supplementing these, several of 3rd order accuracy were inserted by Party 23 These were: Highway, Bay, Hey, Marsh, to assist in the control. The latter three, while falling on the sheet, have and Point. These stations were used to control two bristol not been used. board topographic sheets covering Ochlockonee Bay (Sheets S and T). The topographic signals on the beaches were located from these In addition, several triangulation stations by intersection. signals used in the hydrography were located by sextant fix. These are ALL, SPOT? AW, BAR, and TIDE (Gauge).

Control--Vertical

For all of Ochlockonee Bay, one Portable Automatic Tide Gauge was established and maintained at Bald Point. Plane for this gauge was determined by comparison with Key West. No height or time correction was applied for any section of the Bay. The range is small.

Later work in this sheet in Ochlockonee River and adjacent waters will require an additional gauge somewhere in the river.

Shoreline

This was all obtained from the photo-compilation party at Pensacola, by direct tracing from the celluloid sheets by means of the reducing camera. (7-5512,1935)

Description of the Area

The Bay is about five miles long east and west, and about one mile in width. The bottom is comparatively flat, regular, and shoal, particularly throughout the western half. The eastern half

half is more irregular, marked by small patches of varying depths, sand covered, but probably all having a hard foundation. This condition becomes pronounced in the area north of Bald Point, where irregular oyster banks extend for a half mile.

A natural channel runs in finger-like shape westward through the center half way up the bay, gradually shoaling to the surrounding depths. Another natural channel takes up again a quarter mile south of the west end of the first, gradually deepens, and flows in a crooked line to the mouth of the Ochlockonee River.

Another channel of no importance and having no outlet follows the north shore for a mile, before striking a curved line for the mouth of the Sockockhoppee River.

Having no outlet, these channels have little importance at present, although future dredging may give them some value for local small boats using the Ochlockonee River.

The Ochlockonee Bay Bridge

While the hydrography was being done, the final stages of the completion of the bridge across the bay were going on, looke See Rev. ing to its use as a unit of the future highway to skirt the gulf, par. 12 This bridge has a concrete deck on piling now partly finished. No draw span has been profoundation, with roadway 27 ft. wide. vided, as it is not anticipated that boats of any size will use A rise, however, in the level of the roadway this bay and river. has been built to offer 15 ft. clearance, KMAX vertical, and 35 ft. This rise is about midway in its length horizontal clearance. from shore to shore, and is situated in the middle of the natural channel from the east where 12 ft. of water is found. Obviously. as this channel shoals to no depth a mile or so westward, whereas the natural channel to the Ochlockonee River carries four or five feet of depth, and would necessitate less dredging in case a deeper of m. L. w. channel were desired, it seems that the lower point were the more It may be, however, that the desirable place for the opening. plan was to dredge a channel between the two natural channels, in which case its present location would offer the shorter route.

Changes since last survey

Depths throughout the sheet, channel formations, bars, etc., seem to remain as charted. The bridge which is an open piling structure probably will not alter matters appreciably.

Since the shoreline is all from aerial photographs, it is not possible to campare accurately the changes along the beaches. It is likely, however, that there has been some recession along the north shore, as storms are generally from the SE and this beach frequently gets a severe lashing. Extuard of Long 84°22.6, northern shoreline has receded in much as 80 m.; to the westward of this point, the shoreline has been built up by 25 much as 80 m.; to the westward of this point, the shoreline has been built up by 25 much as 80 m.; to the westward of this point, the shoreline has been built up by 25 much as 80 m.; to the westward of this point, the shoreline worth noting.

Anchorages

None of value, although protection can be found in the channels near either beach. Access to them may not be good, however, in contrary weather. The bay becomes rough due to its shallow depths.

