4574

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: Florida

11—5013

DESCRIPTIVE REPORT.

"3"

Topographic *Sheet No.* 4574

LOCALITY:

Gulf Coast ~ Anclote Anchorage

Anclote River and Approach

1926

CHIEF OF PARTY:

R. P. Eyman

4574

(11)

December 17, 1926.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4574

Locality: FLORIDA WEST COAST

Chief of Party: R. P. Eyman

Plane of reference is M L W
2.7 ft. on tide staff at Anclote Key L. H. Dock
1.2 ft. ------do------- Bradley's Wharf

For reduction of soundings, 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.

E Rude

Chief, Division of Tides and Currents.

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SHEET "g".
SURVEY OF ANCLOTE RIVER

INSTRUCTIONS OF JUNE 3, 1924

RAYMOND P. EYMAN, H. & G. E.
Chief of Party

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET NO. "g".

1. Authority. Instructions from the Director, June 3rd, 1924.

2. General Description of Shore Line.

Anclote River runs in a general N. W'ly direction from the town of Tarpon Springs to Anclote Anchorage into which it discharges over a wide shoal. Above Tarpon Springs the river is narrow and winding, but deep enough for small boats drawing 2 feet or less, to a distance of 12 miles above the Sponge Exchange at Tarpon Springs.

The south bank of the river from the entrance to Tarpon Springs is in general higher and more settled than the north shore. The areas outside the dredged channels are not navigable, and the spoil banks on either side of the channel are now covered with high mangrove bushes.

The coast Pilot of the river is adequate and the channel is well marked. A sunken rock least depth of 4.4 feet at Mean Low Water lies in the channel ten meters northwest of the entrance range about 225 meters S by W of Cut B Rear Range. Numerous shoalings have occured in the dredged channel - but all are well shown on the hydrographic sheet except the shoal on the N.E. side of the channel near Beacon 11. The best water here lies about 30 meters west from Beacon 11. Beacon 34 is missing at present. About 200 meters west of the Weather Tower at the Sponge Exchange is a double Marine Railway which runs out into the stream for a distance of approximately 25 meters and at this distance has a least depth of 2.0 feet at mean low water. The sponge boats lie with bows on the beach near the Sponge Exchange Dock and the stern anchored out into the stream. This section of the river is always crowded and care must be excercised due to anchor lines in the stream. Immediately above the Sponge Exchange the river outside the deep channel is full of

sunken sponge boats but the channel is clear as indicated for a width of approximately 35 meters.

Above the bridge the river becomes narrow and winding and the current bends must be followed. Little if any tide reaches a point more than two miles above signal "Each". Beyond this point the river is picturesque and interesting, covered completely in many places by overgrown trees and moss. The ponds and bayous found occasionally on either side, are full of alligators and many semi-tropical forms of life.

A channel has been dredged into Tarpon Bayou and 4 feet can be taken into the Spring Basin which is the easternmost part of the Bayou. A depth of 20 fms 3 ft was found as the deepest part of the spring. The Spring is believed to be connected with Lake Butler which lies about 2 miles to the eastward, by an intermittent siphon. In the rainy season when the lake rises several feet the spring will begin to boil and continues so until the level of the lake falls about two feet. Some soundings have also been taken in the western-most part of Lake Butler and at the time the spring is running a noticeable suction is felt in a deeper hole near the west shore of Lake Butler. The above information was secured from Mr. H. H. Sammons, resident engineer for a Land Development company in Tarpon Springs.

The tidal currents in the lower river reach a maximum velocity of approximately three knots, but in all places the current sets fair with the channel.

This river seemed scarcely important enough to warrant more than a careful channel development, however a number of small bays and ponds tributary to the river are used considerably altho not marked. The dredged channel was surveyed with the launch in the customary manner.

The shoal areas were all surveyed from the skiff with an outboard motor. The party consisted of two officers (right and left angle and plotting), recorder, cox'n who was also engineer, and one leads man. This was found to be a very satisfactory arrangement and covered the very shoal areas with no difficulty. Much of the hydrography was necessarily referred to topography, but whenever possible fixes were obtained.

The rock in the channel ten feet off range between signals "Ace" and "Out" was located by an improvised drag placed on the launch. A piece of 2" x 4" pine was placed thwart ship across the stern. This piece projected about two feet over the gunwales on each side and had a 1½ inch hole bored in each end about six inches from the end. Thru these holes were run the uprights from the drag which consisted of a 12 ft. section of 3/4 inch pipe secured to the uprights by means of tees and held against the force of current when underway by a bridle passing forward from the bottom section to a ring in the bow of the launch and thence back to the stern. A man was stationed by each upright to hold the drag at the set depth, depths being marked on the uprights in feet.

