6130 (1935-7)

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
NOV 26 1935

6130 (1935-7)

Form 504
Rev. Dec. 1933

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

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } *Sheet No.* 29

State FLORIDA

LOCALITY

ST. JOHNS RIVER

HORSE SHOE POINT TO TROUT CREEK

1935

CHIEF OF PARTY

Hubert A. Paton

U.S. GOVERNMENT PRINTING OFFICE: 1934

Form 537
11—5812

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. 29

REGISTER NO. 6130

State Florida

General locality St. Johns River

Locality ~~Horse~~ Shoe Point to Trout Creek

Scale 1:5000 Date of survey July 23 to Aug. 8, 1935. Feb. 2 & Feb. 24, 1937 192

Vessel Party No. 26 and Mikawe

Chief of Party H. A. Paton and L. D. Graham

Surveyed by Various Officers (O.E. Fang)

Protracted by H. A. Paton, W. R. Jackson, L. S. Straw, G. C. Mc Glasson

Soundings penciled by H. A. Paton, W. R. Jackson, L. S. Straw, G. C. Mc Glasson

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by G. Risegari, L. S. Straw, G. C. Mc Glasson

Verified by G. Risegari, L. S. Straw, G. C. Mc Glasson

Instructions dated Nov. 17 and Dec. 5, 1933; Nov. 9, 1936 192

Remarks:

GPO

July 3, 1934

DESCRIPTIVE REPORT

to accompany

SHEET NO. 29

ST. JOHNS RIVER, FLORIDA

HORSE SHOE POINT TO TROUT CREEK

PARTY NO. 26 - PROJECT NO. HT 168

November 21, 1935

INSTRUCTIONS:

The work on this sheet was done in accordance with instruction dated November 17 and December 5, 1933 and supplemental instructions dated August 23, 1934.

LIMITS:

This sheet consists of a survey of the main channel of the St. Johns River from Horse Shoe Point to the south entrance of Trout Creek. The western half of Murphys Creek is included on this sheet. Field work was discontinued before Barrentine Creek, Trout Creek and the channels between the Seven Sisters Islands could be surveyed.

JUNCTIONS:

On the north this sheet joins Sheet No. 28, and on the south it joins Sheet No. 30. H-6231 (1935-7) The overlap and agreement was satisfactory in both cases.

DATUM:

North American, 1927, Datum was used on this sheet. The triangulation stations were plotted from the field computations of Lieut. Kenneth G. Crosby. The graphic control sheets were on the same datum.

SIGNALS:

All signals between the triangulation stations were located by plane table methods, using alumimum mounted sheets. See G. C. Sheets PP, QQ, and RR for the positions of these signals. T-6391 (1935) T-6392 (1935) T-6393 (1935)

SHORELINE:

For a description of the general character of the shoreline see the reports of the G. C. Sheets. Photo-topographic sheets are being compiled for this area and the shore line will be transferred from them to the smooth sheet when available.

On the boat sheet, the shoreline in black ink was transferred from the G. C. Sheets where it had been sketched by the topographers. The portion in pencil came from the old surveys of the U. S. Engineers. The shoreline in red ink was transferred from a preliminary tracing of the photographs but is approximate only, there being insufficient time available to make a radial plot or to correct for errors in scale and tilt. By means of this method it was possible to complete the survey of Murphys Creek with little delay or additional cost.

SURVEY METHODS:

All soundings were taken with the hand lead line, using an eight pound lead. Lines were run parallel to the banks and were spaced 50 meters apart or less. Positions were located by means of the three point fix method for all the sheet except in Murphys Creek, where they were spotted on the Boat Sheet in reference to the shore. The plans were to run cross lines every quarter mile but work was discontinued before these were completed.

CHANNELS:

The least depth in the main channel through this section of the river is nine feet which is found at two places-near Beacon No. 82 and about 5/8 of a mile farther south. Vessels drawing eight feet will find navigation in this part of the river quite difficult. Two or three additional beacons should be established.