Depth Curves

These have been drawn completely except the zero curve which is fragmentary in places, on account of difficulty in getting due to small range in tide. Many small irregular patches in the eastern section of the sheet show depths appreciably less than surrounding ones. These call for further development. (See note below: Note to Reviewer)

Channels

There are no through channels, shoal water blocking off all of them. Controlling depth is 52 feet in Lat. 29° 57.15, Long. 84°22.3

Buoys and other aids to navigation.

None.

Coast Pilot Information

Found as a part of general report.

0 Wet 1/67a) 29-67-(67a) 16179 16179

Landmarks for Charts

The Bridge should now be charted. A water tower, a short distance from the south end of the bridge, is the only object worthy of charting. * Topo signal WET, see description on page 3 of D.R of T- 435 3b (1935)

List of Signals used

The original herewith; the duplicate under the fly leaf of Vol. #1, Sounding Records.

Statistics

A part of this report.

Color Change

Though Gondola #2 calls for green ink in position number and day letter, there was no green ink on hand when the smooth sheet was made, so blue was substituted throughout. This treatment causes no confusion in the records. Xumn.

Respectfully submitted

Note to Reviewer - The items hill below here been considered in reviewing of this sheet.

This sheet as it stands is incomplete, and it is thought advisable to send it back into the field when work is resumed. The adjacent sheets are all laid out, with shoreline already put on them, so that if another arrangement were made considerable work would have to be duplicated.

Additional work is required:

(1) Ochlockonee River to an overlay with Sheet #20.

(2) Sockockhoppee River, and other small streams on that area to a junction with Sheet #20.~

(3) East edge of the Bay to a line outside of the oyster bar area to make satisfactory junction with proposed sheet #16.~

(4) Off Ochlockonee Point and in Dickson Bay to a junction with Sheets 13 and 16(proposed) -

(5) Development of small shoal patches in eastern portion of the sheet. Sur Part II of Review

(6) Investigation of the 4 ft. sdg. between ll' and l3' (1st sounding before position 137 j.) This may have been incorrectly recorded a fathom too shoal. Retained - See Rev. Macon.

(7) Additional lines should be run to show the edges of the channel from the bridge westward to the entrance of Ochlock-onee River. Present development appears to be adequate. Hum.

LIST OF SIGNALS USED ON SHEET 12.

Hydrographic

Tide Gauge

Bar

Aw At Spot All

Triangulation	_	Topograp	hic
Dickson 1935.	Son	Doc .	Mol
Bald 1935		Gab	Wit
Chaires 1859.		Blo	Hell
Highway 1935		Ban	To .
Bay 1935		Jo	Oťt
Myers 1935		Pete	Me
Och <u>lock</u> 1935		Nuts	Yea
		Nor	Rob
	•	Al	So
		Britt	But
		Go	Aim
		Don	Bla,
		Shak	
		Sig	
		Of f	
		B ${f y}$	
		Po	
		Gus	
		Ro	
		Bert	
		Nut	
		Guy	
		Lum	
		Bar	
		Doe	
		Sou	
		Wet	
		Pill	

And

STATISTICS

Sheet 12.

Date	Day Letter		Volume	Miles	Soundings	Positions
		#2				7
July 8	a	Gondola	. 1	4.0	142	29
9	ь		1	20.5	745	162
10	c ·	#	1	21.7	739	158
11	d	**	2	13.0	451	96
12	E	, #	2	15.7	532	121
13	+	11	2	6.6	217	48
15	9	* #	2	8.4	269	60
15	g	11	3	9.0	228	55
18	h	W	3	19.9	675	141
17		Ħ	3	18.2	547	113
17	ř	Ħ	4	8.0	246	55
22	K	Ħ	4	4.8	200	119
23	i.	Ħ	4	2.5	87	18
25	m	. **	4	2.3	91	42
26	n	Ħ	4	19.5	630	148
30	ρ	19	5	9.0	290	81
	•		Totals:	183.1	6179	1446

The work contained in Vol. 6, H 5868 was originally intended to be sheet #13 but the work was abandoned after but one day had been run and the sheet was registered as vol 6 of H5868 (#12) (40 positions in general vicinity of lat. 30°00', long. 84°21')

