

4690
4690

Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
....., Director

U. S. COAST AND GEODETIC SURVEY
L. S. A.
DEC 15 1927

State: Florida Acc. No.

DESCRIPTIVE REPORT
Topographic } Sheet No. ^{EE} 4690
Hydrographic }

LOCALITY
Caloosahatchee River
Shell Pt. to Fourmile Pt.

1927

CHIEF OF PARTY
R. P. Eyman

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet "E" 4690

Caloosahatchee River

Party of Steamer HYDROGRAPHER

Raymond P. Eymann, H. & G. Engr., Com'dg.

DESCRIPTIVE REPORT

To Accompany
Hydrographic Sheet "E"

1. AUTHORITY.

The work on this sheet was done in accordance with the instructions of the Director to the Commanding Officer of the Steamer HYDROGRAPHER, dated October 21, 1926.

2. LIMITS OF SHEET.

This sheet includes the Caloosahatchee River from Four-mile Pt. to Shell Pt. It extends from a line through signal "OH" and Bn 29 (signal "LAP") to a line passing through signal "AL" and signal "CALF". It joins on to sheet "F" at the East limit and to sheet "D" at the West limit.

3. GENERAL DESCRIPTION.

The work was done on a scale of 1:10,000 with lines run parallel to the channel line. The soundings East of Nigger Head Point were referred to the portable T.G. at Fort Myers, Fla. The soundings West of Nigger Head Pt. were referred to the portable T.G. at Iona, Fla.

4. CHANNELS.

The channel from Bn 13 (signal "TIR") to Bn 17 (signal "APE") has a controlling depth of about 11 ft. and is fairly broad. From Bn 17 to F.R. Bn Cut G (signal "HAM") the channel is very narrow and has a depth of from 10 to 11 ft. Near Bn 17A the channel is about 100 ft. broad. On the North side of the channel there are rocks bare at L.W., and an old wrecked barge on top of them. On the South side of the channel and about 100 meters to the East of the wreck there are rocks within 2 ft. of the surface. Several boats have tried to steer clear of the rocks and wreck on the North side of the channel and gone aground on the rocks to the South of the channel. Boats must stay close on the range in this cut.

From Bn 18 to Bn 19 there is a depth of from 12 to 15 ft. and there are several shoals and spoil banks just off the channel. Just North of the channel at R.R. Bn Cut H there is a spoil bank bare at all stages of the tide and just South of the Channel at this place there is a shoal which makes the channel very narrow at this place.

From Bn 19 to Bn 19A there is a depth of about 12 ft. Midway between these Bns there is a shoal on either side of the channel which make the channel very narrow.

From Bn 19A to Bn 21 the channel is fairly broad and there is good water. Just North of the Channel at this place the bottom is very lumpy.

About 100 meters South of Bn 21 there is a 4 ft. shoal. Bn 21 is located on the edge of a 4 ft. shoal and there is 6 ft

of water in the channel close to this Bn. The Bn should be left about 30 meters to the North. A straight line from Bn 21 to Bn 23 passes over the edge of a 6 ft shoal 100 meters from Bn 21 and over an 8 ft. shoal 385 meters from Bn 23. A depth of from 11 to 12 ft. may be had by continuing on the course from Bn 19A to Bn 21 until Bn 21 is well passed and then heading over 1/3 the way from Bn 23 to the point on which signal "LOT" is located and continuing on this course till Bn 23 and Bn 25 are almost on range, and then heading up for Bn 23.

From Bn 23 to Bn 25 the channel is narrow and it is best to keep close to the Bns. About 100 meters E.X N. of Bn 23 there is a 7 ft. shoal. There is a 7 ft sounding shown on the edge of the channel at Bn 25, the ship passes close to this Bn and has never noticed any shoal in the channel. A depth of 9 ft. can be taken through this section by keeping Bn 27 on range with Triangulation station "FRANK" this is not recommended however for it passes close to a 7 ft. shoal South of Bn 23 and another one 100 meters E.X N. of Bn 23.

From Bn 25 to Bn 27 the channel is broad and has a depth of from 10 to 12 ft. From Bn 27 to Bn 27A the channel is narrow and has a depth of 11 to 12 ft. on the range.

From Bn 27A to Bn 28 (signal "STUB") the channel is narrow with about 11 ft. of water. Near Bn 28 the channel widens out and gives good room for turning.

From Bn 28 to Bn 29 the channel is broad and has from 10 to 12 ft. of water in it. Bn 29 is located on the edge of a shoal and close to the Bn. , and in the channel there is a 6 ft. spot, this bar should be left about 100 ft. to the North for the best water.

