6544

6544

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

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } Sheet No. 54

H6544

State Florida

LOCALITY

St. Johns River
and Trout
Black Creeks

193 9

CHIEF OF PARTY

F. L. Gallen

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. 54

REGISTER NO. H6544

State Florida

General locality St. Johns River

Locality Black Creek and Trout Creek

Scale 1:5,000 Date of survey Feb., 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 G. B. Littlepage Jr.

Verified by "

Instructions dated Oct. 20, 1938

Remarks:

U. S. GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet 54 H-6544

INSTRUCTIONS - Supplemental October 20, 1938, Proj. HT-212.

SURVEY METHODS

The shoreline and the air photographic control signals, circled in green on the boat sheet and in red on the smooth sheet, were furnished by Lieutenant H. A. Paton from 1938 air photographic surveys* made at Palatka, Florida. The shoreline was enlarged from the scale of the air photographic survey (1:10,000) to the scale of the hydrographic survey (1;5,000) by a projector. The signals were scaled from the air photographic sheets and plotted on both the boat sheet and the smooth sheet.

*T-5238
T-5240
T-5271
T-5663

The air photographic signals were recovered and additional signals were located from them by Lieutenant (j.g.) E. B. Brown, Jr. The additional signals were located by sextometer methods and are shown on the sheet by blue circles. All spotted signals are circled in green on the smooth sheet.

The hydrography on this sheet is visual fix control except in the narrow reaches of the river and along the shoreline where positions were spotted from the adjacent topography. Sounding lines close inshore were run parallel to the shoreline, while those offshore were run parallel to the axis of the stream. The soundings were taken with a 6 pound lead from a 25 foot skiff powered by a 9½ H.P. outboard motor.

The offshore limits of hyacinths were sketched in the field and are shown on the boat sheet in blue. On the smooth sheet the limits of the hyacinths have not been shown. However, the work "hyacinths" has been penciled (inked in office) on the sheet where they are present in any quantity.

Signals in Trout Creek, other than those shown in red, which were furnished by the Palatka Office, were located by sextant cuts and sextometer distances; a check cut or distance was taken on each signal where possible. Signals Yet, Zed, War and Kit, cut and distance only with shore line used as a check. Signals Joy, Lot, Ace and Hix could not be located by cuts and were located by distances and shoreline references. Signals Mop, Sea, Ela and Top were plotted on a sheet of tracing paper using angles and distances; the tracing paper was shifted until shoreline references were in agreement.

Signals in Black Creek and tributaries were located by sextant cuts and sextometer distances with check cut and distance on each signal where possible. A traverse (sextometer) was run from signal Old to Eve, which checked, rejecting photo location at signal Fay. A traverse was run from Eve to Can rejecting photo location of Don. A traverse was run from Can to Bag including cut and distance to Rat. Traverse Ash to Rat rejected photo location of Rat. Traverse Oak to Ash. Traverse Low to Hot does not check well. Hot is possibly too far to eastward but is left in photo position so that shoreline reference agrees.

In Peters Creek signals Jig and Tit located by cuts and distances only, no check on signals Tea and Sin, distances and shoreline references only. Signal It was spotted on high water line of point, no cuts or distances were taken.

Peters Creek was blocked by hyacinths about six tenths of a mile from its mouth on Feb. 7 and 14, 1939 and according to notes by the air photographic field inspection party it was blocked about in the same place in December 1938. A few of the deeper bights leading off from Black Creek were also blocked at the time of the hydrographic survey. An attempt is made to keep Black Creek as clear of hyacinths as possible. Hyacinths are kept out of Trout Creek by an eight inch log boom across its mouth between signal Boo and Xes. Whenever the wind is blowing from the north or northeast this boom is opened to allow hyacinths in the creek to drift out into St. Johns River. This boom is tended by J. J. Pacetti, owner and operator of a fish camp at signal Ula. He states that he had verbal permission from the U. S. Engineers in Jacksonville to construct the boom. With much difficulty the hydrographic party succeeded in getting the sounding skiff through the hyacinths and over the log boom. At 11:30 on d day the log boom gave way and it was possible to obtain 4 soundings in the area which had been blocked during the morning. A smaller log boom is in place on Trout Creek between signals Mop and Sea. The creek above the highway bridge at signal Mid was completely blocked by hyacinths at the time of the survey.

