1296
682

Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~*Topographic*~~
Hydrographic } *Sheet No.* 20

State FLORIDA

LOCALITY

ST. JOHNS RIVER

JACKSONVILLE TO JULINGTON CREEK

1935

CHIEF OF PARTY

Hubert A. Paton

U. S. GOVERNMENT PRINTING OFFICE: 1934

HP

Form 537
Ed. Dec., 1930

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. 20

REGISTER NO. H 6256 (1934-35).

State FLORIDA

General locality ST. JOHNS RIVER

Locality Jacksonville to Julington Creek

Scale 1 : 20,000 Date of survey 11/12/1934 - 3/22, 1935

Vessel Party No. 26

Chief of Party Hubert A. Paton

Surveyed by W. O. Hinkley and T. M. Williams

Protracted by T. M. Williams

Soundings penciled by M. K. Spencer

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by G.C. McGlasson

Verified by G.C. McGlasson

Instructions dated November 17 and December 5, 1933, 19

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1931

DESCRIPTIVE REPORT

to accompany

SHEET NO. 20 H6296 (1934-35)

ST. JOHNS RIVER, FLORIDA

JACKSONVILLE TO JULINGTON CREEK

PARTY NO 26 - PROJECT NO. HT 168

October 16, 1935

INSTRUCTIONS:

The work on this sheet was done in accordance with instructions dated November 17 and December 5, 1933.

LIMITS:

This sheet is a survey of the St. Johns River and portions of all of its tributaries, extending from Latitude 30° 19' on the north at the Florida East Coast Railway bridge to Latitude 30° 06' on the south about one mile above the mouth of Julington Creek. The survey covers all of Doctors Lake and Marco Lake. It covers part of Ortega River, Cedar River, Fishing Creek, Fishwier Creek, Willow Granch Creek, McCoys Creek, Duck Creek, Swimmingpen Creek, Julington Creek, Goodsby Creek, and Christopher Creek.

JUNCTIONS:

On the north a junction is made with the surveys of the U. S. Engineers in 1934 at the F. E. C. Ry. Bridge. A junction on the south is made with sheet No. 22. The depth curves joined satisfactorily. H6297 (1935)

DATUM:

The datum used on this sheet is "North American 1927". The triangulation stations were plotted directly from adjusted values of the first order triangulation or from unadjusted field computations of the second order triangulation. No corrections were necessary.

The Graphic Control Sheets were on this same datum, so the signals and shoreline could be transferred without corrections.

SIGNALS: (CS 173, 174, 175)

Signals were located on Sheets CC, DD and EE. Signals BOY, POI, USE, UNA, URP and AMY were located by the hydrographic party with a fix of two sextant angles and a check angle. These sheets not received. 1/18/39.

SHORELINE:

Not in Office

For a general description of the character of the shoreline, see descriptive reports for Sheets CC, DD and EE. The shoreline was located on the above sheets for almost the entire hydrographic sheet before the photographs were made. A small portion of Julington Creek remained to be done and this should be transferred from the photo-topographic sheets after they are compiled. on T 5319.

Topographic maps not have received. 1/18/39.

SURVEY METHODS:

The positions were determined by means of two sextant angles and plotted with a three-arm protractor. The soundings were taken with a hand lead line to the nearest half-foot and reduced to mean low water, which was used as the plane of reference. Eight and fourteen pound leads were used depending on depth of the water.

The sounding lines were spaced one hundred meters and cross lines were run about every half mile.

The work on this sheet was begun in advance of the topographers in order to keep the party busy and the control consisted of only the triangulation stations for a large part of the work. In the smaller streams the hydrography was carried to the limits of the topographic control. Beyond these points the water hyacinth is generally so dense that boats can not pass. In many parts of the St. Johns River proper the hyacinth along the shore made it impossible to develop the one fathom curve.

CHANNELS:

With the aid of the charts this part of the river is comparatively easy to navigate. There are two bridges at Hendricks Point. The highway bridge is of the lift type. The vertical clearance at mean high water is 58.5 feet (17.8 m) minimum and 166.5 feet (50.8 m) maximum. The railroad bridge alongside is a single leaf bascule type with a vertical clearance when closed of 6.2 feet (1.9 m). There is a fixed span on this bridge which has a vertical clearance of 9.2 feet (2.8 M). The horizontal clearance of both bridges is 185 feet (56.4 m).

Clearances on smooth sheet are referred to M.L.W. See par. 1b, review.

Lat. 30°19'
Long. 81° 39.8'

After coming through the draws keep about 150 yards off the starboard bank for 7/8 of a mile until abeam of Winter Point. There is a large shoal in midstream with a least depth of three feet, marked by Beacon No. 32 on the east and Beacon No. 34 on the south. The least depth in the east channel is 13 feet and in the west channel the least depth is 15 feet. From a point 150 yards east of Winter Point set a course of 180° true and continue one mile. Then change course to 164° true for 4 3/8

Lat. 30°18.5'
Long. 81°40.2'

miles, passing 300 yards off Beacon No. 25 and 400 yards east of Beacon No. 36, off Piney Point. This course extends 3/8 mile past the latter beacon. Change course to 202° true and continue 4 3/8 miles passing 700 yards west of Beacon No. 27 off Beauclero Point and to a point 400 yards west of Beacon No. 29, off Mandarin Point. Change course to 172 ° true for a distance of 3 miles, passing 250 yards east of Beacon No. 40, off Ragged Point. This course continues 7/8 mile beyond the beacon.14

The controlling depth on this sheet is ~~15~~ feet.

Ortega River has a least depth of 7 feet as far as the A. C. L. R. R. bridge. At the mouth of the river there is a highway bridge with a double leaf bascule draw span which when closed has a vertical clearance of 10.7 feet (3.3 m) and a horizontal clearance of 53.7 feet (16.4 m). There are many small docks and a boat yard for small craft in this section of the river. The A. C. L. Ry. bridge is a single leaf bascule draw span with a clearance when closed of 4.3 feet (1.3 m). The controlling depth beyond this bridge is five feet to the end of the surveyed area. There are a few docks in poor condition south of the railroad bridge. There is a good dock on Cedar River near the highway. Cedar River has a controlling depth of five feet.

Lat. 30°16.8' Long. 81°42.2' See par. 16, review.

Lat. 30° 16' Long. 81° 44'

Fishing Creek has a controlling depth of four feet for about one-third of a mile upstream. There are no docks and the water hyacinth makes navigation impossible most of the time.

Lat. 30° 15.7' Long. 81° 43.6'

Fishweir Creek is a small stream that has been cleared out by the city of Jacksonville and a hyacinth fence has been built across its mouth. It has a controlling depth of two feet to the highway bridge and there are no docks or landing facilities.

Lat. 30° 17.4' Long. 81° 42.6'

Marco Lake is an artificial lake surrounded by a concrete sea-wall. The entrance has a depth of two feet. There is a fixed concrete bridge across its entrance with a vertical clearance of 9 feet and also a movable fence to keep out the hyacinth. There are no docks on this lake.

Lat. 30° 18.4' Long. 81° 39.4'

Christopher Creek is not navigable because it is choked with hyacinth all of the time.

Lat. 30° 15.1' Long. 81° 38.5'

Goodsby Creek has a depth of one foot at its entrance. There is a narrow unmarked channel at its mouth but the stream is nearly filled with hyacinth and there is but one small dock in poor condition.