Another channel which is used considerably by local tugs with barges in tow, leads off the main channel near Bn 19 and leads through a group of shoals South-South-West of Redfish Pt. and then follows parallel to the main channel till it gets to Bn 15. From Bn 15 the channel leads to the Northward towards signal "CALF" where it passes off the limits of the sheet. The channel has a controlling depth of 5 or 6 ft. By using this channel one gets away from the narrow, main channel with it's strong current and traffic. There is a channel and shoal marker just S.W. of Redfish Pt., but even with that it is necessary for the tugs to take soundings in passing through this area.

A small channel with from 4 to 5 ft. of water leads up into Whiskey Creek at signal "PEP", there are several piling marking this channel.

A long bight with from 2 to 3 ft. of water leads off to the South from signal "PHI". It is used some by local fishermen.

There is another shallow bight of little importance leading off at signal "TUSK".

5. BARS AND OBSTRUCTIONS.

Near Bn 13 there is a bar on the South side of the channel which causes the channel to be very narrow.

Between Bn 17 and Bn 17A there is a spoil bank of large boulders on the North side of the channel. About 200 meters East of Bn 17A the rocks on the spoil bank are swash at low water and there is an old wrecked barge on them. Just South of the channel at this point and about 100 meters to the West there is a 2 ft. spot on the rock spoil bank, the channel here is very narrow and in a rock cut.

On the North side of the channel from Bn 17A to Bn 18 there are shoals and spoil banks almost bare at L.W. Just North of the channel at R.R. Bn Cut H there is a spoil bank bare at most stages of the tide, it is shown on the topographic sheet.

Between Bn 18 and Bn 19A there are bars with as shoal as 2 ft. of water on either side of the channel, the bottom here is very uneven.

Just North of Bn 19A there is a shoal with 5 ft. of water on it. About 150 meters farther to the N.E. there is another shoal with about 6 ft. of water on it.

Bn 21 is located on the edge of a shoal and has 4 ft. of water just inside it and 6 ft. of water in the channel close to the Bn. There is a 5 ft. shoal about 100 meters N.X E. of this Bn. A line joining Bn 21 and Bn 23 passes over the edge of this shoal and over another 8 ft. shoal 385 meters from Bn 23.

Just N.W. of signal "DENT" and about 50 meters South of the channel there is a 6 ft. shoal. In the channel on the line joining Bn 25 and Bn 27 and midway between these two Bns., there is an 8 ft. shoal.

North of the channel between Bn 27 and 27A and for 500 meters W.N.W. of Bn 27A there is a spoil bank with 3 to 4 ft. of water on it. South of the channel at Bn 27A there is a shoal with from 5 to 6 ft. of water on it.

Bn 29 is on the edge of a shoal and there is a 6 ft. spot in the channel close to this Bn. About 100 meters S.W. of Bn 29 there is a 4 ft. sounding, this sounding is verified by soundings shown on Sheet "F".

North of the main channel at R.R. Bn Cut H there is a large cluster of shoals and uneven bottom. Several extra lines were run in this area to develop a channel through them.

About $\frac{1}{2}$ mile N.X E. of Triangulation Station "TOM" there is a 3 ft. shoal surrounded by 6 to 8 ft. of water, this spot is shown on the old chart and several extra lines were run over it to develop it.

Just South of signal "CALF" the bottom is very uneven and the current very strong. Several extra lines were run in this area to check up on bad crossings.

6. ANCHORAGES.

Between Bn 15 and Bn 17 and about $\frac{1}{2}$ mile S.W. of triangulation station "PINEY PT." there is a good anchorage with mud bottom and 15 ft. of water.

Just West of R.R. Bn Cut H there is a bight leading off to the South from the main channel which has about 11 ft. of water and mud bottom.

At signal "TUSK" there is a bight that is used for small crafts by local fishermen.

At signal "PHI" there is another slough that is used by local fishermen.

Whiskey Creek, at signal "PEP", is used by local fishermen and by small pleasure crafts, there is a good sized boat house just inside this creek. Several piling mark the entrance to this creek, the con-

-trolling depth is about 4 ft.

7. SURVEY METHODS.

No new survey methods were used in this work on this sheet. The control for Hydrography was furnished by triangulation and topography. The hydrography was done in the ship's launch and in punt # 2. The launch steering compass course was used for most of the work. The punt was used in places too shoal for the launch to go.