When the drag encountered an obstruction it was raised until it would clear and the depth noted on each upright. The angle of set to the drag could be controlled by the bridle from the stern and made such that the drag would ride without undue strain on the uprights.

Photographs of the drag in use - and the skiff as used on this work accompany this report.

3. Division of the Work with Respect to Tide Reducers.

A tide staff was established on Bradley's Wharf and connected to Anclote Key by simultaneous readings over a period of 58 hours. The tide staff is referenced by three bench marks established on the

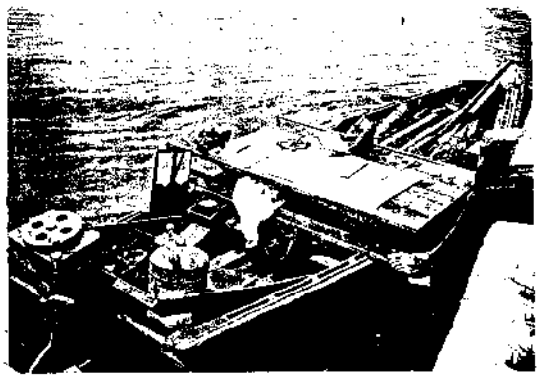
land belonging to Capt. Bradley.

Tide reducers for the river are taken from staff readings at Bradley's Wharf about 100 meters southeast of Beacon 26, and the reducers for the mouth of the river are taken from the Anclote Key Gauge. The dividing line is shown approximately in pencil on the boat sheet running in a N E'ly - S W'ly direction from position 91a to a point halfway between positions 86a and 94a.

St. Petersburg, Florida.

August 1926.

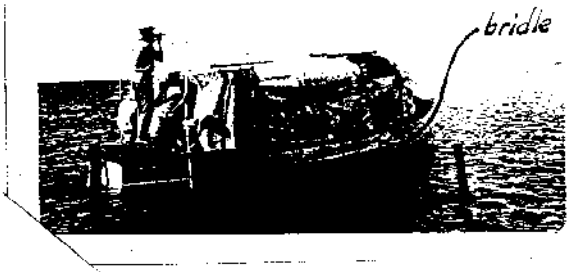
Paul C. Smith
Lieut [illegible]
Hydrographer.



Skiff equipped with Elto outboard motor. Used in survey of Clearwater Harbor.

Skiff and party using Evinrude outboard motor near Bishop's Harbor.

(Rt. 4 man taking picture)



Launch equipped with drag described in report for sheet "g"

STATISTICS SHEET NO. g

Date (1926)	Letter	Volume	Positions	Soundings	Miles Statute	Vessels
July 9th.....	a	1	139	841	18	Launch & Skiff
July 10th.....	b	1	69	312	6.5	Skiff
July 12th.....	c	1-2	81	362	6.5	Launch & Skiff
July 13th.....	d	2	76	366	6.8	Launch
July 16th.....	e	2	11	1	1	Launch
August 4th.....	f	2	22	3	3.0	Launch
Totals	6	2	398	1885	41.8	

E.D.E.

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON May 17, 1927.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4574

Anclote River, Florida

Surveyed in 1926

Instructions dated June 3, 1924 (HYDROGRAPHER)

Chief of Party, R. P. Eyman.

Surveyed by P. A. Smith.

Protracted and soundings plotted by P. A. Smith.

Verified and inked by D. R. Rounds.

1. The records conform to the requirements of the General Instructions.

2. The plan and character of development satisfy the requirements of the General Instructions.

3. The plan and extent of the survey satisfy the specific instructions.

4. The information is sufficient for drawing the usual depth curves.

5. The sounding line crossings are satisfactory.

6. The usual field plotting was completed to the extent prescribed in the General Instructions.

7. The junction with H. 4582 is satisfactory.

8. No additional work is necessary.

9. It is worthy of note that the sounding records and the boat sheet for this survey contained many illuminating notes, in consequence of which a better representation of existing conditions was possible.

10. Character and scope of surveying - excellent.
Field drafting - excellent.

11. Reviewed by A. L. Shalowitz, May, 1927.
Approved:

_____

Chief, Section of Field Records (Charts)

_____

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

Form 537
11—5912

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4574

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. "G"

REGISTER NO. 4574

State Florida.

General locality Gulf Coast ~~of Florida.~~ Anclote Anchorage

Locality Anclote River and Approach

Scale 1/10,000 Date of survey July, 1926

Vessel Hydrographer

Chief of Party Raymond P. Eyman

Surveyed by Paul A. Smith

Protracted by Paul A. Smith

Soundings penciled by Paul A. Smith

Soundings in ~~FATHOMS~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by D. R. Rounds

Verified by D. R. Rounds

Instructions dated June 3rd, 1924

Remarks:

GPO