Lat. 30° 13' Long. 81° 37.2'

Doctors Lake has a depth of 7 to 8 feet in the entrance. At the entrance there is a highway bridge with a swing draw span, horizontal clearance 62 feet and vertical clearance when closed of 11.2 feet at mean low water. A sunken barge 460 feet (140 m) S. 28° W. true from the center of the draw bares 1½ feet at low water. Vessels should not anchor in this vicinity. There is a small marine railway in Doctors Lake which can haul out boats 45 feet in length and of a 4 foot draft.

Lat. 30° 09' Long. 81° 42'

Duck Creek has a least depth of less than a foot at its mouth and is filled with hyacinth.

Lat. 30° 06.2' Long. 81° 46'

Swimmingpen Creek has a least depth of 5 feet for about ½ mile upstream to the highway bridge. The bridge is a wooden fixed span with no horizontal clearance due to cross bracing between bents.

Lat. 30° 06' Long. 81° 45'

Julington Creek has a least depth of 5 feet (1.5 m) for a distance of three miles to the forks. This creek is crossed by a highway bridge about a mile inside from the entrance. The bridge is a fixed span with a forty foot horizontal clearance and a vertical clearance of 10 feet (3.2 m) at mean low water. Beyond the forks the creek is filled with hyacinth and therefore cannot be navigated. There are no docking facilities.

Lat. 30 07.5' Long. 81°38'

COMPARISON WITH PREVIOUS SURVEYS:

When compared with the previous survey as shown on Chart No. 682, the greatest depth south of the bridges at Jacksonville has increased from 60 feet to "no bottom at 72 feet". The three foot shoal off Winter Point was formerly given as four feet. There is no longer a 12 foot channel south of the 8 foot shoal at the mouth of Doctors Lake. The only channel being that of 15 feet to the north of the shoal.

On previous surveys of Willow Branch Creek there was an old slip of timber piling in a very poor state of repair. It has been replaced recently with one of concrete piling and is approximately 63.5 feet long and extends from the bulkhead line of the St. Johns River to the southerly street line of St. Johns Avenue. Since surveying this area the slip has been dredged by the F. E. R. A. to a depth of 5 feet at mean low water except at the mouth and entrance which has a depth of about $\frac{1}{2}$ foot at mean low water. This information was obtained from the engineer in charge of the project.

The City of Jacksonville has cut a new outlet for McCoys Creek. It now follows the F. E. C. Ry. tracks and empties into the St. Johns River about 200 yards west of the north end of the railway bridge.

Marco Lake has recently been constructed and has a concrete retaining wall.

In Latitude 30° 09.5', Longitude 81° 40.9' the chart shows a 12 foot shoal. No evidence of this was found. It is believed that this is an error on the previous survey - the depth probably being 22 instead of 12.

See par. 7b(2), review.

DANGERS:

There is a pile which bares $\frac{1}{2}$ foot at mean low water alongside of the channel about one-half mile north of Beacon No. 40. Latitude 30° 07.6', Longitude 81° 40.9'

Shown as sunken log in records and on smooth sheet. Sunken pile on boat sheet so changed on smooth sheet. See par. 10c(1), review.

There is a temporary stand, built by the U. S. Engineers about 100 meters northeast of Beacon No. 40.

At Latitude 30° 10.8', Longitude 81° 39.5' there is located a possible wreck. While there is no change in depth, the leadsman was previously sounding in soft mud and on this sounding the lead struck something hard and from there on soft mud was found again. This remark was not noticed in the record book until the smooth sheet was plotted and field work had been discontinued.

See par. 10a, review.

300 ~~460 feet~~ There is sunken barge, which bares $1\frac{1}{2}$ feet at mean low water, ~~460 feet~~ S. 28° W. from the center of the drawbridge span at Doctors Inlet.

Lat. 30° 08.8' Long. 81° 42'

The principal dangers are the many shoals and bars, most of which are adequately marked. There is one exception, south of

Winter Point which has a least depth of three feet at mean low water. If a vessel follows the courses given, this danger can be avoided. Lat. 30°18.2' Long. 81°40.8'

DISCREPANCIES:

Between positions 135 and 137, J day, there were several 9 foot soundings taken. These were believed to be in error and were later investigated, see position 153, Q day. The depth was then found to be 14 and 15 feet, which agrees with the surrounding depths. It is believed the lead was read one fathom too shoal on the first survey and it is recommended that the shoaler soundings be rejected. Lat. 30°14.9' Long. 81° 40.1' 9's rejected. J.A.M.

The sounding on position 83, ~~P~~ U day, is also probably in error for the same reason. It is recommended that it be changed to 13 feet instead of 7 feet as recorded. Try & develop Lat. 30°15.1' Long. 81°39.5' 7 rejected. J.A.M.

In the vicinity of Beauclerc Point there was a seven foot sounding taken among soundings of greater depth. This spot was investigated thoroughly, see page 32 volume 21 and was proven to be in error. It is recommended that this sounding be changed to 13 feet also. Lat. 30°11.8' Long. 81°39.1'

The vertical clearance on the F. E. C. Ry. bridge at Jacksonville as given in the descriptive report accompaning G. C. Sheet BB, was found to be in error. It is believed that the correction for tide was added to the measured distance and should have been subtracted. It is recommended that the clearances as given in this report be accepted. Lat. 30°19.2' Long. 81°39.9' As the clearance is referred in this case to M.L.W. the correction should have been added. See par. 16, rev.

Due to distortion of the smooth sheet some positions locating the ends of docks do not plot in the topographers positions. In such cases the position angles were disregarded and the positions were plotted in accordance with the topography. A few of these fixes were plotted on the aluminnum-mounted sheets and all error was eliminated, thus showing the trouble arose from distortion. See par. 3a, review.

The hydrographic party had to redress some of the signals in Ortega River and by mistake put a flag for signal HOP on the wrong dock. The signal was changed on the topographic sheet to agree with the boat sheet to avoid confusion. Lat. 30°16.4' Long. 81°42.6'

The wreck at signal XIT is indicated as baring 8 feet at mean low water on the topographic sheet and as 6 feet in the sounding records. As both heights were estimated, it is recommended that a mean of the two values be accepted. Lat. 30°12.5' Long. 81° 38' Hydro value accepted.

GEOGRAPHIC NAMES: 16HE

See descriptive reports of the topographic sheets of this area for a discussion of the geographic names. In addition it might be noted that Buckley Bluff in now commonly known as Beauclerc Point. The names Duck Creek, Peoria Point, Cane Point, Romeo Point, Moccasin Slough, Giggers Point, Mill Cove, Catfish Point in Doctors Lake and Peters Creek south of Beacon No. 40 are in common use by the fishermen and local inhabitants. The name Doctors Inlet applies only to the inlet at the mouth of the lake. The lake proper is known as Doctors Lake.

The name Flemming Island refers to the area of land lying

between Black Creek, St. Johns River, Doctors Lake and Swimmingpen Creek. Topographic Sheet DD is in error in regards to the use of this name.

The south fork of Julington Creek is known as Durbin Creek, and this name appears on the Geological Survey maps.

The newly dredged Marco Lake is commonly known as such, it being located in the San Marco subdivision of the city.

It is recommended that all of the above names be adopted for use on the charts.

LANDMARKS:

Lists of Landmarks have been fully described in the reports accompaning Topographic Sheets CC, DD, EE. Lists of these marks and also Lists of Aids to Navigation have been submitted previously.