Just South of signal "SHOR" there is a shoal bare at low water. One Officer walked along the exposed portion of this bar and another Officer walked along parallel to it in about 2 ft of water taking sextant fixes.

The lines were run parallel to the channel. In the marked dredged cuts one line was run on the range and another line on either side of it as close as possible. The natural channels were developed by 50 meter lines and the rest was developed by 100 meter lines.

In the dredged cut near Bn 17A the channel is so narrow that it was not possible to show three lines in the cut on this scale.

Two lines of soundings were run off the main channel near R.R. Bn Cut H to develop a possible anchorage.

Another line was run off the main channel at Bn 15 to develop the channel leading off to the N.E.W.

Just North of signal "DENT" several lines at right angles to the channel lines were run to develop the shoal at this place.

Between Pos. 37g and 38g a 6 ft. sounding was recorded, this spot was searched for and could not be found, the sounding is between 12 ft. soundings and is an error in recording of 1 fm. and should be 12 ft.

8. DESCRIPTION OF SHORE LINE.

The general trend of the shore line from the West end of this sheet to Redfish Pt. is East and West. From Redfish Pt. to the Eastern limits of the sheet the general trend is N.E. and S.W.

The North shore of the river is fringed with mangroves for the entire length of this sheet. The South shore line is fringed with mangroves from the Western limits of the sheet to triangulation station "NIGGER". From "NIGGER" to the Eastern limits of the sheet the shore line is grass with trees a short distance back from the shore line.

The small island on which signal "HACH" is located is a shell and sand spoil bank and is covered with small trees.

9. TIDES & CURRENTS.

The H.W. at Iona tide gauge ^glays behind the H.W. at Punta Rasa from $1\frac{3}{4}$ to 2 hours, the low water at Iona ^glays behind the L.W. at Punta Rasa from $2\frac{1}{2}$ to $2\frac{3}{4}$ hrs.

The Currents do not change for a considerable time after the H.W. and L.W.

Near the dredged channel at signal "HACH" the current is very strong and it is slack water for a very short time. As the river spreads out the current gets less strong, but is still fairly strong in the main channel. Near signal "CALF" the current is very strong. From Bn 18 to Bn 25 the current is fairly strong. From Bn 25 to the

Eastern limits of the sheet the currents are not so strong, the current sets fair with the channel at all times. At the narrows near signal "HACH" the current sets into the channel from both North and South.

10. LAND MARKS.

There are no prominent land marks on this sheet. Redfish Point is a sharp mangrove point and fairly prominent. Piney Point is well defined but not so sharp as Redfish Pt. Fourmile Point is a broad, round mangrove point.

Respectfully Submitted,

Jack C. Sammons

Jack C. Sammons, Jr. H. & C. Engr.

- TIDE DATA SHEET -

to accompany
Hydrographic Smooth Sheet "E"

Locality Caloosahatchee River Boat Launch and Punt

Gauge used Portable automatic No. 158

Locality of gauge Gulf Refining Co. dock, Fort Myers, Florida.

Elevations of Bench Marks above 0 of tide staff

Bench Mark	Levels		
Date	Jan. 7, 1927	Apr. 6, 1927	Sept. 16, 1927
B.M.#1	8.328	8.335	8.348
2	8.234	8.235	8.246
3	9.218	9.237	9.248
4	11.194	11.211	11.221
5	- - -	7.095	7.117

Tide Planes	Readings on staff.	
	<u>feet</u>	<u>Date.</u>
Highest tide observed - - - - -	4.85	- - - July 25, 1927
Mean H.W. (302 obs.) - - - - -	4.92	
Mean half tide level - - - - -	3.72	
Mean L.W. (302 obs.) - - - - -	3.40	
Lowest tide observed - - - - -	2.70	- - - Apr. 25, 1927
Mean range of tide - - - - -	0.61	

Value of M.L.W. used for reducing soundings 3.0 Authority Director's
letter of Sept. 20, 1927.

** TIDE DATA SHEET **

to accompany
Hydrographic Smooth Sheet "E"

Locality Caloosahatchee River Boat Launch and Punt

Gauge used Portable Automatic No. 158.

Locality of gauge Old cattle dock, Iona, Florida.