Directions:- From a point about 100 yards off the southeast bank of the river, with Horse Shoe Point bearing northwest, haul to the north shore and follow it around the curve at a distance of about 100 yards, passing about 100 yards north of Lighted Beacon No. 59. Continue until about 300 yards west of a fish house in midstream and then haul to the southward. There is an old wreck of a river boat near the shore 430 yards southwestward of Beacon No. 59 and to the eastward of a small wooded island. Keep 100 yards to the west of this island and the same distance off the south and east shore, passing lighted Beacon No. 80A, 100 yards to starboard. This beacon stands on the southeast side of a shoal in midstream which has a depth on one foot at mean low water. There is a small lumber mill inside the mouth of Murphys Creek on the west bank.

When about 200 yards beyond Beacon No. 80 A, and about half way to the mouth of Murphys Creek, haul to the north shore again and follow it at a distance of about 100 yards to the draw of the railroad bridge at Buffalo Bluff. This bridge has a swing type draw, through which the horizontal clearance in the north opening is 95 feet (29 m) and the vertical clearance is 8.3 feet above mean low water when closed.

After passing through the draw follow in midstream for one quarter of a mile and then favor the east bank until due west

(sta "To")

of a small wharf on the east shore. Haul sharply to the southward and head for Beacon No. 82, leaving the broad opening to the eastward. The best water is found 25 yards west of this beacon. Follow the western shore at a distance of about 100 yards for about ¼ mile and then favor the eastern shore for another ¼ mile, keeping 100 yards off the bank. The river bends to the southwest here and a broad flat shoal extends across the entire width of the stream. The best water, 9 feet, will be found exactly in mid stream, with 8 foot depths close by on each side.

When the north end of the north one of the two islands on the west side of the river comes into view, cross over toward the south end of this island and follow close to a row of pilings. Continue on past Stokes Island, keeping about 100 yards to the east of it and set a course to pass 50 yards west of lighted Beacon No. 61. (When abeam) Haul slowly out toward midstream and continue until opposite the south end of Trout Island.

There is an alternate channel near Beacon No. 80 A which is used frequently by the river steamers. It follows closely to the northwest shore passing off the end of a fish trap. A least depth of 12 feet will be found in this channel.

The controlling depth through Murphys Creek is seven feet which is found on Sheet No. 28. Care must be exercised near the western entrance of the creek which is shown on this sheet. A large shoal with a depth of 5 feet makes out from the west bank for more than 3/4 of the width of the creek. Vessels should enter on a due south course, passing 50 yards off the east bank and then follow midchannel courses.

The channel into Stokes Landing has a depth of 7 feet on the north side of the island. Follow the row of pilings along the north side of the channel at a distance of 30 yards. The channel on the west side of the island is used frequently but there is a four foot shoal in midstream west of the small boat landing near the south end of the island. Keep close to the east bank when coming out into the river until this landing is abeam and then steer south by west until deeper water is reached.

CURRENTS:

The following current observations were taken while working on this sheet :

Date	Location	Wind Dir.	Wind Force	Current Dir.	Current Force
7/30/35	Railroad bridge near north shore	SW	1	E	0.30 knots
"	center of span	"	"	E	0.45
8/2/35	Mouth of Murphys Cr.	N	2	SE	0.36
5	SW of Bn. No. 80 A	Calm		E	0.27
6	NE of Stokes I.	NE	2	N	0.21
8	Beacon No. 82	NNE	1	N	0.32

These observations were taken during the noon hours of the days indicated and were obtained by the use of a drift pole.

DANGERS:

Lat. 29°35½'
Long. 81°40'

A long shoal extends from the island near Signal COD eastward to a point opposite Horse Shoe Point. Another shoal extends 200 yards north-north-east of the small round island west of Beacon No. 82. The characteristics of this beacon should be changed to an odd numberal, or should be moved farther west across the channel.