MISCELLANEOUS:

Navigation in the St. Johns River is frequently impeded by large masses of floating water hyacinth that drift with the wind and tide. They make it especially difficult for small flat bottom boats and under certain conditions they collect around the docks in Jacksonville and make docking difficult even for the larger vessels. They completely fill the upper reaches of the small streams and prevent navigation all year round. They are most numerous after the close of the summer season and until late fall.

ADDITIONAL WORK:

The Florida Cross-State Canal now under construction by the U. S. Government will follow the general course of the river through this section. It will be dredged to a depth of 30 feet below mean sea level and will cause a big change in this survey. It is recommended that the entire area be resurveyed when the canal is finished.

Canal construction suspended and its resumption is rather dubious. JAM. 1/18/39.

There were several places where additional work was to be done when the photo-topographic sheets had been compiled and the shore line for the upper parts of the small streams had been received. The party was disbanded and the field work discontinued prior to this however so that the spots were not investigated. Since the entire river is to be completly changed by the construc- of the canal it probably is not important now to expend the time and money for these minor places. A few might be mentioned however:

Further development of the two foot shoal east of Camp Foster. - Not necessary. J.A.M.

Investigation of possible wreck off Plummers Point. Lat. 30° 10.8' Long. 81° 39.5' See par. 10a(1), review.

Development of two fathom curve northwest of signal RED. Lat. 30° 10.7' Long. 81° 40.1' Not necessary

Investigation of the 15 foot spot shown on Chart No. 682, about 1800 yards north of Beacon No. 40. This spot was not noticed during the progress of the field work. See par. 7b(1), review.

Further search for the 12 foot shoal 600 yards northwest of Beacon No. 29. Lat. 30° 09.5' Long. 81° 40.9' See par. 10a(2), review.

Developement of the inshore channel between Cochley and Beacon No. 25. Lat. 30° 17' Long. 81° 40' Not necessary

Development of the least depth into Willow Branch Lat. 30° 18.1' Long. 81° 41.5'

Creek after the dredging operations. Not necessary. J.A.M.

Extension of the survey of the minor streams if not clogged with hyacinth. This is problematical. Probably will be very difficult to find such a time.

STATISTICS:

Total number of Soundings	32,531
Total number of Positions	6,650
Statute miles of sounding lines	874.3
Area in square statute miles	37.5

Respectfully submitted

Thos. M. Williams,
Surveyor, C. & G. S.

Hubert A. Paton

by Hubert A. Paton,
Lieut. C. & G. S.

APPROVAL SHEET

to accompany

SHEET NO. 20

The sheets and records have been examined and are approved.

Hubert A. Paton

Hubert A. Paton,
Chief of Party

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

July 22, 1938.

Division of Hydrography and Topography:

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

Plane of reference
Tides~~xRedxxxxxxxx~~ approved in
22 volumes of sounding records for

HYDROGRAPHIC SHEET **6296**

Locality **Jacksonville to Julington Creek, St. Johns River, Florida.**

Chief of Party: **H. A. Paton in 1934-1935**
Plane of reference is **mean low water reading**
3.3 ft. on tide staff at **McGiffin Terminal**
9.1 ft. below B.M. 1
1.7 **ft. on tide staff at Orange Park**
23.7 **ft. below B.M. 1**
2.6 **ft. on tide staff at Green Cove Springs** off sheet see H 6297
6.6 **ft. below B.M. 1**

Height of mean high water above plane of reference is 1.1 feet at McGiffin Terminal; 0.7 foot at Orange Park; 0.8 foot at Green Cove Springs.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

GEOGRAPHIC NAMES

Survey No. H-6296

Name on Survey	A. On Chart No. 682	B. On previous survey No. T-1459	C. On U. S. quadrangle Maps	D. From local information D.R.	E. On local Maps	F. P. O. Guide or Map	G. Rand McNally Atlas	H. U. S. Light List	K.	
Hendricks Point	✓									1
Winter Point	✓									2
~~Grassy Point~~	✓									3
Memorial Park				✓						4
Willowbranch Creek					✓					5
Marco Lake					✓					6
Fishweir Creek		✓		pg. 3						7
Cedar River	✓									8
Ortega	✓		✓			✓				9
Point La ~~Vista~~ Vista	Phillips Pt	Phillips pt	Phillips pt.		Submitted by US GB 6/16/38					10
Ortega River	✓									11
Venetia				✓						12
Piney Point	✓	✓	✓							13
Christopher Creek	✓	✓ "S"	✓							14
Christopher Point	"S" Pt	✓ "S"	✓	✓	✓ CC					15
San Jose				✓ CC						16
Camp Foster				✓ CC	✓ CC					17
~~Goodbys~~ Goolsby Creek	GNS									18
Beauclerc ~~Point~~ Bluff	GNS				Bluff CC					19
Plummers Cove	✓	Plummer's Cove	✓							20
Plummers Point	"S" Pt	"S" Pt	✓							21
Orange Park	✓	Orange Park Ldg.	✓			✓				22
Mandarin	✓		✓			✓				23
Doctors Lake	✓	Doctor's Lake	✓	✓						24
Moccasin Slough				✓						25
Romeo Point				✓						26
Doctors Inlet				✓						27

M 234

Note Graphic Control Sh. D.R. Field No CC is referred to by CC

	Remarks	Decisions
1		USGB decision
2		USGB decision
3	See Hendricks Pt.	
4	~~Decision with held waiting planimetric map~~ see G.C. (CC)	30-18.5 81-41.5
5		See D.R. Graphic Control
6		sheet (CC)
7		
8		USGB decision
9		
10	T-1459 has name La Vista also as if it were a locality name - No statement in D.R.	Referred to Paton See GN#2(1938)
11		USGB decision
12	See G.C No. CC	
13		
14		
15		
16		
17		
18		USGB decision
19	"Pt" recommended (See D.R.No.CC)	USGB decision
20		
21		
22		
23		
24		
25	Applies to a shallow Bight in Doctors Lake, Not a Slough - Feature of no importance	
26		See also CC
27	Rejected for charting - could be considered a conflict with Doctors Lake Local name only applies to Entrance of Lake	

M 234

GEOGRAPHIC NAMES

Survey No. H-6296

Name on Survey	On Chart No. 682 A,	On previous survey No. T-1459 B,	On U. S. quadrangle Maps C,	From local information D	On local Maps see G.C. Sheets (P.R.) E	F	P. O. Guide or Map G	Rand McNally Atlas H	U. S. Light List K	
Cane Point				✓ cc						1
Peoria	✓		✓				✓			2
Peoria Point				✓						3
Catfish Point				✓						4
Mill Cove				✓						5
~~Niggers~~ Geigers Point				✓						6
Ragged Point	✓	✓	✓							7
Julington Creek	✓	✓	✓							8
Old Bull Bay	✓	✓	old Bull Bay							9
~~Swimmingpen~~ Swimming Pen Creek	✓									10
Flemming Island				✓						11
Peters Creek				✓ cc						12
Cunningham Creek	✓	✓	Cunningham Cr							13
Jacksonville	✓									14
South Jacksonville	✓		✓				✓		✓ R.R.G.	15
St. Johns River	✓									16
Sadler Pt	✓	Saddler's Pt	Sadler Pt		✓ Sadler Pt					17
Fishing Cr.	✓	✓	✓							18
Macks Pt				✓ cc						19
Mandarin Pt	✓									20
Orange Pt.										21
										22
										23
										24
										25
										26
										27

Names underlined in red approved by GFE on 6/9/38

M 234

	Remarks	Decisions
1		
2		
3		
4		
5		
6	Corrected per T5613 to Geigers Pt	
7		
8		
9		
10		USGB decision
11	See D.R. T5271	
12		
13		
14		USGB decision
15		
16		USGB decision
17		
18		
19	This name applied else where on T. 5613 (noted on H6296)	
20		
21	Macks Pt replaced by this name	
22		
23		
24		
25		
26		
27		

M 234

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. H6296

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

Number of positions on sheet	6,650
Number of positions checked	142
Number of positions revised	44
Number of soundings recorded	32,531
Number of soundings revised	68
Number of signals erroneously plotted or transferred	1
Number of soundings erroneously spaced	718

Date: 10 January, 1939

Verification by G.C. McGlasson Time: 20 days 1½ hours

Review by J.A. McCormick, Jan. 21, 1939. Time: 30 hr.