The taped bridge clearances obtained by the hydrographic party have been shown on the smooth sheet and are recommended for charting. The vertical clearance was measured from an estimated mean high water on the bridge piling. See also page 4, Par. 3.

Bridge Values: Lat. 30°02.5, Long. 81°42.5
Steel + Concrete, Swing Span, tended
Vert. Clear. = 10.6 ft. at. MHW
Hor. " = 63.0 ft (N. Span), 62.4 ft. (S. Span)

DISCREPANCIES

Where discrepancies with the air photographic survey were found by the hydrographic party they were called to the attention of the air photographic party for further investigation with the photographs.

Plotted 17 M.

Position 11 b plots 17 meters from high water line. Record book note states position is 5 meters from high water.

There is distortion upward to 14 meters at the lower left corner of the smooth sheet at the mouth of Trout Creek. This was caused by water when the Launch MIKAWE was destroyed.

DANGERS

There are no dangers known to exist in the area surveyed, except the log booms in Trout Creek in Lat. 29° 58.7', Long. 81° 34.1' and in Lat. 30° 00.4', Long. 81° 33.9'.

The wreck located by the air photographic survey in Lat. 30 03.4 Long. 81 43.6 is in a hyacinth filled slough off Black Creek and does not constitute a danger to navigation. The wreck extends 7 to 8 feet above high water.

TOPO & HYDRO STATIONS

The following signals fall in the water area on this sheet.

You - Fender piling at bridge.
Nut - On west face of bridge.
Jim - Northeast corner of shed on dock.
Ray - End of cattle fence (10 meters off high water)
Old - Offshore end of pier
Sot - Overhanging bush (5 meters off high water)
Qui - Tree (2 meters off high water)
Tit - Tree overhanging high water.
Tea - Tree (1 meter off high water)
Sin - Tree (5 meters off high water)
Sun - Tree (1 meter off high water)
Who - Tree (2 meters off high water)
Zip - Tree (4 meters off high water)
Urn - Tree (1½ meters off high water)
Ink - Temporary stake (8 meters off high water)
Can - Tree (1½ meters off high water)
Boy - Tree (2 meters off high water)
Ant - Overhanging tree (4 meters off high water)
Dog - Tree (3 meters off high water)
Erg - Temporary stake (5 meters off high water)
Bag - Temporary stake
Rat - Offshore end of wrecked wharf.
Fun - Overhanging Tree.
Gul - Tree (1 meter off high water)
Oak - Overhanging tree.
Lon - Overhanging tree (5 meters off high water)
Low - Overhanging tree (3 meters off high water)
Jig - Temporary stake (1 meter off high water)
Mid - On south face of bridge.
Hix - Tree (½ meter off high water)
Sea - on end of wood retaining wall.
Mop - Overhanging bush (2 meters off high water)
Lot - Tree (1 meter off high water)
Kit - Tree (2 meters off high water)
Pin - Offshore end of old pier
Joy - Tree (1 meter off high water)
Vet - Pile on south face of bridge and northwest edge of boat opening.
War - Tree (1 meter off high water)
Why - Old snag
Boo - Tree at west end of log boom
Xes - Temporary stake at east end of log boom (4 meters off high water)
Zed - Temporary stake

GENERAL

At present Black Creek is used commercially by one or two tugs, which haul lumber rafts and barges from the upper reaches of the creek. A few pleasure crafts make use of the creek for scenic trips. Trout Creek is used only by fishermen who keep their small boats inside of the creek due to the log boom across its mouth.

CHANNELS

Black Creek is one of the deepest creeks in this section. With local knowledge 17* feet may be carried from its mouth to the limits of this sheet. A depth of 4 feet may be carried on a midstream course from the mouth of Trout Creek to the highway bridge at signal Mid, a distance of about 2½ miles.

*Only 8 feet can be carried to the mouth from St. Johns River on H-6297 (1935)

COMPARISON WITH PREVIOUS SURVEYS

There has been no previous surveys on the Trout or Black Creeks except at their mouths. A junction was made to the west of the highway bridge at the mouth of Black Creek with hydrographic survey No. H6297, made in 1935 by the party of Lieutenant H. A. Paton, on a scale of 1:20,000. A junction was made at the mouth of Trout Creek with hydrographic survey No. H6297 made in 1935 by the party of Lieut. H. A. Paton on a scale of 1:20,000.

