

6301

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Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

-Topographic-
Hydrographic } Sheet No. 32

State Florida

LOCALITY
St. Johns River

~~Lat. 29°10'30" to 29°07'30"~~
Volusia to Orange Bluffton

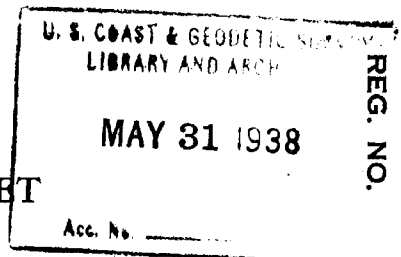
1938

CHIEF OF PARTY
L. L. Graham

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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. 39

REGISTER NO. HG301

State Florida

General locality St. Johns River

Locality Volusia to Orange Bluffton
~~Lat. 29° 10' 30" to 29° 07' 30"~~

Scale 1:5,000 Date of survey Jan. 20 - Feb. 10, 1936

Vessel MIKAWA

Chief of Party L. D. Graham

Surveyed by R. H. Carstens

Protracted by E. F. Hicks

Soundings penciled by E. F. Hicks

Soundings in ~~fathoms~~ feet

Plane of reference M. S. L.

Subdivision of wire dragged areas by _____

Inked by Leonard A. McGann

Verified by Leonard A. McGann

Instructions dated _____ November 9, 1936

Remarks: _____

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet 39.

INSTRUCTIONS - November 9, 1936

Project HT-212

LIMITS

The sheet extends from about $\frac{1}{2}$ mile downstream from the bridge at Astor to Orange Bluff or Bluffton. ✓

CONTROL

The primary control on this sheet consisted of one traverse station, station Dog, triangulation station Dexters Lake Beacon No. 104, 1935 and numerous signals spotted from air photographs and radially plotted on the map drawing. Other signals were located from these spotted signals by sextant cuts and telemeter rod or sextometer readings. See report for sheet 38 for description of sextometer. The signals taken from the air photographs were located by a party under H. A. Paton and are shown in green. A list of their geographic positions accompanies this report. ✓ The signals located by sextant cuts are shown in blue. The shoreline was transferred from air photographs by H. A. Paton.

SURVEY METHODS

Sounding lines were run following the general trend of the shoreline. Where the channel line deviated from the trend of the shoreline the sounding lines were run following the channel line and additional lines were run to develop the remaining area. Cross lines were run on ranges. ✓ Fixes on sounding lines were obtained by sextant angles on signals established ashore. Soundings were taken with the leadline.

DANGERS

No dangers to navigation lie on this sheet. In Lat. $29^{\circ}07.95'$, Long. $81^{\circ}30.55'$ the northeast bank should be favored for some distance above beacon 11 in order to get the best water. ✓

CHANNELS

Only one main channel runs down this stretch of the river. It is well marked by beacons and no trouble will be experienced in navigating through it. The least depth in the channel is $9\frac{1}{2}$ feet, occurring in Lat. $29^{\circ}07.95'$, Long. $81^{\circ}30.55'$. In order to carry this depth the northeast bank, for a distance of about 250 meters above beacon 11, should be followed at a distance of about 75 meters before changing course for beacon 12. ✓

GEOGRAPHIC NAMES ✓

For new geographic names see the report submitted by the party under H. A. Paton covering the air photographic survey of this region.

25-

COMPARISON WITH PREVIOUS SURVEYS

The only previous survey available was that shown on chart 509, last print 7/11/35. The two 9 foot soundings, one 0.1 mile north of Lungren Island and the other 0.75 mile south of Lungren Island, agree very well with the least depth found in the present survey. A number of the deeper soundings as shown on the chart do not agree with the depths found in the last survey but as they are of no importance to navigation no specific mention will be made of them.

DISCREPANCIES

There were no discrepancies on this sheet.

Submitted by,

Raymond H. Carstens
Raymond H. Carstens
Deck Officer, C. & G.S.