HYDROGRAPHIC SURVEY NO. H-6296

Smooth Sheet Yes

Boat Sheet Yes

Records; Sounding 22 Vols., Wire Drag ___ Vols., Bomb ___ Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Vol.#1

Landmarks for Charts (Form 567) Yes

Statistics See Page 7 of D.R.

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) None

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

Hydrography: Total Days 54 ; Last Date Mar. 22, 1935

Remarks

2776

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT } No. H-6296

~~PHOTOSTAT OF~~ ~~No.~~

received May 19, 1938
registered May 27, 1938
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	✓	D	Pages 2, 3, 4, 5 and 6
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed

✓ 1938

9 January, 1939.

Report on H 6296
Verifying and Inking

1. Condition of Records.

The records are neat and legible and, in general, conform to the requirements of the Hydrographic Manual.

In Lat. 30° 19', Long. 81° 39.8'. Page 2 of the Descriptive Report relates the vertical clearance of these two bridges to MHW while the same clearance is related to MLW on the smooth sheet. Attention is called to this fact and a careful comparison should be made with the topographic sheets when they arrive in this office. Furthermore the same check should be made for all bridges on this sheet as they were related to MLW by the field party.

In Lat. 30° 14.8', Long. 81° 40.1'. The soundings between positions 135-137, J days, were rejected as recommended by the

Chief of Party. Consequently the soundings between positions 152-155, Q day, were plotted.

In Lat. 30°12.5', Long. 81°38'. On page 5 of the Descriptive Report, it is stated that a wreck bares 6 feet MLW by the hydrographic records and it bare 8 feet MLW by the topographic records. Therefore the note was inked according to the hydrographic information.

In Lat. 30°11.8', Long. 81°39.1'. Volume 17, page 33, position 30, S day: There is recorded a 7 foot sounding which was developed on D" day, volume 21, page 32. The above sounding appeared to be erroneous consequently it was omitted as recommended by the Chief of Party.

In Lat. 30°18.5', Long. 81°40.8'. Volume 4, page 65, position 34, K day. According to the hydrographic note, memorial beacon is either out of place or the hydrographer has referred the note to the wrong sounding. Therefore it

is suggested that the location of memorial beacon be checked with the topographic survey prior to ~~any~~ changes on the smooth sheet.

Agreement sufficiently close
~~Probably recorder's error.~~
Topo location accepted.
J.A.M.

2. Shoreline and Signals.

The topographic (graphic control surveys) surveys from which the shoreline and signals originate have not arrived in this office. The hydrographic signals were located by sextant cuts listed in the index of the hydrographic records.

3. Sounding Line Crossings.

Attention is called to the pencil notes on the sheet relative to sounding line crossings which appear to be shoal.

In Lat. 30°18.3', Long. 81°39.6'. Volume 5, page 6, positions 16-17, L day. There are two 8 foot soundings recorded which were doubtful to the hydrographer. In view of the fact that on the cross line a 12 foot sounding falls between the two 8 foot soundings, it is believed that they are correct and were plotted as such.

4. Depth Curves.

The usual depth curves may be satisfactorily drown except in a few places where they were left in pencil in order that further study may be made relative to cross lines which appear about. Curves completed. J.A.M.

When warranted the ½ was added to the 6, 12, and 18 foot soundings in order to smooth out the curves.

5. Junctions with Contemporary Surveys.

The junction on the north is with the surveys of the U.S. Engineers and was not considered by the verifier.

The junction on the south with H 6297 (1935) will be considered when the survey has been inked and verified.

6. Field Plotting

The field protracting and plotting appeared to be done carelessly. Numerous changes were made and the soundings were not spaced correctly. However as the bottom is very even it was not thought worthwhile to re-space

all soundings, therefore only changes were effected where critical soundings occur.

Furthermore the field party failed to show the idraw on the various bridges on this sheet.

In lat. 30°15.2', Long. 81°41.8'. The hydrographic signal "Boy" was relocated even though the original was platted and checked by the field party.

In lat. 30°15.5', long 81°41.8'. There is doubt about the positions and soundings on these docks. Therefore it is advisable to make a comparison with the topographic surveys prior to any changes on the smooth sheet. All positions and soundings should be checked from position 52, Y day, to the end of the day. See par. 3a, review.

The above statement applies to positions 50-51, Z day, and to all the work on A' day.

7. Aids to Navigation.

All aids to navigation were located

by topography consequently no errors exist.

Respectfully submitted,

G. C. McGlasson

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6296 (1934-35) FIELD NO. 20

Jacksonville to Julington Creek, St. Johns River, Florida
Surveyed in November 1934 - March 1935, Scale 1:20,000
Instructions dated November 17 and December 5, 1933 (H. A. Paton)

Hand Lead Soundings. 3 Point fixes on shore signals.

Chief of Party - H. A. Paton.
Surveyed by - W. O. Hinkley and T. M. Williams.
Protracted by - T. M. Williams.
Soundings plotted by - M. K. Spencer.
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. Openings in draw bridges were not shown and cannot be added in the office until the topographic surveys of the area are received from the field.

b. Bridge clearances are referred to M. L. W. instead of M. H. W. as is the usual practice. The values given also differ slightly from those in the U. S. Engineers' 1935 Bridge List and there is other evidence in the descriptive report, page 5, of possible discrepancies. No changes will be made in the office until the topographic sheets are inspected.

The Descriptive Report had several minor discrepancies in its text and located most of the discussed features by geographic features or by bearings and distances to signals rather than by geographic coordinates. Otherwise, it was satisfactory.

2. Compliance with Instructions for the Project.

The survey satisfies the instructions for the project except as noted in par. 10, this review.

3. Shoreline and Signals.

a. Shoreline and topographic signals originate with topographic maps and surveys which have not as yet been received in the office. The present survey will be compared with them when they arrive, particularly as regards unfinished shoreline; discrepancies in piers noted in descriptive report, page 5; and bridge clearances and draws discussed in paragraphs 1a and b, this review.

b. Fixes used in the location of hydrographic signals are recorded in the sounding volumes.

4. Sounding Line Crossings.

There are several discrepancies of 1 to 2 feet where east-west lines cross the normal system of north-south lines. These differences are probably due to the difficulty of determining just when the lead started to penetrate the prevailing soft mud bottom. In approximate lat. 30° 07', long. 81° 39.5', depths on line 52 - 66 Z' (blue) average 3 to 4 feet shoaler than depths of 9 to 12 feet on adjacent lines. The leadsman on the shoal line was T. M. Williams, who was in charge of the sub-party and whose usual duties were the taking of right angle and plotting. The line is considered highly questionable and should have been investigated by the field party. It is two miles long and, throughout its length, excepting three soundings adjacent to the shore, is shoaler than close parallel lines. The soundings are clearly erroneous and have been rejected.