A four foot spot is found about 75 meters off the west bank between Signals GO and EMA. Lat 29°34'30" Long 81°41' Several additional shoals have been mentioned under the subject of CHANNELS.

There are numerous fish traps, pilings, ruins of old wharfs, etc., near the shores and on the shoals, which are dangerous to all boats.

COMPARISON WITH PREVIOUS SURVEYS:

It is believed the present charts were compiled from reconnaissance surveys of the U. S. Engineers and they do not show sufficient details of the present conditions. A comparison with the present survey show a great many differences but these are probably not changes in the river but details that were missed on the previous work.

GEOGRAPHIC NAMES:

Most of the names shown on this sheet have been discussed on the reports of the G. C. Sheets for this area.

The largest one of the Seven Sisters Islands is known as Trout Island by many of the local inhabitants and it is recommended that this name be adopted for use on our charts.

For the sake of clarity, the present term - Horse Shoe- should be changed to Horse Shoe Point. This term is not in common use but it has been on the charts for some time and there is no other name applied to the point.

GULF ATLANTIC CANAL:

At present, a canal is under construction across the state of Florida. It will enter the river from the northeast some where in the vicinity of Signal HE, continue on across the neck south of Buffalo Bluff and will finally leave the river in the vicinity of Station Oke. The plans are to dig a channel to a depth of 30 feet below mean sea level for a width of 400 feet. The sides will have a slope of 1 to 3.

MISCELLANEOUS:

Lists of Aids to Navigation and Landmarks will be found with the reports of the G. C. Sheets. A discussion about the water hyacinth is given in the report of Sheet No. 27.

STATISTICS:

Total number of positions	1261
Total number of soundings	6591
Statute miles of sounding lines	78
Area in square statute miles	1.5

Respectfully submitted,

Hubert A. Paton

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

APPROVAL SHEET

to accompany

SHEET NO. 29

This sheet and records have been examined and are approved.

Hubert A. Paton

Hubert A. Paton,
Chief of Party

HYDROGRAPHIC SURVEY NO. H6130

Smooth Sheet yes

Boat Sheet yes

Sounding Records 4 Vols.

Descriptive Report yes

Title Sheet yes

List of Signals Vol 1

Landmarks for Charts (Form 567) yes

Statistics yes

Approved by Chief of Party yes

Recoverable Station Cards (Form 524) none

Special Chart for Lighthouse Service (Circular Nov. 30, 1933) no

Remarks

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. H6130

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

Number of positions on sheet	1261
Number of positions checked	32
Number of positions revised	3
Number of soundings recorded	6591
Number of soundings revised	12
Number of signals erroneously plotted or transferred	none

Date:

Verification by G. Pisegna Nov. 16/36 Time: 64½ hrs.

Review by R.J. Christman Time: 12 hrs

	Remarks	Decisions
1		Horseshoe Pt (one word)
2		USGB decision
3		
4		Location ?
5		Re-submitted to USGB
6		
7		see H-6131
8		
9		
10		See H-6131
11		" "
12		Not appd for Hydro Sh. Not shown
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

M 234

GEOGRAPHIC NAMES

Survey No. H6130

Name on Survey	A: On Chart No. 508	B: On previous survey No. T-2027	C: On U. S. quadrangle Maps	D: From local information	E: On local Maps	F: P. O. Guide or Map	G: Rand McNally Atlas	H: U. S. Light List	K: USCP	
Horse Shoe Pt.	Horse shoe							Horse Shoe		1
Murphys Island	✓ appd		✓					✓		2
Murphys Creek	✓ Murphy		✓ Murphy						✓ Murphys	3
Chalfinchs Landing										4
Buffalo Bluff	~~Bare~~ ✓	Buckalews Bluff	✓ Not same Location					✓	✓	5
~~Barrentine Creek~~	(OK	see	T-	5195)						6
Seven Sisters Islands	✓ appd		✓							7
Stokes Landing	✓		✓							8
Stokes Island	✓		✓							9
Trout Creek	✓ appd									10
Trout Island	✓ appd									11
Rose Creek		✓						✓		12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names underlined in red approved by GHE on 4/5/37

