

5666

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Map Drawing~~
~~Hydrographic~~ } Sheet No. T-5666

CO
CO
CO
CO

State in FLORIDA

LOCALITY

ST. JOHNS RIVER

ORTEGA RIVER

and vicinity

Photographs taken Nov. 1933
Feb. 1935 and Feb. 1939.

193

CHIEF OF PARTY

Riley J. Sipe

Applied to chart comp. 685. October 28, 1940. Lam.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 6

REGISTER NO. T-5666

T5666

State FLORIDA

General locality ST. JOHNS RIVER

Locality ORTEGA RIVER and vicinity

Photographs Nov. 1933

Scale 1:10,000 Date of survey Feb. 1935 & Feb., 1939

~~Master~~ Air Photographic Party No. 2A

Chief of party Riley J. Sipe

Surveyed by See notes on compilation

Inked by See notes on compilation

Heights in feet above.....to ground to tops of trees

Contour, Approximate contour, Form line interval.....feet

Instructions dated March 4, 1935 and letter June 6, 1939

Remarks Army Air Corps Camera No. 30-2 used; also single lens and nine lens camera No. not known.

Field Inspection 1935 and 1939.

Reference Station: Greenwood 1934

Latitude: 30° 17' 20.392" (627.9 m)
Longitude: 81° 42' 20.804" (556.0 m) (Adjusted)

X coordinate: 277,237.9 ft

y coordinate: 2,165,634.9 FT.

Supplemented by other surveys to: 1939

TIME SHEET

Field Sheet No. 6
 Register No. T-5666

The radial plot was nearly finished before time records were begun on this sheet. This is a rough drafted sheet.

Pricking Points for Plotting	24	hrs.
Radial Plot		
Pricking Additional Points for Detail	14½	hrs.
Plotting All Control	17	"
Detailing Roads, Buildings, Fences, Trails, etc.	447	"
Detailing Symbols	27	"
Shoreline	6	"
Field Inspection	17½	"
Reports	29	"
Field Review of Sheet	51½	"
Total	633½	hrs.

*69 days
3 m*

See paragraph Field Sheet No. 5 (T-5668)

DATE OF SURVEY

Single lens photographs Nov. 1933.
Five lens photograph Feb. and Mar. 1935.
Nine lens photographs Feb. 16, 1939.
Field inspection in 1935 and 1939.

Details on T-5666 have to be brought up to the date of the
nine lens photographs. Feb., 1939.

NOTES ON COMPILATION

Sheet No. 6 (Field)

Register No. T-5666

PHOTOGRAPHS:

Single Lens	-	Flight No.	<u>M129</u>	No.	<u>M-137</u>	Inc.	<u>---</u>		
"	"	"	"	"	<u>M170</u>	"	<u>M-177</u>	Inc.	<u>---</u>
<u>Five</u>	"	Flight No.	<u>6149</u>	"	<u>---</u>	"	<u>---</u>	Inc.	<u>---</u>
<u>Nine</u>	"	"	"	"	<u>03215</u>	"	<u>03217</u>	Inc.	<u>---</u>
"	"	"	"	"	<u>03223</u>	"	<u>03225</u>	Inc.	<u>---</u>

SCALE PLOT: W. H. Burwell

SCALE FACTOR USED: 1.00

PROJECTION BY: Benson

CONTROL PLOTTED BY: W. M. Crook

CONTROL CHECKED BY: W. H. Burwell

SMOOTH RADIAL PLOT BY: H. A. Hatton

TOPOGRAPHY TRANSFERRED BY: H. A. P.

TOPOGRAPHY CHECKED BY: H. O. Fortin

SHORELINE INKED BY: D.R. S. and R. H. Yeung.

DETAIL INKED BY: D.R. Shallenberger

OVERLAY SHEET BY: D.R.S.

DESCRIPTIVE REPORT BY: D.R.S.

REVIEWED BY: H.O.F.

AREA OF DETAIL INKED: 15.76 Square Statute Miles

LENGTH OF SHORELINE (Over 200 m): 9.0 Statute Miles.

LENGTH OF SHORELINE (Under 200 m): 9.5 Statute Miles.

LENGTH OF SHORELINE OF SMALL LAKES: None Statute Miles.

DESCRIPTIVE REPORT

TO ACCOMPANY

Field Sheet No. 6
Register No. T-5666

General.

This rough map drawing was compiled from air photographs taken by the U. S. Army Air Corps, using a single lens camera number unknown; a five lens Army Air Corps camera No. 32-2, and a nine lens camera designed by the U. S. Coast & Geodetic Survey.