5. Depth Curves.

The usual depth curves may be satisfactorily drawn.

6. Junctions with Contemporary Surveys.

a. The junction on the south with H-6297 (1935) will be considered in the review of that survey.

b. There is no contemporary survey by this Bureau on the north. The junction with the latest U. S. Engineers' survey (blueprint 30792 of 1934) is satisfactory, however, for charting purposes.

7. Comparison with Prior Surveys.

a. H-484 (1855), H-1542b (1875).

These 1:10,000 scale surveys cover that portion of the present survey north of lat. 30° 18.5'. Depths on the old surveys are in fair agreement with those on the present work but the line spacing is wider and the present survey adequately covers the information which they contain. They should be superseded by the present survey in future charting of the common area.

b. H-1384a & b (1876-77).

These 1:20,000 scale surveys cover the entire area of the present survey. The delineation of depth curves on the old surveys is strikingly similar to that on the present work. Individual depths differ by 1 to 3 feet in some areas, the old surveys being the shoaler in some cases and the deeper, in others. Two noteworthy differences are the following:

(1) The 15 foot depth (charted in lat. 30° 08.1', long. 81° 40.8', on H-1384b falls between 21 foot depths both on that survey and on the present work. The 15 originates with pos. 9-10b' (red) in the old records and is supported by two similar depths. A penciled note on the old smooth sheet reads, "Probably leadsman's error, H. G. O. Sept. 1883." The initials are those of H. G. Ogden who was in charge of the party which made the survey. The development on the present survey is fairly close and the bottom is soft mud, while it is recorded in the old survey as hard. The present survey shows a single sounding of 18.5 ft. 200 meters W. by N. of the 15. The existence of the 15 is considered improbable and, as it is not less than the controlling depth of 14 feet in the portion of the main channel covered by the present survey, it should be disregarded in future charting.

(2) The 2-3/4 foot depth (depth curve only charted) in lat. 30° 09.5', long. 81° 40.9', on H-1384a (1876-77) originates with pos. 29t (red) and falls in depths of 20 feet on the present survey. The old record states that the shoal sounding was obtained on the spar of a wreck. The sounding was shown on the first edition (1884) of obsolete chart 455b and was marked by a beacon. Neither sounding nor beacon appear on the second edition (also 1884) of the old chart, only the depth curve remaining as on the latest chart. The wreck has probably broken up or been removed and has not been carried forward to the present survey. The depth curve should be retained on the chart, however, pending the results of additional investigation already authorized in the instructions of October 20, 1938 to the Launch MIKAWE.

Considered disproved. See Rev. Par. 2 B Ad. Wk. (1939)

The present survey, because of its later information and closer development, should supersede the old surveys in future charting of the common area.

c. T-2027 (1875).

This 1:80,000 scale reconnaissance survey contains a single zig-zag line of soundings down the portion of the St. Johns River covered by the present survey. Such depths as were obtained are in fair agreement with those on the present work. Because of its extreme sketchiness, the above survey should be disregarded in future charting of the common area.

8. Comparison with Chart 577 (New Print dated March 3, 1938)
Chart 682 (New Print dated July 2, 1937).

a. Hydrography.

Within the area of the present survey, the charts are based principally on surveys discussed in the foregoing

paragraphs. North of lat. 30° 16' these surveys have been supplemented by various surveys of the U. S. Engineers, the latest being shown on blueprints 25103 and 25104 of 1932. Although on a smaller scale, the present survey more closely develops the salient features on the Engineers' surveys and being of a later date should supersede them in future charting of the common area.

b. Aids to Navigation.

Light "38" charted in lat. 30° 09.5', long. 81° 41.5' from Chart Letter 211 of 1938, was erected after the date of the present survey and is not shown thereon. Charted positions of other aids in the area originate with information of dates prior to the survey and differ from the survey positions by as much as 250 meters. The survey positions adequately mark the features intended and should control for charting purposes.

9. Field Plotting.

The field protracting was fair. Many inaccuracies were found in the spacing of soundings because of the method of selection used by the field draftsman in omitting soundings on closely spaced lines. For example, if five soundings were recorded between positions, one would be omitted and the remaining four equally spaced between the positions. In many cases the one omitted sounding was the shoalest of the five.

10. Additional Field Work Recommended.

a. A preliminary inspection of the present survey before verification resulted in the following items of additional work being included in supplemental instructions of Oct. 20, 1938 to the Launch MIKAWE;

(1) Further examination of a "possible" wreck shown in lat. 30° 10.8', long. 81° 39.5', and apparently based solely on the fact that the leadsman reported "something hard" on a single sounding. The depth was the same as surrounding depths. Disproved. See Rev. Par. 2 A Ad.Wk.(1939)

(2) Further examination of the shoal charted in lat. 30° 09.5', long. 81° 40.9', and discussed in par. 7b(2) this review.

b. A survey of McCoy Creek and a resurvey of the Ortega River above A.C. L. R.R. Bridge were recommended by the Commanding Officer of the Launch MIKAWE by letter of December 7, 1938 and approved in further instructions issued Dec. 13, 1938. Disproved. See Rev., Par. B Ad.Wk.(1939)

c. In addition to the items already authorized, the following should also be accomplished if practicable:

Determine whether or not the sunken pile in lat. 30° 07.6', long. 81° 40.9' now exists in that position. As shown on the survey, it is in 20 feet of water and is a definite menace to navigation. The existence of this pile should have been reported to the office by the Chief of Party, for a chart correction at the time the survey was made.

Relocated. See Rev., Par. 2C Ad.Wk. (1939)

11. Superseded Old Surveys.

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

H-484 (1855) in part
H-1384a & b (1876-77) in part
H-1542b (1875) in part
T-2027 (1875) in part

12. Reviewed by - J. A. McCormick, January 21, 1939.

Inspected by - E. P. Ellis.

Examined and approved:

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

K. T. Adams
Chief, Division of Charts.

Fred. L. Peacock
Chief, Section of Field Work.

Chief, Division of H. & T.

6296

Additional work 1939
(Contains Wire Drag)

Form 504
Rev. April 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } Sheet No. 56 & 56A

State Florida

LOCALITY

St. Johns River

Vicinity of Green Cove Springs

1939

CHIEF OF PARTY

F. L. Gallen

U. S. GOVERNMENT PRINTING OFFICE 102221

6296
Additional work 1939
(Contains Wire Drag)

Form 537
Ed. Dec. 1930

REG. NO.

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. 56

REGISTER NO. H6296 (Additional Work 1939)
(Contains Wire Drag)

State Florida.

General locality St. Johns River.

Locality Vicinity Green Cove Springs.

Scale 1:5000 Date of survey February, 1939.

Vessel Launch MIKAWE

Chief of Party F. L. Gallen

Surveyed by J. C. Partington

Protracted by H. J. Bozzo

Soundings penciled by H. J Bozzo

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by H.F.Stegman

Verified by H.F.Stegman

Instructions dated October 20, 1938.

Remarks:

U. S. GOVERNMENT PRINTING OFFICE

Form 537
Ed. Dec. 1930

REG. NO.

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. 56A

REGISTER NO. H6296 (Additional Work 1939)
(Contains Wire Drag)

State Florida

General locality St. Johns River

Locality Green Cove Springs

Scale 1:5000 Date of survey April, 1939.