Elevations of Bench Marks above 0 of tide staff

Bench Mark	Levels			
	Date	Sept. 21, 1927	Nov. 8, 1927	Nov. 14, 1927
B.M.#1	3.972	3.888	3.906	
2	5.964	5.910	5.900	
3	5.817	5.760	5.754	
4	6.683	6.622	6.634	
5				

Tide Planes	Readings on staff	
	feet	Date
Highest tide observed - - - - -	2.50 - - -	Oct. 9, 1927
Mean H.W. (33 obs.) - - - - -	2.04	
Mean half tide level - - - - -	1.78	
Mean L.W. (31 obs.) - - - - -	1.52	
Lowest tide observed - - - - -	1.20 - - -	Sept. 28, 1927
Mean range of tide - - - - -	0.51	
Value of M.L.W. used for reducing soundings <u>1.2</u>	Authority <u>Mean of two</u>	

comparisons of simultaneous comparisons
with Punta Rasa gauge.

STATISTICS SHEET NO. "E"

Date (1927)	Letter	Volume	Positions	Soundings	Miles Statute	Vessels
September 12	a	1	74	537	10.5	Launch
September 13	b	1-2	190	1544	29.5	Launch
September 16	a	3	101	687	10	Punt
September 19	c	4	175	1272	27	Launch
September 20	d	4-5	138	876	15.5	Launch
September 21	e	5	73	520	10.75	Launch
September 22	f	5-6	210	1528	36	Launch
September 23	g	6-7	162	1049	16.5	Launch
September 26	h	7-8	194	1363	33	Launch
September 27	j	8-9	186	1382	28	Launch
September 28	k	9	193	1392	20	Launch
September 29	l	10	114	739	17	Launch
September 30	m	10-11	114	1154	25	Launch
October 3 . .	b	11-12	146	870	14	Punt
October 4 . .	c	12-13	203	1102	19.5	Punt
October 7 . .	n	13	50	192	4	Launch
TOTALS	16	13	2323	16207	316.25	Area- 12 mi. Sq.
December 5	p	13	58	248	1.5	Launch
FINAL TOTALS	17	13	2381	16455	317.75	

January 8, 1928.

J.P.A.

(11)

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in volumes of sounding records for

18

HYDROGRAPHIC SHEET

4670

Locality:

SALCOGANACHEE RIVER, FLORIDA.

Chief of Party:

Plane of reference **St. F. Hyman, 1927.**

ft. on tide staff at **M L U**

8.0

Fort Myers

1.2

• • • • •

Ida

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

G. W. Riddle

Chief, Division of Tides and Currents.

Section of Field Records.
Report on Hydrographic Sheet No. 4690
Culoozahatchee River Florida.
Shell Point to Fourmile Point.

Surveyed in 1927

Instructions dated October 21, 1926 (Hydrographer).
Chief of Party R. P. Eymann.

Surveyed by J. C. Sammons.

Protracted and soundings plotted by E. A. Deily
Verified and inked by J. D. Torrey.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development conforms to the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are limited but adequate. Soundings agree closely.
5. The usual depth curves could be drawn.
6. The field protracting and plotted soundings excellent.
7. The junction with sheet H-4691 good.
8. All shoals including spoil banks are well defined.
9. The open area just north of Bn. 18 and Bn. 19 should have been further developed by additional lines.
10. The character and scope of the survey is excellent and the field drafting good.
11. There are no indications of shoals or danger other than those shown. Additional work not required. John D. Torrey

DEPARTMENT OF COMMERCE

AND REFER TO NO. 11-DRM

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

August 11, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4690

West Coast of Florida, Caloosahatchee River, Shell Point to Fourmile Point

Instructions dated October 21, 1926

Chief of Party, Raymond P. Eymann.

Surveyed by J. C. Sammons.

Protracted and soundings plotted by E. A. Deily.

Verified and inked by J. D. Torrey.

1. The plan and development of the work conform strictly to the requirements of the general and specific instructions.
2. No additional development is necessary although a few more soundings north of Beacons 18 and 19 would have been desirable, especially near the 13 ft. sounding northwest of Beacon 19.
3. The channel, shoals and obstructions have all been well described in the descriptive reports except a 6 foot shoal about 200 meters south of beacon 23. A 6 foot sounding was obtained here on a line crossing another which showed 12 feet at the same spot. A subsequent attempt was made to verify the 6 foot sounding but with no success. The hydrographic party recommended that the sounding be changed from 1 1/6 fathoms to 2 1/6 fathoms. This sounding lies in the center of the channel and would be hard to avoid by a passing ship. In view of the fact that a thorough search was later made for it and the surrounding soundings do not show indications of the shoaling, I believe it would be safe to leave this sounding off the chart. Six or eight lines of soundings were run over the spot. A comparison with previous surveys does not help much because there are evidences of quite extensive changes since. The previous surveys were made about 1913 by U. S. Engineers. It was also noted that the search for this spot was made 2 1/2 months after the sounding was obtained.**
4. The channel shows a number of changes from previous surveys. Beacon 17 A has been shifted about 2/3 mile to the westward.