M 234

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

No. H 6130

NOAA

received Oct. 5, 1936
registered Oct. 27, 1936
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		AHP	D. R. page 1
24			
✓ 25			D. R. pages 2 & 3 & 4
26			
✓ 30			D R page 3
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	C. K. Greek

Q.Q.C.

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

April 1, 1937.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 6130 Additional Work.

Locality Horse Shoe Point to Trout Creek, St. Johns River, Florida.

Chief of Party: L. D. Graham in 1937.
Plane of reference is mean low water reading
2.6 ft. on tide staff at Buffalo Bluff
10.7 ft. below B.M. 1

Height of mean high water above plane of reference is 1.0 foot.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

220

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

October 28, 1936.

Division of Hydrography and Topography:

✓ Division of Charts: Att: Mr. E. P. Ellis

Plane of Reference
~~Tide Reducers are~~ approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 6130

Locality St. Johns River, Fla.-Horse Shoe Pt. to Trout Creek.

Chief of Party: H. A. Paton in 1935
Plane of reference is mean low water reading
2.9 ft. on tide staff at Buffalo Bluff (Sig. Bull)
10.7 ft. below B.M. 1

Height of mean high water above plane of reference is 1.0 ft.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Report on H-6130 (1935)

1. The records are neat and legible and conform to the requirements of the Hyd. Man. except as follows:

a. Failure to note in the records, stakes, piles, beacons and a wreck when passing them by on sounding lines!

Ex; ⊙ ALA (Stake), ⊙ PIL (pile), Bn. 61 (BEN), wreck in approx. Lat. 29°35.7' long. 81°40'. (Hyd. Man. p. 8, par. 756)

b. In Vol. No. 4, "hrd" was recorded "hd".

c. The long and tortuous leaders running through the hydrography were unnecessary and could have been avoided.

d. The 16.5 ft. sounding between positions 109 and 110 was erroneously reduced to 22.5 feet. The recorded sounding was 16.5 feet at zero tide.

e. The course lines, particularly in Murphys Creek, have been too deeply imbedded on the sheet and is not considered good practice.

2. The shoreline originates with the air photo compilation which has not yet been received in the office. The topographic signals are from Graphic Control sheets, T-6391a (1935), T-6392 (1935) T-6393 (1935).

Evidence of conflicting delineation exist in the shoreline

between the smooth sheet and small sections of the shoreline shown on the graphic control sheets. No changes were made pending the arrival of the photo compilation sheets.

3. The sounding line crossings are very good where shown.

4. The usual depth curves may be satisfactorily drawn, including the portions of the 6 foot curve. The low water line, however, is practically coincident with the shoreline and therefore was omitted.

5. The junction with Field Sheet No. 23 on the north will be covered in the report for that sheet.
The junction with H-6131 (1935) on the south will be discussed mentioned in the report for that sheet.

6. The field protracting and plotting were well done and only in a few places a revision of minor importance was made in the plotting.

Respectfully submitted,
L. Pinegar.
Nov. 16, 1936.

SUPPLEMENTAL REPORT TO ATTACH TO DESCRIPTIVE REPORT ACCOMPANYING

SHEET No. 29 - ST. JOHNS RIVER, FLORIDA

HORSE SHOE POINT TO TROUT CREEK

Launch MIKAWE - Project 212.

This supplemental report is to be attached to the descriptive report on file in the Washington Office. The original report is from Party No. 26, Project No. HT-168, Lieutenant H. A. Paton, Chief of Party. The report is dated November 21, 1935. The Washington Office file No. is 6130.