Vessel Launch MIKAWE

Chief of Party F. L. Gallen

Surveyed by E. L. Jones

Protracted by H. J. Bozzo

Soundings penciled by H. J. Bozzo

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by H. F. Stegman

Verified by "

Instructions dated February 21, 1939.

Remarks:

U. S. GOVERNMENT PRINTING OFFICE

DDESCIPTIVE REPORT

To Accompany Hydrographic Sheet No.56 H-6296(1939) Ad.Wk.

ST. JOHNS RIVER, FLORIDA.

INSTRUCTIONS.

Supplemental October 20, 1938, Proj. HT-212.
The hydrography consists of an examination of;

(a) Charted shoal in Lat. 30 09.5, Long. 81 40.9 where a 2½ foot sounding was obtained on the spar of a wreck during the survey made in 1876-77. Area "B"

(b) Awreck shown on the 1934-35 hydrographic survey No. H-6296 in Lat. 30 10.8 Long. 81 39.5 based solely on the leadsman's reporting "something hard" on a single sounding where the depth was the same as the surrounding depths. Area "A"

SURVEY MOTHODS.

The control consisted of 7 triangulation stations supplemented by GAL, ORANGE PARK LT. 38, PARK, AND GREEN located by plane table methods in 1935 by the party of Lieut. H. A. Paton. Additional control was established by Lieut. E. B. Brown by sextant cuts and taped distances. Signals located by sextant are shown by blue circles.

Both areas were dragged with an improvised rope drag consisting of 130 meters of 6 thread line floated by five gallon oil cans. The drag line was weighted at each float by 10-lb sounding leads.

Lieut. (j.g.) J. C. Partington was in charge of the guiding skiff which was powered by a 9H. P. outboard motor. Lieut. (j.g.) E. L. Jones was in charge of the end skiff.

Three point fixes were taken simultaneously at each end of the drag at about three minute intervals. Angles were taken to the end buoy on each launch. The length of the drag from the stern of the drag boats to the end buoy was 32 meters.

The drag was set to an effective depth of 6 feet and the vicinity of the wreck in Lat. 30 10.8, Long. 81 39.5 was dragged for one hour and forty minutes without finding any evidence of the wreck. The drag hung up at position 17-a day. This point was investigated by hand lead and redragged without changing the effective depth. Area "A"

The charted shoal in Lat. 30 09.5, Long. 81 40.9 was dragged with an effective depth of seventeen and twenty feet for three hours and twenty minutes. The drag hung up twice but investigation with hand lead and later redragging indicated the drag was grounded. No evidence of the shoal as charted was found. Area "B"

On c-day 4.9 statute miles of sounding lines were run over the areas investigated. The soundings were taken from a 25foot skiff with a six pound lead.

All positions of the drag on the boat sheet are positions of the skiffs. This improvised drag was used as a means to sweep the area to locate any possible obstruction and, as positions of the end buoys were not plotted in the field, it was impossible to ascertain definitely if splits were made in the drag work. It is felt that sufficient investigation was made however to disprove the existence of these reported obstructions.

GEOGRAPHIC NAMES.

There are no geographic namrs submitted with this report since they have been submitted with hydrographic survey No. H-6296.

STATISTICS.

Square statute miles of rope drag ----------	6.3
Statute miles of sounding ---------- ---------	4.9
Soundings ----------	321
Positions ----------	171

RECOMMENDATIONS.

It is recommended that:

(a) The charted shoal in Lat. 30 09.5, Long. 81 40.9 be removed from the chart and the soundings as shown on this be charted. Area "B"

(b) The wreck in Lat. 30 10.8, Long. 81 39.5 as shown on hydrographic survey No.H-6296 is disproved and should not be charted. Area "A"

NOTE:

The work on this sheet was accomplished by Lieuts.(j.g.) J. C. Partington and E. L. Jones, both of whom were transferred from this party before the smooth copy of this report was prepared. The report is, therefore transmitted without their signatures.

Approved and forwarded:

F. L. Gallen.

F. L. Gallen,
H. & G. Engineer
Chief of Party.

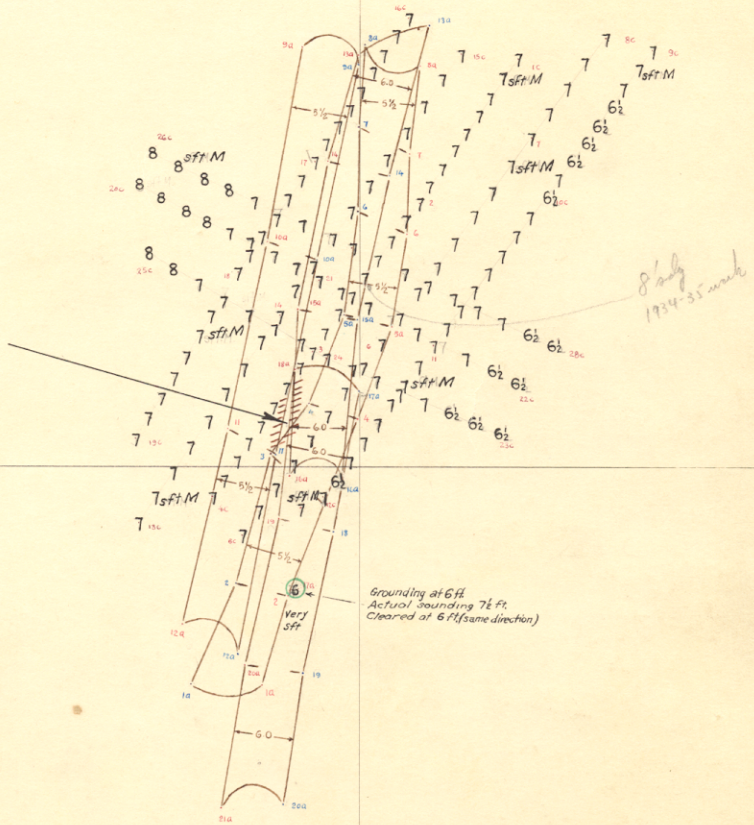
H-6296 (1939) Ad.-Wk.

Smooth Sheet No. 56 was plotted under the immediate supervision of the Chief of Party. The sheet and records have been inspected and are approved.

F. L. Gallen.

F. L. Gallen,
H.&G. Engineer.
Chief of Party.

30° 11' 00"



30° 10' 30"

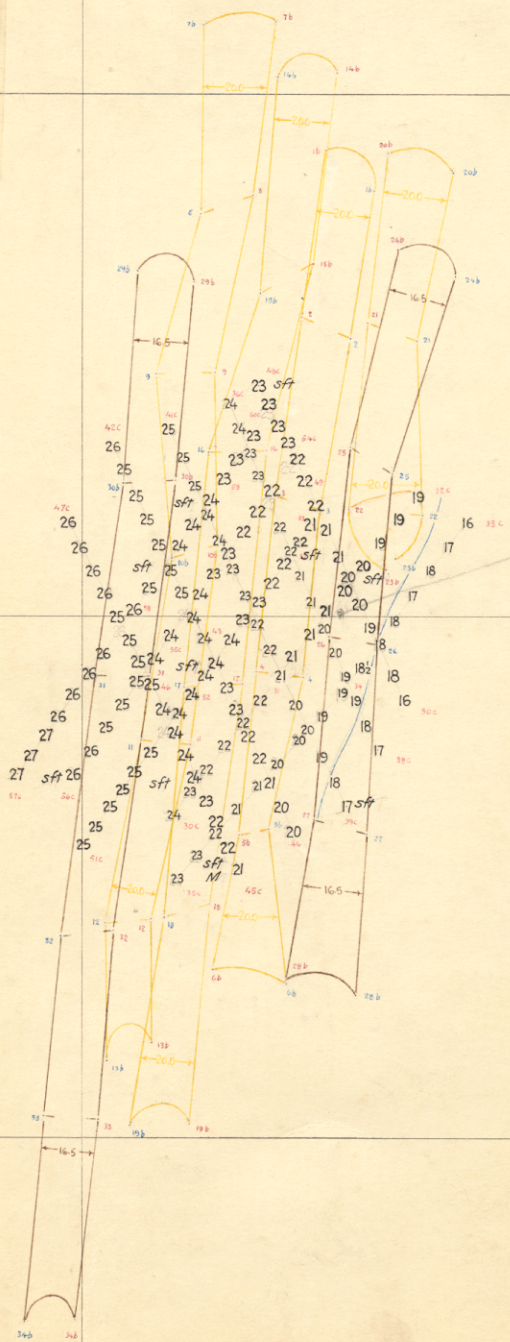
AREA "A"