The projection was made with a scale factor of 1.00.

Unimportant small buildings and those not distinct enough on the photographs to locate accurately were not shown.

The nine lens photographs, being considerably out of scale were not used except for vegetation and changes in detail in areas covered by single and five lens photographs. Detail along the western edge of this map drawing was taken from the nine lens photographs as this area was not covered by either the single or the five lens flights.

Control.

A total of 37 control stations were plotted on this map drawing; 21 of which fall within the tracing limits. Of these, 8 are traverse stations established by the Florida Mapping Project, 6 are described topographic stations and 7 are U. S. Coast and Geodetic Survey triangulation stations. Five of these triangulation stations were established in 1934, one in 1932 and one in 1876.

Radial Plot.

The radial plot was made on this projection from the single lens and five lens photographs. Identifiable radial points were transferred to the nine lens photographs. New radial points were pricked on the nine lens photographs where single and five lens points could not be identified and also for new development in detail.

Notes on the original radial plot are as follows:

The F.I.S. station at Greenwood is 6 meters too far northwest. Station was recomputed; no change found; distance and azimuths checks G.C. sheet. May be an error in station. F.I.S. station at Bight 1876 falls 9 meters too far east. Distance and azimuth checks G.C. Sheet. May be using wrong correction to geographic position to change to N.A. 1927 datum. Topographic stations that would not fit plot. Lov 10 meters too far north; *No1 20 meters too far northeast; *Boat 27 meters too far east and north; *Span 32 meters too far northeast. Evidently an error in rod readings on this traverse. Station Bridge (d) probably in error also and should be * These stations were used on H-6296 ~~60~~ (1:20,000) 1935 and these differences were never investigated as this report was not available when H-6296 was reviewed. This area has since been resounded on H-6530 1939. B.G.J. H-6530 was on a scale of 1:5,000 and none of the above questionable signals were

H-6530 entirely superseded H-6296 in the area in which the questionable signals were used.

rejected. Stations AJ 33-AJ35 and AB 14 were not recovered, but were pricked from the original notes and appear to be correct in the radial plot. All other stations fit nicely. The plot of the single lens flights were made first and the radial points used for control of the five lens flights.

Interpretation of Photographs.

The photographs were clear and no difficulty was experienced from a photographic standpoint.

Field Inspection.

Field inspection was made in 1935 and by boat and truck in 1939.

Graphic Control Surveys.

This map drawing is covered by Graphic Control Sheet "CC". At the highway bridge crossing the Ortega River at Ortega a discrepancy of approximately 8 meters was noted. Docks on each side of the Ortega River in the vicinity of this bridge differ in varying amounts up to approximately 10 meters. Other differences in shore line are principally in swamp or marsh areas. Dredging operations in connection with real estate development, is going on at the present time in Big Fishweir Creek. Docks shown on the G.C. Sheet and omitted from this map drawing are no longer there.

G.C. Sheet "CC" ^{CS175M 1:20 000} compares only fairly with this map drawing. This is especially true in the vicinity of Cedar River and Ortega River. However, since a good part of this shoreline is either heavily wooded, swampy or marshy, there is no doubt that some of these discrepancies are due to different interpretation of the shoreline, and probably by erosion due to stream flow since the Graphic Control Survey was made. However, the notes on smooth radial plot no doubt prove that there apparently was traverse error in some of the topographic stations.

All details on the above graphic control survey within the area of this photographic survey are shown on this map drawing except:

1. Magnetic Declination.
2. Temporary Stations for control of hydrography.
3. Cable area across Ortega River at Sadler Point.

Hydrographic Surveys.

The delineation of the shoreline from air photographs was made prior to the hydrographic survey up Cedar River and above Ortega River west of the Highway Bridge on U.S. Highway No. 17. The differences are shown in red ink on a tracing that is attached to this report.

H6530 used above line and signals from T5666
Comparison with Surveys of other Organizations outside the Coast Survey.

Maps were found to be too small for proper comparison.

Bridge Clearances.

There are shown in the 1935 Bridge list and agree with the field inspection of T-5666 except as follows:

1) 64th St. over Cedar River

Fixed Wood Bridge

Horiz. clearance 22ft.

Vert. cl. 7.2 ft. at M. H. W.

2) St. Johns Ave. over Cedar River.

The graphic control survey C.S. 175 states that this is a fixed wooden bridge, horiz. cl. = 29 ft. and vert. cl. 16ft. at M.H.W. The photographs show this to be a fixed bridge.