Approved and Forwarded:

F. L. Gallen

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

PHOTOGRAPHIC SIGNALS ON SHEET NO. 39

Station No.	Hydro name	Latitude	Longitude
51	Jay	29° 07' 458 m.	81° 30' 727 m.
49	Boy	29° 07' 923 m.	81° 30' 480 m.
48	Pile	29° 07' 1257 m.	81° 30' 617 m.
47	End	29° 07' 1773 m.	81° 30' 822 m. ✓
46	Gab	29° 08' 103 m.	81° 30' 1361 m.
223	Lun	29° 08' 1122 m.	81° 30' 1503 m.
20	Till	29° 08' 1600 m.	81° 31' 173 m.
19	Cat	29° 09' 23 m.	81° 31' 287 m.
18	Fog	29° 09' 283 m.	81° 31' 477 m.
227	Pen	29° 09' 987 m.	81° 31' 812 m.
226	Nor	29° 09' 1157 m.	81° 31' 815 m.
225	How	29° 09' 1418 m.	81° 31' 777 m.
224	Ware	29° 09' 1845 m.	81° 31' 561 m.
238	Saw.	29° 10' 244 m.	81° 31' 706 m.
4	Oak	29° 10' 414 m.	81° 31' 1446 m.
5	Pig	29° 10' 742 m.	81° 31' 1466 m.
7	Tall	29° 10' 1091 m.	81° 31' 1530 m.

HYDROGRAPHIC SURVEY NO. H6301

Smooth Sheet Yes

Boat Shoet Yes

Records; Sounding 2 Vols., Wire Drag Vols., Bomb Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Vol.#1

Landmarks for Charts (Form 567) None

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) None

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

Hydrography: Total Days 7 ; Last Date Feb. 10, 1938

Remarks _____

LIST OF STATISTICS

Date	Day Letter	Positions	Soundings	Statute Miles
Jan. 20	a	33	230	3.8
21	b	71	478	7.9
24	c	7	29	0.8
25	d	6	50	0.7
26	e	153	884	13.5
28	f	31	204	3.5
Feb. 10	g	<u>23</u>	<u>168</u>	<u>2.7</u>
		324	2043	32.9

Smooth sheet No. 39 was plotted under the immediate supervision
of the Chief of Party. The sheet and accompanying records have been
inspected and are approved. ✓

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

Verifiers Report on H-6301 (1938)

The records conform to the requirements of the Hydrographic Manual instructions.

The air photo stations (shown in green) originate with T-5682 (1935-'38) and T-5683 (1935-'38). The shoreline of T-5682 and T-5683 was enlarged by projector to scale of H-6301, then transferred to H-6301.

The agreement of soundings at crossings is excellent.

There is a rock symbol shown on the boat sheet at latitude $29^{\circ} 08' 47''$ longitude $81^{\circ} 30' 95''$. This position corresponds with a note in sounding Vol. #2, page 17, between positions 15 and 16 "f" day. The hydrographer in charge of this work when interviewed in this office stated that there are no rocks along the course of this river within the limits of this sheet. He further stated that the word "bare" in this note should be close to shore and unimportant. ignore. "bears" instead.

The adjoining surveys when completed will be joined to the work of this sheet.

Leonard A. McGann
November 18, 1938.

Field Records Section (Charts)

H6301

HYDROGRAPHIC SHEET NO.

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

Number of positions on sheet ³²⁴
Number of positions checked ²⁰
Number of positions revised ²
Number of soundings recorded ²⁰⁴³
Number of soundings revised ²
Number of signals erroneously plotted or transferred [—]

Date: *November 18, 1938*
Verification by *Leonard A. McSann* Time: *27 hours*
Review by *J. A. Mc Cormick, Nov. 21, 1938* Time: *5 hrs.*

Remarks

Decisions

	Remarks	Decisions
1		see T-5682
2		see T-5682
3		USGB decision
4		see T-5682
5	D.R. in which these names are discussed not in office to date Accepted as being charted names and also used on H-6301 by field party	see T5683
6		
7		see T-5682
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TIDE NOTE FOR HYDROGRAPHIC SHEET

July 28, 1938.

Division of Hydrography and Topography:

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

Plane of reference

~~This reference was~~ approved in
2 volumes of sounding records for


HYDROGRAPHIC SHEET 6301

Locality Volusa to Orange Point, St. Johns River

Chief of Party: L. D. Graham in 1938
Plane of reference is mean low water reading
3.0 ft. on tide staff at Astor
6.0 ft. below B.M. R 58

There is no periodic tide in this area. The plane of reference is the average water level during the period of the lower river stages and corresponds to sea-level datum of the Level Net.