Additional work was executed in February 1937 as listed in the Instructions for field work to the Commanding Officer Launch MIKAWE dated November 9, 1936.

The bend around the island at Latitude 29° 34.4', Longitude 81° 41.6' was surveyed and found to be very shoal. It was impossible to run sounding lines all the way through this loop with a hydro skiff drawing only 1½ feet. The bottom is soft mud and a fine stem grass grows almost to the surface all the way around this loop.

This statement not clear. Area in question is adequately developed.

Split lines were run as indicated on the boat sheet to develop the areas shown.

The shoal at the northern end of the sheet was developed with several split lines.

The unsurveyed navigable waterways around the Seven Sisters Islands were developed. Generally, in areas of 2 feet or less, a fine stem grass grows nearly to the surface of the water. This grass fouls propellers on small boats and makes navigation difficult except in water 3 feet or more in depth. Numerous places were filled with water hyacinth and therefor impossible to sound. These places are marked on the boat sheet. It was impossible to enter either end of Trout Creek because the entire creek is filled with water hyacinth, which apparently remains the year round.

Submitted by,

George A. Lovesee

George W. Lovesee
Jr. H. & G. Engineer

Approved by,

L. D. Graham

L. D. Graham
H. & G. Engineer
Chief of Party

ADDITIONAL STATISTICS - SHEET No. 29.

Date	Day letter	Statute miles	Soundings	Positions
Feb. 4	A	4.0	264	70
5	B	1.0	74	32
8	C	5.0	344	83
18	D	7.0	372	63
19	E	13.5	1041	184
24	F	0.5	62	15
		31.0	2157	447

Applied to Chart Comp. 687 H.E.W. Dec 13, 1939.

6130 Additional work (1937)

6130 Additional work (1937)

Form 504
Rev. Dec. 1933

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

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } *Sheet No.* 29

State Florida

LOCALITY

St. Johns River

Horse Shoe Point to Trout Creek

1937

CHIEF OF PARTY

L. D. Graham

U.S. GOVERNMENT PRINTING OFFICE: 1934

The boat sheet and new records have been examined and are approved.

L. D. Graham
H. & G. Engineer
Chief of Party

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. H6130 ~~(Add. Wk. 1937)~~ (Continuation 1937)

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

Number of positions on sheet	447
Number of positions checked	447
Number of positions revised	1
Number of soundings recorded	2157
Number of soundings revised	0
Number of signals erroneously plotted or transferred	0

Date: 23 Dec., 1937

Verification by S.C. McGlasson, W.R. Jackson, L.S. Strow Time: S.C. McGlasson 7 days 5 hrs. W.R. Jackson 3 days 5 hrs. L.S. Strow 2 days 2 hrs.

Review by J.A. McConnell Jan. 13, 1938 Time: 15 hrs.

HYDROGRAPHIC SURVEY NO. H-6130 ~~(Addl. Ms. 1937)~~ (Continuation) 1937

Smooth Sheet **Original One**

Boat Sheet **Original One**

Sounding Records **2** Vols. _____

Descriptive Report **Yes**

Title Sheet **Yes (Made in the Office)**

List of Signals **Vol# 5**

Landmarks for Charts (Form 567) **Yes**

Statistics **Yes**

Approved by Chief of Party **Yes**

Recoverable Station Cards (Form 524) **None**

Special Chart for Lighthouse Service (Circular Nov. 30,1933) **No**

Remarks HYDROGRAPHY

6

Total Days .....

Feb. 24, 1937

Last Date .....

23 December, 1937.

Report on H 6130
Additional Work

The work on this sheet consists of transferring signals, plotting positions, checking signals, penciling soundings, and inking and verifying soundings. The work in red dog letters was done in 1935 while the work in blue dog letter was done in 1937, the additional work.