Scale 1:5,000

81° 39' 45"

81° 39' 15"

NA 1927 Datum



30° 09' 45"

2 3/4 chart from H-13842 (1876-77)

△ MANDARIN PT. BEACON NO. 29 1934

30° 09' 15"

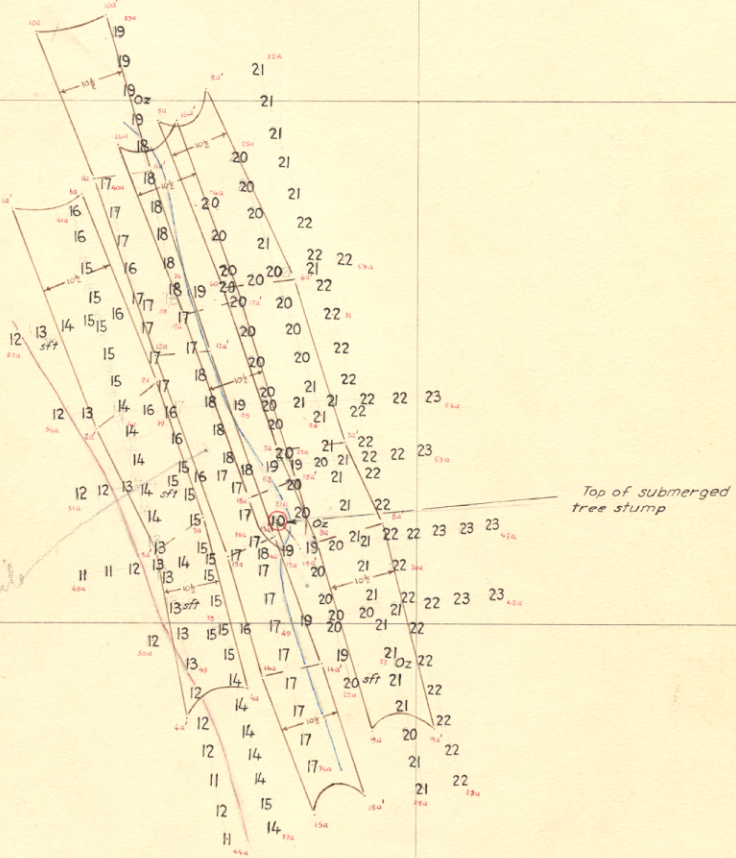
AREA "B"

Scale 1:5,000

81° 41' 00"

81° 40' 30"

NA1927 Datum



30° 07' 45"

30° 07' 15"

81° 41' 00"

81° 40' 30"

AREA "C"

Scale 1:5,000

△ RAGGED PT. BEACON, NO. 40, 1934

NA 1927 Datum

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet # 56A H-6296(1939)Ad.Wk.
Area "C"

INSTRUCTIONS

The hydrography on this sheet is part of project H-212, the supplemental instructions for which were dated Feb. 21, 1939. The hydrography consists of an examination of an obstruction to navigation in latitude 30 07 1078 meters, longitude 81 40 1388 meters, which according to the supplemental instructions is a pile bare 1 foot at mean low water located by Lieut. H. A. Paton in 1935. This obstruction is shown on a photostat of a section of the original sheet as a "sunken log awash at M.L.W."

SURVEY METHODS

Four hydrographic stations were established on the west side of the St. Johns River by taped distance and sextant angle direction from triangulation and marked topographic stations. All control falling on the sheet was recovered except for triangulation stations HUNTINGTON, 1876 and CHINK, 1934 which were not searched for due to lack of time.

The area in the vicinity of the obstruction was first dragged with an improvised rope drag consisting of 130 meters of 6 thread line floated by five gallon oil cans with the line weighted at each float by 10 lb. sounding leads. The effective depth of the drag was 10½ feet.

The guide skiff was a 25 foot sounding skiff powered by a 9½ h.p. outboard motor, while the end launch was a 35 foot launch powered by a 150 h.p. inboard motor. Both boats were run at slow speed, with the launch being thrown out of gear at short intervals.

Three point fixes were taken simultaneously at the end of the drag at 2 to 3 minute intervals. Angles were taken to the end buoy (32 meters from the stern on the drag boats) at each fix.

Sounding lines were finally run over the area investigated. Hand lead soundings were taken from the 25 foot skiff. The soundings were very carefully taken by an experienced leadsman with the skiff running at slow speed since it was apparent to the sounding party that the previous survey showed depths of about one foot greater.

An obstruction was found with the rope drag at fix 21c (about 100 meters southeast of the obstruction found in 1935). This obstruction is apparently a stump about 2½ feet in diameter narrowing to about 8 inches at the top and is standing in an upright position. It is covered by 10½ feet of water at mean low water and is in surrounding depths of 16½ feet. (not plotted)

All positions of the improvised drag shown on the boat sheet are boat positions only. The drag was used as a means to sweep the area to locate any possible obstructions and as positions of the end buoys were not plotted in the field, or the other end launch positions, it was impossible to ascertain definitely whether or not splits were made in the drag work. The position of the pile as mentioned in the supplemental instructions for this work was covered by the drag.

GEOGRAPHIC NAMES

There are no geographic names submitted with this report since the names for the area covered by this sheet have been submitted with hydrographic survey No. H-6296 made in 1934-35 and with recent air photographic survey of the St. Johns River.

STATISTICS.

Statyte miles of soundings ----------	3.4
Soundings ----------	209
Positions ----------	59

RECOMMENDATIONS.

It is recommended that:

φ 30° 07.6
λ 81° 40.8

(a) The original sunken log awash at M. L. W. located on hydrographic sheet H-6296 in 1935 should not be charted.

(b) The snag located on this sheet (fix 21a) be charted.

NOTE.

The work on this sheet was done by Lieut. E. L. Jones, who was transferred from this party before the smooth copy of this report was prepared. The report is, therefore transmitted without his signature.

Approved and forwarded:

F. L. Gallen.

F. L. Gallen,
H. & G. Engineer,
Chief of Party.

Smooth Sheet No. 56A was plotted under the immediate supervision of the Chief of Party. The sheet and Records have been inspected and are approved.

F. L. Gallen

F. L. Gallen,
H. & G. Engineer,
Chief of Party.

WS
HHR

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

August 8, 1940

Division of Hydrography and Topography:

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

Tide Reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 6296

Locality Vicinity of Green Cove Springs, St. Johns River

Chief of Party: F. L. Gallen
Plane of reference is Mean low water reading
4.1 ft. on tide staff at Green Cove Springs
6.8 ft. below B.M. 1

Height of mean high water above plane of reference is 0.8 foot.