The clearances of bridges on this sheet were compared with the Corp. of Engineers publication "List of Bridges over Navigable Waters" and found to be in close agreement, except that the bridge listed as being 0.5 mile above the mouth of Black Creek has been removed.

GEOGRAPHIC NAMES

Geographic names for this sheet will be submitted with the air photographic survey of this area compiled by the party in Palatka, Fla.

Names penciled on the smooth sheet have been verified in the field by local residents. The following is the source of names obtained by this party:

	Clay County Map	St. Johns County Map	Fla. Forest Service Map	U.S.Geol.Survey Map	U.S.C.& G.S. Chart	C.D.Knight	W. R. Poss	J. J. Pacetti	G. A. Knight
Peters Creek	x		x	x	x	x	x		x
Pecks Branch	x			x		x			
Black Creek	x		x	x	x	x	x		x
Trout Creek	x	x			x		x	x	

Mr. G. A. Knight, whose mailing address is Russell, Florida, has 40 years local knowledge, 11 years of which were on a tug boat operating in Black Creek.

Mr. Pacetti, whose mailing address is Green Cove Springs, Florida, owns and operates a fishing camp on Trout Creek.

Mr. Poss, whose mailing address is Doctors Inlet, Florida, has been A.C.L. R.R. bridge tender on Black Creek for 13 years.

Mr. C. D. Knight, whose mailing address is Green Cove Springs, Florida, has 23 years local knowledge and is now employed by the U. S. Engineers to keep the main part of Black Creek free from hyacinths.

NOTE:

The hydrography on this sheet was accomplished by Lieut.(j.g.) Edmund L. Jones, who was transferred from this party before the smooth copy of this report was written. The report is, therefore, transmitted without his signature.

Approved and forwarded:

F. L. Gallen.

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

STATISTICS

Date	Day	Statute Miles	Soundings	Positions
Feb. 9	a	4.9	299	51
13	b	5.9	313	42
14	c	14.8	873	136
15	d	7.2	429	72
		32.8	1914	301

Smooth Sheet No. H-6544 54 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

LAC
5321

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

July 2, 1940

Division of Hydrography and Topography:

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

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 6544

Locality Black Creek, St. Johns River, Florida

Chief of Party: F. L. Gallen in 1939
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:

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

GEOGRAPHIC NAMES

Survey No. H6544

Name on Survey	On Chart No. A,	On previous survey No. B,	On U. S. quadrangle Maps C,	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Black Creek										1
Pecks Branch ✓										2
Peters Creek										3
Trout Creek										4
St. Johns River										5
										6
	Names underlined in red approved by L. Heck on 7/17/40									7
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M 234 R

	Remarks	Decisions
1		300817
2		"
3		"
4		299815
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Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. H6544

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

Number of positions on sheet	301
Number of positions checked (Check by distance)	17 / 135
Number of positions revised	5
Number of soundings recorded	1914
Number of soundings revised	5
Number of soundings erroneously spaced	40
Number of signals erroneously plotted or transferred	0

Date: July 30, 1940

Verification by G B Stanley Jr. Time: 30 1/4 hrs

Review by Harold W. Murray Time: 5 hrs.

2629

HYDROGRAPHIC SURVEY NO. H6544

Smooth Sheet Yes

Boat Sheet Yes

Records; Sounding 2 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) None

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

Hydrography: Total Days 4 ; Last Date Feb. 15, 1939

Remarks

2776

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

No. H H6544
~~No. xx~~

received June 14, 1940
registered June 24, 1940
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	✓	HBC	Pages 2 to 4
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed

✓ TBR

Verification Report for H-6544 (1939)

Condition of Records.

The records are complete and conform with the requirements of the Hydrographic Manual.

Shoreline and Signals

The shoreline and red signals in Black Creek are from T-5271 (1935) and T-5663 (1935) and a close comparison has been made. The shoreline and red signals of Trout Creek originate with T-5238 (1935) and T-5240 (1935). The blue circle signals were located by sextometer methods and the green circle signals were spotted (see Descriptive Report)

Sounding Line Crossings

Satisfactory

Depth Curves

Depth curves were drawn for the area covered by the survey

Junctions with contemporary surveys.

The junction with H-6545 (1939) is satisfactory

The junction with H-6297 (1935) at Trout Creek is satisfactory

Field Plotting

The field plotting is satisfactory

Remarks:

1- A row of circles running N.N.E from ⊙ Jim have been inked on the smooth sheet. They were shown in pencil on the smooth sheet and boat sheet and mentioned in Rev. on the Topo without identification. It is presumed they are piles and are rejected & the reviewer.