The additional work fits very nicely with the 1935 work and no amount of ~~trouble~~ trouble was encountered on the sheet. It was necessary to plot the additional topographic and hydrographic signals on the smooth sheet and they were checked according to Coast Survey standards. The location of the hydrographic signals will be found in the sounding

records and a list is shown on the index page. Signals "Bay" and "Dmo" were plotted from the boat sheet and marked on the smooth sheet as hydrographic ✓ signals. They were shown as topographic signals on the boat sheet but were not shown on the topographic control sheet.

Lat 29° 35.1', Long 81° 40.8'. It appears that the hydrographic signal "As" is an entirely different signal ✓ from the topographic signal. The hydrographic ~~signal~~ location was used and it was marked "As 2".

In lat. 29° 35.7, long. 81° 40.9'. The actual location of the soundings in the draw of the bridge indicate that the 30 ft depth runs up to the center span abutment, it is therefore suggested that the 30 ft. curve be omitted along the center span (draw) abutment. 30-foot curve shown.

In lat. 29° 34' 33", long. 81° 41' 28". The fish trap as shown on the 1935 work no longer exists as indicated by the note in records of 1937 work. It never there are Noted on Smooth sheet.

new fish trap stake shown on the 1937 work approximately 100 metres south west of the old fish trap.

Lat. 25°33'30"; Long. 81°42.2'

The fish trap as shown on the 1935 work no longer exists as indicated by the note in the records of 1937 work.

Noted on smooth sheet.

Respectfully submitted,

A.C. McGlasson

W.R. Jackson

L.S. Strow.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6130 (1935-37) FIELD NO. 29

Horseshoe Point to Trout Creek, St. Johns River, Florida
Surveyed in July - Aug. 1935; Feb. 1937, Scale 1:5,000
Instructions dated Nov. 17 and Dec. 5, 1933 (H. A. Paton)
Nov. 9, 1936 (MIKAWE)
Hand Lead Soundings. 3 Point fixes on shore signals.

Chief of Party - H. A. Paton and L. D. Graham.
Surveyed by - Various officers.
Protracted by - H. A. Paton, W. R. Jackson,
L. S. Straw, G. C. McGlasson.
Soundings plotted by - H. A. Paton, W. R. Jackson,
L. S. Straw, G. C. McGlasson.
Verified and inked by - G. Risegari, L. S. Straw, 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. One recorder used the abbreviation "Hd" instead of "hrd" for hard sand bottom. (Vol. 4, sounding records).

b. Descriptive notes should have been entered in the"Remarks" column of the records when sounding lines passed close to stakes, piles, beacons, etc. (Par. 75b).

c. Too much pressure was used on the pencil in drawing course lines on some parts of the sheet. This is particularly noticeable in Murphy Creek.

d. Dual names, one inked in red and one in blue, are shown for most of the signals originating with T-6393 (1935-37). The names in red are those shown on T-6393 (1935-37) and those in blue, the names used on the boat sheet. No changes have been made in the office.

e. Descriptive notes were omitted in the sounding records and on the boat sheet for hydrographic signals located on the 1937 portion of the present survey and falling outside the high water line. In most cases these hydrographic signals are within 50 meters of topographic signals, also outside high water line and established on fish stakes, used in the 1935 portion of the work. Presumably the 1935 signals were gone in 1937 but there is nothing in the records to indicate that such was the case. It is assumed that the 1937 signals were also established on fish stakes but the stakes being of a temporary nature are not considered as chartable features.

f. The wooded island, 50 meters in diameter in lat. 29° 35.69' long. 81° 39.95' was not shown on the smooth sheet. It was added in the office from T-5195 (1935).

g. Signals "Imo" and "Guy" in lat. 29° 35.10', long. 81° 40.20' and lat. 29° 34.88', long. 81° 40.74' respectively, were shown as topographic signals but they do not appear on the current graphic control survey nor are there any hydrographic locations recorded for them. (See par. 3d, this review for further discussion).