The bridge book lists this as a swing bridge, horiz. cl. 28 ft., vert. cl. 4.5 ft. at H.W.

The bridge has evidently been rebuilt since it was listed in the bridge book.

Comparison with Chart No. 682-39/1/19.

No detailed comparison could be made as this chart is on a scale of 1:40,000.

Comparison with early Coast & Geodetic Surveys.

T-1459-A, 1877 agrees remarkably well with this map drawing. The only appreciable difference is shore line is that part north of Big Fishweir Creek which has been filled in and bulkheaded, and the shore-line just northeast of the point where Fishing Creek empties into Ortega River.

Land Marks.

Previously sent in by Lieut. H. A. Paton, 1935.

Preparation for Inking.

This map drawing was treated with dry carbonate of magnesia before inking, thus cutting all grease, dirt and foreign matter. The finished drafted part of the map drawing was covered with clear celluloid as the inking progressed.

Bridges.

The new bridge across Cedar River at 64th St., was not listed in "List of Bridges over the Navigable Waters of the U.S. 1935", which was used as the final authority on bridges as shown on this map drawing. The clearance for the above mentioned bridge was obtained from field inspection note on single lens field print M-17h and corrected with the Director's letter of December 8, 1939, reference no. 32-FLM for tide reducer.

*Fixed Wood Bridge: Horiz. Clearance 22 FT.
Vert. Clearance 7.2 FT. at M. H. W. 1*

Miscellaneous.

See opposite page

In making the junction with T-5664 on the south of this map drawing, the railroad could not be made to check. A more accurate representation is shown extended on this map drawing and it is recommended that T-5664 be changed accordingly. *Junction Corrected 2-21-40*

A new ditch as shown on the nine lens is also added just west of the above mentioned railroad, and should be added to T-5664.

Street names shown on this map drawing west of the city limits were obtained from the Duval County Topographic Survey Map 35-SW-21; a tracing of which accompanies this map drawing. A City Map of the City of Jacksonville will be mailed with one of the remaining map drawings, as this map shows all the names of streets and location of schools and important buildings.

As indicated on this map drawing, layout of railroad yard is shown on Seaboard Air Line blueprints W.J/50 and R72 which accompany this map drawing. *Returned for sheets to follow.*

A tracing is also furnished showing the shoreline as furnished for the boat sheet in black and a revision of the shoreline on Williamson

Creek, at the Hyde Park Road bridge, and other places, in red ink.

Topographic station Boat (d) has been destroyed, for the bridge on which it was located has been torn down. *Boat is not on a bridge*

Areas that show as shoal, especially around Sadler Point have not been shown on this map drawing. The hydrographic survey should have a better determination of these areas, and as this office thought it might lead to confusion they were left off.

St Johns Ave. Bridge has apparently been rebuilt as preceding paragraph on Bridges.

Approved and forwarded:

Riley J. Sipe, Chief of Party.

Henry O. Fortin
By Henry O. Fortin.

Respectfully submitted

D. R. Shallenberger

	Remarks.	Decisions
1	Two words preferred, in view of USGB precedent	302817
2		302817
3		" U S G B
4	Not recommended Desc. Report.	"
5		303817
6		302817
7		"
8		"
9	Part of Ortega River, per USGB decision	"
10		303817
11		302817
12	Includes McGirts Creek shown on this sheet, covering the entire stream from source.	" U S G B
13		302816
14		"
15		302817
16		"
17		303816
18		302817
19		
20		
21	For title	U S G B
22		303816 U S G B
23	On sheet, not mentioned Desc. Report.	303817
24	" " "	"
25	" " "	302817
26		
27		

GEOGRAPHIC NAMES

Survey No.