HYDROGRAPHIC SURVEY NO. 5868

Smooth Sheet
Boat Sheet
Sounding Records 56 Vols.
Descriptive Report
Title Sheet yes
List of Signals D.R. & Vol 1
Landmarks for Charts (Form 567) -yes Mo
Statistics yes
Approved by Chief of Party
Recoverable Station Cards (Form 524)none
Special Chart for Lighthouse Service no (No. Aids on this sheet) (Circular Nov. 30, 1933)
Remarks

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. .. 5868

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

Number of positions on sheet	1486
Number of positions checked	24
Number of positions revised	0
Number of soundings recorded	64.19
Number of soundings revised	56
Number of signals erroneously	
plotted or transferred	Mone

Date: May 7,1936

Verification by B. C. Miller

Review by Harold W. Murray

Time: 5 days 3 hours

Time: 3

GEO	CD	A DL	IIC	NAM	AFC
GEU	UK/	470	IIC	INAI	VIE 3

•				GEUGRAPHIC	INA
Data	Sent.	12.	1935		

Survey No	5868	
Chart No	182	
	rt	
Diagram No		

Approved by the Division of Geographic Names, Department of Interior. *\footnote{\text{X}}\)
Referred to the Division of Geographic Names, Department of Interior. R
Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Ochlock Bay				
	Ochlock Point				
	Bald Point V				
		St. James Island	1 / '		
		Ochlockonee River	/		
	Apalachee Bay				
	Dickson Bay				
	Levy Bay				
	Tide Creek				
	Chaires Creek				
	Sockockhoppee River				
				,	
		.,			
······································					
		3			
		names offrond 9/13/3 KTA			
		1011			

FORM 712

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 26, 1936.

Division of Hydrography and Topography:

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

Tide Reducers are approved in 6 volumes of sounding records for

HYDROGRAPHIC SHEET 5868

Locality Ochlockonee Bay, Gulf Coast, Fla.

Chief of Party: C. A. Egner in 1935
Plane of reference is mean low water reading
O.8 ft. on tide staff at Bald Point
6.7 ft. below B.M. 1

Height of mean high water above plane of reference is 2.0 feet.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Virginition Report on H 5868 of the Several Instructions. 2. The usual depth curves can be completely drown within the limits of the shut with the exception of of the oyster bors shown in the south east portion of the about. There oyster bors were new developed and there in not enough by drogrouply to show the curve satisfication.

3. The field platting was completed to the eftent prescribed in the Hydrographic Monuel. 4. The affin droftemon did not have to do over any part of drofting done by the field portly except as noted on statistic sheet. 5. There are no contingorary adjocent shuts, 6. Discrepancia: de Lat. 29.58.3 Long. 84.25.2, volume 1, poge 15, between position at and ash. a 6 ft. sounding in seconded which plotts in mid channel. This shoot probably does not exist and the very believed that the hydrographer either missed the channel or the lead line won read incorrectly.

An Lot 29°57.9 Long 84°21.8, volumen 4, page 8, between positions 136 and 137j. a 4 ft sounding is recorded. This sounding seems to be in error by one fothors and the veryfier believe that the sky netimed. her line was read incorrectly, Rev. P10. sum. The shool areas in but 300,00.3 long 84° 21.3 were removed from the smooth shed when soundings were taken and plotted. These shoot area, were solotted from the air photo compilation and stor former was informed of the above changes. The show line, was taken from 1 5512 (air photo Compilation). The signols were taken topographic shuts 6353 a and b, and 6354.

may 7, 1936 Respectfully submitted,

•

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5868 (1935) FIELD NO. 12

Ochlockonee Bay, Gulf Coast, Florida
Surveyed in 1935
Instructions dated Nov. 30, 1934 and June 5, 1935 (C. A. EGNER)

Hand Lead Soundings.