Condition of records satisfactory except as noted below:


Acting Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES
 Survey No. **H6301**

Name on Survey	On Chart No. 509		On previous survey		On U. S. quadrangle Maps		From local information		On local Maps		P. O. Guide or Map		Rand McNally Atlas		U. S. Light List	
	A	B	C	D	E	F	G	H	K							
✓ <u>Volusia</u>	✓															1
✓ <u>Astor</u>	✓															2
✓ <u>St. Johns River</u>	✓															3
✓ <u>Manhattan</u>	✓															4
✓ <u>Orange Bluffton</u>	orange bluff															5
✓ <u>Alco Dock</u>	✓															6
✓ <u>Lungren Island</u>	✓															7
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Names underlined in red approved
 by JVE on 6/19/38

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6301 (1938) FIELD NO. 39.

Volusia to Orange Bluff, St. Johns River, Florida.

Surveyed in Jan.-Feb. 1938, Scale 1:5000

Instructions dated Nov. 9, 1936 (MIKAWA)

Hand Lead Soundings.

3 Point fixes on shore signals.

Chief of Party - L.D. Graham.

Surveyed by - R.H. Carstens.

Protracted by - E. F. Hicks.

Soundings plotted by - E. F. Hicks.

Verified and inked by - L. A. McGann.

1. Condition of Records.

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

The Descriptive Report is complete and satisfactorily covers all items of importance.

2. Compliance with Instructions for the Project.

The survey satisfies the instructions for the project.

3. Shoreline and Signals.

- a. Shoreline originates with topographic maps T-5682 (1935) and T-5683 (1935). Signals inked on the smooth sheet in green were spotted from topographic features on these maps.
- b. Topographic signals originate with correction sheet CS 139M.
- c. Hydrographic signals originate with the sounding records of the present survey.

4. Sounding Line Crossings.

Sounding line crossings are satisfactory.

5. Depth Curves.

The usual depth curves may be satisfactorily drawn.

6. Junctions with Contemporary Surveys.

The junctions with H-6316 (1938) on the north and H-6302 (1938) on the south will be considered in the reviews of those surveys.

7. Comparison with Prior Surveys.

T-2027 (1875) Scale 1:80,000.

This reconnaissance survey contains a single line of soundings down the middle of the river. It has already been superseded on the charts by later surveys of the U. S. Engineers' and need not be considered in future charting.

8. Comparison with Chart 509 (New Print dated March 14, 1938)

a. Hydrography.

Within the area of the survey the chart is based entirely on U. S. Engineers' B. P. 21060 and 21061 of 1925-26. The present survey because of its much greater development and its later information should supersede the Engineers' surveys in future charting of the common area.

b. Controlling Depths.

A general note on the chart shows a controlling depth in St. Johns River of 8 feet as of Nov. 1937. The present survey within the area covered shows a controlling depth of $9\frac{1}{2}$ feet.

c. Aids to Navigation.

The charted positions of navigational aids in the area are in substantial agreement with those on the survey.

9. Field Plotting.

The field plotting was satisfactory.

10. Additional Field Work Recommended.

No additional work is required.

11. Superseded Old Surveys.

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

T-2027 (1875) in part (Hydrography only).

MEMORANDUM IMMEDIATE ATTENTION

SURVEY }
 DESCRIPTIVE REPORT } No. H-6301
~~PHOTOSTAT OF~~ } ~~XXXX~~

{ received May 28, 1938
 { registered June 3, 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			
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25	✓		Page 1
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RETURN TO

82	T. B. Reed
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✓ JBR

12. Reviewed by J. A. McCormick, November 21, 1938.

Inspected by Harold W. Murray,

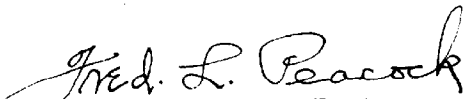
Examined and approved:



Thos. B. Reed
Chief, Section of Field Records



Chief, Division of Charts



Chief, Section of Field Work



Chief, Division of Hydrography
and Topography.

Applied to Chart # 687. December 1939. L.A. M.