Name on Survey	Sources										
	A	B	C	D	E	F	G	H	K		
	On Chart No. 632 On previous survey No. T-1459A-07 On U. S. quadrangle Maps From local information On local Maps G. C. C. C. Rand McNally Map U. S. Light List U. S. Coast Pilot K. Atlantic Coast Section 12										
Butcher Pen ✓✓											1
<u>Butcher Pen Creek</u>		X		X	X						
Big Fishweir Creek ✓✓	X	X		X	X	X					2
<u>Cedar River</u> ✓✓	X	X	X	X	X	X					3
<u>Cedar Springs</u> ✓✓				X	X						4
<u>Highway</u> ✓✓			X	X	X						5
<u>Fishing Creek</u> ✓✓	X	X	X	X	X	X					6
<u>Lakeside Park</u> ✓✓	X		X	X							7
<u>Little Fishweir Creek</u> ✓				X	X						8
Mc Wirtz Creek ✓		X	X	X	X						9
<u>Murray Hill</u> ✓✓			X	X	X						10
<u>Ortega</u> ✓✓	X		X	X	X	X					11
<u>Ortega River</u> ✓	X	X	X	X	X	X			X		12
<u>Ortega Terrace</u> ✓✓				X							13
<u>Sadder Point</u> ✓✓	X	X	X	X	X	X					14
<u>St. Johns Park</u> ✓✓	X		X	X	X						15
<u>Williamson Creek</u> ✓			X	X	X						16
<u>Willowbranch Creek</u> ✓✓	X			X							17
<u>Wills Branch</u> ✓			X	X	X						18
											19
											20
<u>St. Johns R.</u> ✓✓											21
<u>Jacksonville</u> ✓											22
<u>Murray Hill Park</u> ✓											23
<u>Willowbranch</u> " ✓											24
<u>Boone</u> " ✓											25
											26
											27

Names underlined in red approved
by L. Heck on 9/23/40

GEOGRAPHIC NAMES

Butcherpen Creek. A small stream flowing into Cedar River just north of Fishing Creek. Source B show the name as two words, Butcher Pen, but the single name as shown is believed to be more correct. The name is supposed to have its origin in the fact that at some time a slaughter house was located on its shore. Recommended

Big Fishweir Creek. A creek flowing into the St. Johns River just north of the highway bridge across the Ortega River. The entrance to this creek is obstructed by two sunken barges from which a hyacinth fence extends to either shore. The descriptive report for G.C. Sheet "CC" reports that there is a gate in this fence for the passage of small boats. Dredging operations due to real estate development along the west shore will be responsible for some changes in the stream. Source B shows the name as Fish Weir Creek. Source E shows both Fishwier and Fishweir. Although the spelling Wier is shown on some sources it is believed that this is a corruption of the word Weir which means a fence set in a stream for taking fish. It is recommended that the word Big be used to differentiate between a tributary known as Littel Fishweir Creek. Recommended.

Cedar River. A stream flowing into Ortega River. Source A and F show Cedar River and all other sources show Cedar Creek. As explained in the descriptive report for T-5664 under McGirts Creek, real estate operators are responsible for the attempt to give both these creeks the more imposing name of rivers. U.S.C. & G. Survey chart No. 683 lists a Cedar Creek, and the descriptive report for map drawing T-5670 recommends Broward River be changed to Cedar Creek, as per discussion under T-5670 descriptive report. Cedar River is recommended.

Cedar Springs. An old section just northwest of Lakeside Park where San Juan Avenue crosses Cedar River. Very little known, so not recommended.

Highway. A section just southeast of S.A.L. Ry. Shops. Name recommended.

Fishing Creek. A small tributary of Cedar River flowing in a northerly direction. It joins Cedar River just west of McGirts Creek. Recommended.

Lakeside Park. A section just southwest of St. Johns Park. Recommended.

Little Fishweir Creek. A small tributary of Big Fishweir Creek. For discussion of the name, see Big Fishweir Creek. Recommended.

McGirts Creek. A large creek flowing in a northerly direction and joining Cedar River which together form the Ortega River. The descriptive report for T-5664 explains fully that real estate operators tried to change the name of this creek to Ortega River which they considered to be more euphonious.

Murray Hill. A well known community in the north central part of the map drawing. Recommended.

Ortega. A suburb of Jacksonville located on the peninsula between the St.

Johns River and the Ortega River. It has a postoffice. Recommended.

Ortega River. The stream formed by the junction of McGirts Creek and Cedar River. The descriptive report for T-5664 under McGirts Creek gives explanation of recommendation for this name.

Ortega Terrace. A community adjacent to and south of Ortega. Recommended.

Sadler Point. The point of land at the junction of the Ortega River with the St. Johns River. Recommended.

St. Johns Park. A section just southwest of Big Fishweir Creek. Recommended.

Williamson Creek. A small creek flowing into Cedar River about one half mile north of Butcherpen Creek. Recommended.

Willowbranch Creek. Just north of U.S.H.L.B-65-102 station. The lower end of which is now a small boat basin. Recommended.

Wills Branch. A small stream flowing into Cedar River near the west edge of this map drawing. The Duval County Commissioners Map shows this stream as Willis Branch. It is believed that the name Wills Branch is correct and this name is recommended.