** (Mr. R. P. Eymann personally inspected the sheet and approved the omission of the 6 ft. sounding.)

5. Paragraph 4 of the Descriptive Report mentions submerged rocks 100 meters east of the wreck near Beacon 17 A. There is no evidence of this on the boat sheet or in the records. In paragraph 5 of the Descriptive Report mention is made of a 2 foot spot on a rock spoil bank 100 meters to the west of the wreck. Since this was borne out by the records and boat sheet the statement in paragraph 4 of the Descriptive Report was construed to mean "west of the wreck" instead of "east".
6. According to the Descriptive Report the 2 foot spot southeast of Beacon 17 A was on sunken rocks. No mention in the records is made of sunken rocks although the bottom is shown as rocky.
7. Junctions were adequate with adjacent sheets.

The field records contained an unusual amount of rejected work usually on account of uncertain signals. Outside of this the records were very good.
8. The character of this survey was an inland water route. The surveying was excellent. Drafting and inking, also excellent.
9. Reviewed by W. M. Gibson, Jr. H. & G. Engr., April 28, 1928.

Approved:

Chief, Section of Field Records (Charts)

Chief, Section of Field Work (H. & T.)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4690

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. E

REGISTER NO. ⁴⁶⁹⁰ 4690

State Florida

General locality ~~Gulf Coast of Florida~~ Caloosahatchee River

Locality ~~Caloosahatchee River~~ Shell Pt. to Fourmile Pt.

Scale 1:10,000 Date of survey September¹² & October⁷, 1927

Vessel Str. HYDROGRAPHER

Chief of Party Raymond P. Eyma

Surveyed by Jack C. Sammons

Protracted by Earle A. Deily

Soundings penciled by Earle A. Deily

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W. = (M.T.L. - 0.5 ft)

Subdivision of wire dragged areas by

Inked by J. D. Torrey

Verified by //

Instructions dated October 21, 1926

Remarks:

4690 Add'l. Work

4690 Add'l. Work

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

11-5613

State: Florida

JAN 18 1928
Acc. No.

DESCRIPTIVE REPORT.

Development of Shoal on -
Hydrographic Sheet No. "E" 4690 Add'l. Wk.

Add'l Work on Original Sheet
LOCALITY:

West Coast of Florida,

Caloosahatchee River

1928

CHIEF OF PARTY:
Raymond P. Eymann, H. & G. E.

DESCRIPTIVE REPORT

To Accompany Development of Shoal
in Caloosahatchee River,
near Bn. #21.

The work on this sketch shows the development of the shoal 60 meters East of Bn 21 (©BIT). The projection used is traced from the bromide of the smooth hydrographic sheet "E", Caloosahatchee River.

The ship's launch was used for this work and the soundings were referred to the T.S. at Iona, Florida. The tides at Iona were recorded from the plane staff at that place while the work was being done.

The launch was tied up alongside Bn. 21 (©BIT) and sextant fixes taken to check the location of this Bn. The launch was then anchored near the center of the shoal and fixes taken to locate this shoal.

Radiating lines were run on ranges over Bn. 21 (©BIT), using Bn. 21 as the fix at the West end of the lines. All these lines were run from the East towards the West.

Cross lines were run from the N.E. to the S.W. on ranges over Bn. 19A (©PILE).

This shoal is of sand and shell and at present has a least depth of 4 ft. The shoalest part of this shoal was thrown up by the action of the ship's wheel in working off the shoal. It has since been learned that a boat of the Florida R.R. and Navigation Co. grounded on this shoal a few days before the HYDROGRAPHER did, and it is thought that this boat may have thrown up a portion of this bank in working off the shoal.

Respectfully Submitted,

J. C. Sammons, Jr.
J. C. Sammons, Jr. H. & G. Engr.

~~11~~
11

February 15, 1928.

J.D.H.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
1 volume of sounding records for

HYDROGRAPHIC SHEET 4690 add'l.

Locality: CALOOSAHATCHEE RIVER, FLORIDA.

Chief of Party: R. P. Ryan, 1928.

Plane of reference is M L W
1.2 ft. on tide staff at Iona.

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

Chief, Division of Tides and Currents.