3 Point fixes on shore signals.

Chief of Party - C. A. Egner.

Surveyed by - Geo. Fortune.

Protracted by - G. C. McGlasson.

Soundings penciled by - G. C. McGlasson.

Verified and inked by - G. C. McGlasson.

1. Condition of Records.

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

- a. No approval sheet signed by the Chief of Party accompanied the Descriptive Report. (Par. 166).
- b. Several original soundings (vicinity of latitude 29°58', longitude 84°21') entered in the records were accompanied by a horizontal bar just above the sounding and so plotted on the boat sheet but reduced as actual depths. Old surveys covering this area indicate no apparent change in bottom and in addition show several deeper depths. It is concluded from these facts that the original soundings entered in the records are actually "no bottom" soundings and have been so shown on the smooth sheet.

To avoid confusion in such entries, a zero numerator should be shown above the bar as set forth in the Hydrographic Manual (page 117).

- c. Notations stating that the leadline was correct, while entered at the beginning of each day's work, should also have been entered at the end of each working day.
- d. No information regarding the character of topographic signal "Pill" (from T-6353b, 1935) falling on the edge of the channel in 6 feet of water in latitude 29°57.7', longitude 84°23.8' could be found in the sounding records, boat sheet nor on aerial and Graphic Control surveys covering this area. This matter has been discussed with G. C. McGlasson, a member of the field party, who states that the feature is a stake and should so be charted.
- e. No landmarks for charts was submitted on Form 567. However, the Descriptive Report (page 4) states that a water tower (signal WET) in lat. 29°57.6°, longitude 84°23.1°, is worthy

of charting. This tower is described on Form 524, submitted for signal WET.

The Descriptive Report is exceptionally clear and comprehensive and satisfactorily covers all matters of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project. The Descriptive Report (page 6) states that the development of several areas is incomplete. The more important of these are listed in paragraph 11 of this review.

3. Shoreline and Signals.

The shoreline originates with air photo compilation T-5512 (1935).

The signals are from Graphic Control sheets: T-6353a (1935), T-6353b (1935), and T-6354 (1935), as well as several 3 point fixes and sextant cuts recorded in the sounding volumes.

4. Sounding Line Crossings.

Sounding line crossings are excellent, the depths generally coinciding with the main system of lines.

5. Depth Curves.

Within the limits of the survey, the usual depth curves may be completely drawn including portions of the low water curve.

6. Junctions with Contemporary Surveys.

There are no contemporary surveys adjoining the present survey due to suspension of field operations in this locality. However, satisfactory junctions may be made with H-1331a (1876) and H-1331b (1876), which surveys are discussed in paragraph 7 of this review.

7. Comparison with Prior Surveys.

H-1331a (1876) and H-1331b (1876).

These are 1 to 20,000 scale surveys; the latter covering the area in Ochlockonee Bay and the former covering the detached development in the northeastern part of the present sheet. Depths are generally in very close agreement with the present survey. However, in latitude 29°58.6°, longitude 84°25.9°, the channel shown here on H=1331b (1876) has shifted about 130 m. due southward. Eastward of longitude 84°22.2°, the bottom is extremely lumpy. This fact resulted in a number of differences and necessitated the carrying forward of several shoal soundings from the old surveys.

All soundings transferred were obtained on line and are supported in the original records by one or more similar soundings of the same depth. The more important of the differences noted are as follows:

- a. The 3-3/4 foot sounding (3-1/2 charted) originating with H-1331b (1876), in latitude 29°58.2', longitude 84°22.1', was obtained on line 9 to 12j of which positions 10 and 11 were incorrectly protracted. Correct plotting places the line about 50 m. due southward where the sounding falls in depths of 5 feet on the present survey. Other soundings on the same line are in excellent agreement with depths on the present survey and the sounding has been carried forward as 3-1/2 feet.
- b. The 2-3/4 foot sounding (2-1/2 charted) originating with H-1331b (1876) in latitude 29°58.0°, longitude 84°22.7°, is one of several soundings (line 1 to 2 1) of like depths and falls in depths of around 5 feet on the present survey. Surrounding soundings on the present survey indicate a general deepening of 2 to 3 feet in this vicinity but also a shoaling of 1 to 2 feet about 200 m. to the southeastward. The shoal has probably shifted in position and for charting purposes, should be superseded by the development on the present survey.
- c. In latitude 29°57.3', longitude 84°21.2', a small islet (charted) is shown in ink on H-1331b (1876), but is not mentioned in the sounding records nor shown on T-771 (1859). A sounding line with depths of 1 to 2 feet was run directly over this feature on the present survey and no indications noted. It is probably a small island which has washed away and should be disregarded in future charting.
- d. A 2 foot sounding (charted) originating with H-1331a (1876) in latitude 30°00.2', longitude 84°20.7', falls just east of and 8 foot sounding on the present survey. A study of surrounding depths on both surveys indicates the possible existence of a small narrow ridge of hard bottom and the 2 has been carried forward.
- 8. Comparison with Chart 182 (New Print dated Feb. 11, 1935).

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

9. Field Plotting.

Field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual.

10. Doubtful Soundings.

A 4 foot sounding (line 136 - 137j) in latitude 29°57.9', long. 84°21.8', falls between a 10 and 13 foot sounding (line 110-111k) spaced about 35 m. apart. The bottom in the immediate vicinity is generally lumpy and 7 foot spots are shown 50 m. due north and southward of the 4. While the sounding may possibly be a leadsman's error, it is not considered advisable to reject the sounding.

11. Additional Field Work Recommended.

For Future Consideration.

The general character of the bottom eastward of longitude 84°22' in Ochlockonee Bay is extremely lumpy. When field work is resumed in this locality, additional sounding lines should be run in this area, which development shall include investigation and definite dispositions of the following:

- a. Soundings carried forward in red from prior surveys including the 2 foot spot discussed in paragraph 7d of this review.
- b. The doubtful 4 foot sounding discussed in paragraph 10 of this review.

12. Bridge Clearance Discrepancies.

The Descriptive Report (page 3) states that atothe bridge in latitude 29°58.1', longitude 84°23.0', the vertical clearance is 15 feet and the horizontal clearance 35 feet but no mention is made of the plane of reference. The Graphic Control sheet, T-6353a (1935) gives a vertical clearance of 15 feet and horizontal clearance of 36 feet at M.L.W. A note on the hydrographic sheet added by the field party gave the vertical clearance as 14 feet and 38 feet horizontal clearance at M.H.W. No authority, however, could be found for such information in the hydrographic records, but it is noted that these values are in agreement with the statement in the Descriptive Report of the air photo compilation, T-5512 (1934) which states that these values will be the clearances (based on a field inspection note on a photograph) when the bridge is completed. The values as given on the graphic control sheet, which is the latest in point of time, are accepted as the best available information and have been so shown on the hydrographic sheet. However, in as much as the bridge was still under construction at the time of the various surveys and inspections, the final data should be obtained from the District Engineers before application to the chart. Storm wrote on July 8 to District Engr for data

13. Note to Compiler.

Attention is called to paragraph le of this review and page 4 of the Descriptive Report regarding landmarks in this areas

14. Superseding Previous Surveys.

Within the area covered the present survey, with the indicated additions from previous surveys, supersedes the following surveys for charting purposes:

H-1331a (1876) in part H-1331b (1876) " "

15. Reviewed by - Harold W. Murray, April 22, 1936.

Inspected by - E. P. Ellis, May 19, 1936.

Examined and approved:

C. K. Green,

Chief, Section of Field Records.

Chief, Division of Charts.

eld Work.

Chief, Section of Field Work.

Chief, Division of H. & T.

applied to ch. 1261

afr. 1943 SHE

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

SEP 5 1935

Ace, No.