2- The bridge clearances noted in pencil on the smooth sheet do not check those on the Topo Hydro values accepted at ⊙ Vet. Those at ⊙ Mid have been crossed out on the Topo and do not check the sdg volumes. Superseded

Respectfully Submitted

7/30/40

DIVISION OF CHARTS

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6544 (1939) FIELD NO. 54

Florida, St. Johns River, Black and Trout Creeks
Surveyed in February 1939, Scale 1:5,000
Instructions dated October 20, 1938 (MIKAWE)

Soundings:
Hand Lead

Control:
Three point fixes on shore signals

Chief of Party - F. L. Gallen.
Surveyed by - E. L. Jones.
Protracted by - H. J. Bozzo.
Soundings plotted by - H. J. Bozzo.
Verified and inked by - G. B. Littlepage, Jr.
Reviewed by - Harold W. Murray, July 30, 1940.
Inspected by - H. R. Edmonston.

1. Shoreline and Signals.

   a. The shoreline was enlarged to a scale of 1:5,000 from 1:10,000 scale topographic maps; T-5238, T-5240, T-5271 and T-5663 of 1935.

   b. The origin of the signals is given in the descriptive report, page 1, "Survey Methods".

2. Depth Curves.

   The usual depth curves may be satisfactorily drawn.

3. Sounding Line Crossings.

   Agreement of such cross lines as were run as well as agreement of adjacent lines are satisfactory.

4. Junctions with Contemporary Surveys.

   a. The junction on the northwest with H-6545 (1939) is satisfactory.

   b. Junctions with H-6297 (1935), scale 1:20,000, are made at the mouth of Black and Trout Creeks. The junction at Trout Creek is satisfactory.

      At the mouth of Black Creek, the hydrography on H-6297 extended about one mile upstream and was not verified and inked pending receipt of the larger scale present survey. Since the present survey

adequately covers the same area and shows nearly twice as much detail, the small scale older survey lines are not needed and have been removed from the smooth sheet. A satisfactory junction, however, is made in the vicinity of the bridge.

5. Comparison with Prior Surveys.

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

This reconnaissance survey containing hydrography covers the mouths of Trout and Black Creeks but since no hydrography is actually shown in the area common to the present survey, no further consideration is necessary.

b. H-1384b (1877), scale 1:20,000.

This survey contains about a mile of hydrography extending up both Black and Peters Creeks. The hydrography consists principally of a single line of soundings run in midstream which is in fair agreement with the present survey. The present survey supersedes this 1877 survey.

c. H-1389 (1878) scale 1:20,000.

This survey contains a single line of soundings running up Trout Creek which is in fair agreement with the present survey. The present survey supersedes this 1878 survey.

6. Comparison with Charts 682 (New print dated Oct. 17, 1940) Chart 683 (New print dated Mar. 11, 1940.

a. Hydrography.

Only a portion of the area covered by the present survey is shown on the charts. The hydrography charted within the common area originates with surveys discussed in the preceding paragraphs and no further consideration is necessary. The descriptive report, however, on page 4, par. 3, states that the bridge charted about 1/2 mile from the newer bridge at the mouth of Black Creek has been removed.

b. Aids to Navigation.

There are no aids to navigation within the limits of the present survey.

7. Condition of Survey

a. The sounding records are neat and legible and conform to the general requirements of the Hydrographic Manual. In latitude 30° 02.5', longitude 81° 42.7', near the mouth of Black Creek, a row of small circles were shown off signal "Jim". Since no explanatory description could be found in the records of the present survey it is assumed that these circles represent piling and have been so labeled.

b. The descriptive report is clear and comprehensive, and satisfactorily covers all matters of importance. The inclusion of a brief description of all signals falling outside the high water line is a very commendable addition.

c. The field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual.

8. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

9. Additional Field Work Recommended.

This is an excellent survey and no additional field work is required.

10. Superseded Surveys.

H-1384b (1877) in part
H-1389 (1878) in part

Examined and approved:

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

F. S. Borden
Chief, Division of Charts.

Raymond P. Ingman.
Chief, Section of Field Work.

E. Rude
Chief, Division of H. & T.

applied to chart compilation 605 October 25, 1940 LAM.