Approved and forwarded:

Riley J. Sipe, Chief of Party.

Henry O. Fortin
By Henry O. Fortin.

Respectfully submitted.

D.R. Shallenberger.

REVIEW OF AIR PHOTO COMPILATION NO. T-5666.

Chief of Party: Riley J. Sipe

Compiled by: Shallenberger.

Project: No. 2A

Instructions dated: March 4, 1935.

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b, c, d, e, g and i; 26; and 64) Yes.
2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g, n) Yes.
3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d, e) Yes.
4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28) Railway Blue-Prints and tracings.
5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report. Yes.
6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c, h, i) Yes.
7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44) Yes.

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs."

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41) Yes.
9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57) Yes.
10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60) Precisely sent in.
11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c) Yes.
12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k) Yes.
13. The geographic datum of the compilation is N. American 1927 and the reference station is correctly noted. Yes.
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j) Yes.
15. The drafting is satisfactory and particular attention has been given the following: Yes.
 1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.
 2. The degrees and minutes of Latitude and Longitude are correctly marked.

- 3. All station points are exactly marked by fine black dots. Yes.
 - 4. Closely spaced lines are drawn sharp and clear for printing. Yes.
 - 5. Topographic symbols for similar features are of uniform weight. Yes.
 - 6. All drawing has been retouched where partially rubbed off. Yes.
 - 7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground. Yes.
- (Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time. No.

17. Remarks:

18. Examined and approved; *Henry O. Fortin*
Henry O. Fortin

Riley J. Sipe
Chief of Party

19. Remarks after review in office:
By Henry O. Fortin

PLANE COORDINATE GRID SYSTEM

Positions of grid intersections used for fitting the grid to this compilation were computed by Division of Geodesy and the computation forms are included in this report.

Positions plotted by S. KASS

Positions checked by S. K (ON RULING MACHINE)

Grid inked on machine by S. K.

Intersections inked by J. DUNICH.

Minute Inters.

~~Points~~ used for plotting grid:

Q-k 30-20
λ-γ 81-41

z 30-20
γ 81-41

z 30-17
γ 81-43

x
y

z 30-14
γ 81-41

x
y

z 30-14
γ 81-45

x
y

Triangulation stations used for checking grid:

1. GREENWOOD, 1934 (REESTA)
2. 30-18
81-42 Minute Inters. 6.
3. 30-19
81-44 Minute Inters. 7.
4. _____ 8. _____

Note - Grid checks within approx. 0.2 mm.

DIVISION OF CHARTS

Section of Field Records

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5666

Graphic Control Surveys.

C.S. 175 M (1:20,000) 1935.

No descriptive reports or card descriptions of topographic stations were received with this graphic control survey. Refer to page 2 of the descriptive report (T-5666) for a comparison. No further comparison has been made in this office as shoreline details on T-5666 are of a much later date (field inspection and 9 lens photograph of 1939).

Descriptions were not received with the graphic control surveys; a number of topographic stations from these surveys are shown on T-5666 without the (d).

Previous Topographic Surveys.

T-2027 (1:80,000) 1875

T-1459 (1:20,000) 1878

T-5666 supersedes those sections of the previous surveys which it covers.

Hydrographic Surveys.

T-6530 (1:5,000) 1939

T-5666 has been compared with H-6530 and minor corrections made to T-5666 to bring the two surveys into agreement.

H-6296 (1:20,000) 1935

Shoreline and signals on H-6296 are from the graphic control surveys of 1935 and not from T-5666 which has been brought up to date of 1939. No comparison is considered necessary between T-5666 and H-6296 because of the difference in dates.

Chart 682.

T-5666 was applied to chart 682 prior to this review. No changes have been made on T-5666 since its application to chart 682 except for the addition of buildings. These have been called to the attention of the nautical chart section.

Recoverable Topographic Stations.

Form No. 524 descriptions are filed under T-5666. Several stations from the graphic control surveys are shown without the (d), as the descriptions were never received.

General.

T-5666 was compiled as a rough drawing and redrafted at Philadelphia. The survey as received from the field was complete with the exception of buildings, a number of which have been added in this office.

Reviewed in office by F. H. McBeth, September 30, 1940.

Inspected by B. G. Jones, September 20, 1940. *BJ*

Examined and approved:

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

K. T. Adams
K. T. Adams
Chief, Section of Topography.

J. S. Borden
J. S. Borden
Chief, Division of Charts.

G. H. de
G. H. de
Chief, Division of Coastal
Surveys.