Condition of records satisfactory except as noted below:

Acting Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. H6296 **Additional Work 1939**
(Contains Wire Drag)

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

Number of positions on sheet	230
Number of positions checked	11
Number of positions revised	1
Number of soundings recorded	530
Number of soundings revised	2
Number of soundings erroneously spaced	0
Number of signals erroneously plotted or transferred	None

Date: Oct 10, 1940

Verification by H.F. Stegman Time: 27 hours

Review by Harold W. Murray Time: 16³ "

2629

HYDROGRAPHIC SURVEY NO. H6296 (Additional Work 1939)
(Contains Wire Drag)

Smooth Sheet Original

Boat Sheet Two

Records; Sounding 3 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 _____; Last Date _____

Remarks _____

2776

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H-6296 add'l wk (1939)

Verified and Inked by H.F. Stegman Date Oct. 10, 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. None.

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, on original smooth sheet for add'l wk (1939). Topo and hydro signals used in 1939 work were transferred to H-6296 (1935) by the verifier

20. Heights of rocks were checked against range of tide.

21. Rocks transferred from topographic survey have a dotted curve where shown thereon.

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.
Hydro Signals SIG and SEX were not described in the records. SIG is in 4 ft of water and probably a temporary signal. ϕ-30°-11.2 λ-81°-38.5 SEX plots on the end of a dock - ϕ-30°-10.1 λ-81°-38.9

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).

Topographic signals originate on graphic control sheet CS-173-M (1935)

27. Depth curves were satisfactory ~~except as follows~~:

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

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

Soundings taken during additional work of 1939 are 1 to 2 feet shoaler (in general) than those of the original sheet (H-6296 (1935)). Field party believes this is due to erroneous reading of leadline soundings caused by lead sinking in soft mud. See note in vol. 1, p-28 — lead sinks into 3 feet of soft mud.

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

The descriptive report states that the towline length is 32 meters from the stern of launch to end buoy. The records do not state that fixes were taken at the stern. Since the scale of this survey is 1:5,000, an error of about 1mm would be introduced in buoy positions if the fixes were taken amidships. This error would normally be in such a direction as to decrease the drag strip width by about 1mm or about 10%.

31. The protracting was satisfactory except as follows:

On the drag work, launch positions, rather than end buoy positions, were plotted on the boatsheets. Since the towlines were each about half as long as the drag it was difficult for the hydrographers to avoid having splits in the dragged areas by inspecting the boatsheet.

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

33. Notes to reviewer:

Areas covered by the additional wk of H-6296 in 1939 were outlined on H-6296 (1935) in red dashed lines.

Sheets showing the additional work, on a scale of 1:5000 are in the descriptive report.

H. F. Stegman

Oct 10 1940

DIVISION OF CHARTS

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6296 (1939) Ad. Wk.
FIELD NO. 56 and 56A

Florida, St. Johns River, Vicinity of Green Cove Springs
Surveyed in February and April 1939, Scale 1:5,000
Instructions dated October 20, 1938 and February 21, 1939
(MIKAWE)

Soundings:
Hand Lead
Wire Drag

Control:
Three point fixes on shore signals

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1. Purpose of Survey.

The purpose of this survey was to investigate several items noted in the review of the original survey made in 1934-35. The additional work accomplished on a scale of 1:5,000 is attached to the descriptive report and is cross-referenced on the smooth sheet, scale 1:20,000 by appropriate notes.

2. Results of Additional Work.

a. Latitude 30°10.8', long. 81°39.5'. Possible wreck on 1934-35 work.

The leadsman (see original review, par. 10a(1) had reported "something hard" on a single 8 foot sounding obtained in general depths of 8 feet.

The additional investigation consisting of intersecting diagonal sounding lines spaced 50 m. apart and an improvised rope drag set to effective depths of 5-1/2 to 6 feet failed to discover any obstruction. The bottom, however, is described as composed of 3 feet of soft mud. It is still possible that some hard feature exists on the bottom, but the present investigation is sufficient to insure that no dangers to navigation exist. The notation "wreck" shown on the original smooth sheet has been

removed and replaced by the notation "hrd".

While the drag was proceeding southward, a grounding at 6 feet occurred about 250 m. south of the above mentioned 8 foot spot. The drag was reversed and again drawn over the grounding without change in the effective depth. No grounding occurred. Hand lead investigation revealed no depths shoaler than 7-1/2 feet which depth agrees closely with the previous survey depths of 8 feet. The 6 foot grounding has been indicated on the smooth sheet but is not necessarily important from a charting viewpoint.

b. Latitude 30°09.5', Longitude 81°40.9'. 2-3/4 foot sounding on H-1384a (1876-77).

The 2-3/4 foot sounding (see original review, par. 7b(2)) was obtained on the spar of the wreck of the MAPLE LEAF lying in general depths of 20 feet and was marked by a beacon. Both the sounding and the beacon were charted on the first edition (1884) of obsolete Chart 455b but on the second edition of the same year, the sounding and beacon were not shown but the 6 foot curve marking the spot was still charted.

In the 1934-35 work, no specific investigation was made but a sounding line run directly over the supposed wreck showed a depth of 20 feet.

The additional investigation consisted of intersecting diagonal sounding lines and an improvised rope drag set to effective depths of 16-1/2 to 20 feet. This development did not reveal the existence of any obstruction. The vicinity of the wreck was dragged to an effective depth of 16-1/2 feet. The side of the drag strip however, is close to the position of the wreck and a holiday of approximately 20 m. exists between this drag strip and the adjoining strip. This additional work does not conclusively disprove the existence of the wreck but in view of the work accomplished in this area, it seems improbable that the wreck still exists as a menace to navigation. This feature should, therefore, be disregarded.

c. Latitude 30° 07.6', Longitude 81° 40.9'. Sunken pile baring one foot at M. L. W.

Confirmation of the continued existence of this feature was requested in the original review, par.

10c. The feature was originally located by a three point fix but is described in the sounding records as a "sunken log."

The additional investigation consisted of sounding lines spaced about 50 m. apart and an improvised drag set to an effective depth of 10-1/2 feet. A submerged obstruction was found at a depth of 10 feet lying in general depths of 17 to 20 feet. It is described as a tree trunk standing upright in the water (evidence of two volunteer divers). The new position of this obstruction is approximately 90 m. southeast of the old one and furthermore is in an upstream direction.

It is somewhat difficult to accept an upstream movement of 90 m. Other possibilities are that the original obstruction was either erroneously located or else two similar features exist in close proximity. The fact that a three degree change in the right angle of the original fix would bring the old location into close agreement with the new one is considered a pure coincidence because the original position is verified by a note on a passing line. The second alternative seems more probable because the present development does not disprove the existence of an obstruction lying in depths greater than 10-1/2 feet and especially since the feature could have rolled over on the bottom or possibly been carried further downstream.

The obstruction determined in 1939 is considered sufficient for charting purposes on a scale of 1:40,000 or smaller.

3. Note to Compiler.

The hand lead soundings of the 1939 work are often from 1 to 2 feet shoaler than the soundings of the 1934-35 work. This discrepancy is due to the lead line weight on the old work sinking into the soft mud bottom. A penetration of 3 feet is quite common (note in records, Consec. Vol. No. 23, p. 28).

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