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

2. Compliance with Instructions for the Project.

The plan and character of development comply with the instructions for the project, except in the matter of control for the greater portion of Murphy Creek, which consisted primarily of spotting the boat's position on the boat sheet in relation to shore features and in estimating the distance offshore. The inadequacy in general of such type of surveying in wider waterways is discussed in paragraph 2 of the review of H-6126 for this same project. In the present instance, however, the method employed was undoubtedly justified in viewof the excessive cost necessary to locate hydrographic signals along a non-fast shore line of the character which borders Murphy Creek. In such cases though, the hydrographic party should put up a sufficient number of small signals on identifiable features of the shore line and record in the sounding volumes sufficient references to these signals to establish beyond question that the several sounding lines through the waterway are satisfactorily coordinated.

3. Shoreline and Signals.

a. Shoreline shown on the present survey originates with topographic map T-5195 (1935).

b. Topographic signals used originate with graphic control surveys T-6391a (1935), T-6392 (1935-37) and T-6393 (1935-37).

c. Hydrographic signals originate with the present survey, the fixes used in their location being recorded in volume 5 of the sounding records.

d. No authority other than the boat sheet could be found for signals "Imo" and "Guy" in lat. 29° 35.10', long. 81° 40.80' and lat. 29° 34.88', long. 81° 40.74' respectively. They are shown on the boat sheet as topographic signals located in 1937 but they do not appear on the graphic control survey covering this area nor are there any hydrographic locations recorded for them. They appear to have been spotted from a sounding line (pos. 58-63D, blue) by time and relation to shoreline. The boat sheet positions were carefully transferred to the smooth sheet in the office and inked in blue.

4. Sounding Line Crossings.

The sounding line crossings are satisfactory, depths generally agreeing within less than 1 foot.

5. Depth Curves.

Within the area of the survey the usual depth curves can be satisfactorily drawn. Because of the steep nature of the banks only one small section of the low water line appears on the sheet.

6. Junction with Contemporary Surveys.

The junction with H-6131 (1935-37) to the south is satisfactory. Field sheet No. 28 joining this survey to the north has not yet been received in the office.

7. Comparison with Prior Surveys.

T-2027 (1875)

This survey is a reconnaissance on a scale 1:80,000 showing a single line of soundings in this portion of St. Johns River. The information has been superseded on the charts by later U. S. Engineer surveys and the above survey need not be considered in future charting.

8. Comparison with Chart 508 (New Print dated Nov. 12, 1936).

a. Hydrography.

The chart is based on surveys by the U. S. Engineers in 1907-8 and in 1925-6, the latter survey being shown on blueprint 21053 and 21054. The agreement with the present survey is good, only minor differences in detail being noted and these due mostly to the closer development and larger scale of the present survey.

The sunken wreck charted in lat. 29° 35.7', long. 81° 39.9' is derived from Chart Letter 465 of 1931. The present survey shows this wreck as bare at mean low water.

The above surveys should be superseded by H-6130 (1935) in future charting of the area covered by it.

b. Aids to Navigation.

The charted positions of the four lighted beacons falling within the area of the present survey are in agreement with the positions determined by topographic methods on the Graphic Control sheets.

9. Field Plotting.

The field plotting was excellent.

10. Additional Field Work Recommended.

The survey is complete except as noted in par. 2 this review.

11. Superseded Old Surveys.

Within the area covered the present survey supersedes the following survey for charting purposes.

T-2027 (1875) in part (contains hydrography)

12. Reviewed by - R. J. Christman, Nov. 18, 1936 and J. A. McCormick, Jan. 13, 1938.

Inspected by - A. L. Shalowitz.

Examined and approved:

Thos B Reed
T. B. Reed,
~~Acting~~ Chief, Field Records Section.

K.T. Adams
Chief, Division of Charts.

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

G V Rude
Chief, Division of H. & T.

Applied to Court Comp. 687 Dec. 13, 1939 H. MacEwan