

5691

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

DESCRIPTIVE REPORT

Topographic

Sheet No. **T-5691**

State **Florida**

LOCALITY

Lake Harney - St. Johns River

~~North End~~ Northern part

Photographs taken March 14 & 20, 1935
" Feb. 16, 1939

193 9

CHIEF OF PARTY

Riley J. Sipe

U. S. GOVERNMENT PRINTING OFFICE: 1934

≡

Applied to Chart Comp. 688 April 30, 1940 H. E. Mee Swen

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. 43

REGISTER NO. T-5691

T5691

State Florida

General locality Lake Harney - St. Johns River

Locality Lake Harney, northern part
North End of Lake Harney

Scale 1:10,416 Photo.
Date of ~~March 14 & 20, 1935~~ March 14 & 20, 1935
Feb. 16, 1939

Vessel Air Photographic Party No. 2-A

Chief of party Riley J. Sipe

Surveyed by See Notes on Compilation

Inked by " " " "

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

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

Instructions dated March 4, 1935, 19

Remarks: U.S. Army Air Corps Five Lens Camera 32-2 and
Nine lens Camera used.

Field Inspection
July & August 1937 (boat)
July 1938 (truck)
March 1939 (truck)

Date of Survey

Five lens photographs taken March 14 and March 20, 1935.

Nine lens photographs taken February 16, 1939.

Field Inspection was made in 1937, 1938, and in March, 1939.

T-5691 was compiled in the five lens photograph but was brought up to date of the nine lens photographs with the exception of that section of the sheet east of longitude $81^{\circ}-04'$ and north of latitude $28^{\circ}-49'$.

NOTES ON COMPILATION

Sheet No. 43 (Field)

Register No. T-5691

PHOTOGRAPHS:

<u>5</u>	Lens	Flight No. <u>29</u>	No. <u>1196-1201</u>
<u>5</u>	"	" " " <u>30</u>	" <u>1207-1225</u>
<u>5</u>	"	" " " <u>33</u>	" <u>Field prints</u> <u>C-1086; C-1091; EB-1089;</u>
<u>9</u>	"	" " " <u>--</u>	" <u>03246 and 03252</u>

SCALE PLOT: ☒ Henry O. Fortin

SCALE FACTOR USED: ☒ 0.96

PROJECTION BY: Washington Office

CONTROL PLOTTED BY: Henry O. Fortin

CONTROL CHECKED BY: Hubert A. Paton

SMOOTH RADIAL PLOT BY: Hubert A. Paton

TOPOGRAPHY TRANSFERRED BY: ☒ Henry O. Fortin

TOPOGRAPHY CHECKED BY: Hubert A. Paton

SHORELINE INKED BY: David R. Shallenberger

DETAIL INKED BY: David R. Shallenberger

OVERLAY SHEET BY: ☒ David R. Shallenberger

DESCRIPTIVE REPORT BY: ☒ David R. Shallenberger

REVIEWED BY: ☒ Henry O. Fortin

AREA OF DETAIL INKED: 22.0 Sq. Stat. Miles

LENGTH OF SHORELINE (Over 200 m): 5.8 Stat. Miles

LENGTH OF SHORELINE (Under 200 m): 21.0 Stat. Miles

LENGTH OF SHORELINE OF SMALL LAKES: 6.9 Stat. Miles

Reference Sta. Osceola, U.S.E., 1935

Lat. 28° 47' 22.192" (683.2 meters) (Adjusted)
Long. 81° 04' 00.284" (7.7 meters)

X coordinate: 478,620.48 FT.

Y coordinate: 1,619,688.09 FT.

Supplemented by other surveys to March, 1939.

DESCRIPTIVE REPORT
Field Sheet #43
Register #T-5691

June 19, 1939.

GENERAL INFORMATION.

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

Nine lens photographs 03252 and 03246 were used in the vicinity of Osceola and Underhill Slough as described under "Interpretation of Photographs". The scale factor of Flight #30 was 0.956, and of Flight #29 was 0.954. The projection was made with a scale factor of 0.96.

In many instances marsh and swamp are separated from open water by a narrow strip of fast land in the form of a bank or bluff.

Unimportant small buildings were not shown on the map drawing according to recent instructions.

This refers to small old buildings made as garage.

CONTROL

A total of 10 control points were plotted on this sheet, 9 of which fall within the tracing limits. Of these, 3 were triangulation Stations established by this party in 1935, 4 were triangulation stations established by the U. S. Army Engineers in 1934 and 1935, 2 were traverse stations established by U. S. Army Engineers in 1934.

RADIAL PLOT

Radial lines were drawn directly on the sheet. Although there is no control in the northeast part of the sheet no difficulty was experienced in getting through a very smooth plot.

INTERPRETATION OF PHOTOGRAPHS

In view of the fact that detail around Osceola already inked on the sheet was found to be changed after receiving the nine lens pictures, the following procedure was followed. A tracing on celluloid was made from the nine lens photographs. This was then reduced to the proper scale by the projector and a paper copy prepared and used in the same manner as a photograph. The detail within the fire break around Osceola and the triangle formed by the railroad and the river was transferred in this manner. The cattle fence along the

east bank of the St. Johns River from the railroad to the shore was taken from the nine lens photographs while the offshore section was transferred from Boat Sheet #61 after being reduced to the same scale as the sheet.

Detail of small stream on the west side of Underhill Slough was transferred from the nine lens photographs in the same manner as the detail at Osceola.

Where the mean high water line could not be defined in sanded areas, the light line indicates the edge of low water at the time the photographs were taken.

FIELD INSPECTION

Field inspection was made by boat in July and August 1937. Additional field inspection was made by truck in July 1938 and March 1939.

GRAPHIC CONTROL SURVEYS

This map drawing is covered by Graphic Control "BBBB" and "AAAA" of which this office has only a tracing. The only detail shown pertaining to this map drawing is a short section of shoreline at station "River" and "Cypress" which checks with the photographic interpretation.

HYDROGRAPHIC SURVEYS

It was found that this map drawing checks with the Boat Sheets for Hydrographic Sheets #60 and #61. It was noted that the shoal line interpreted from the photographs was practically identical with the one foot curve as drawn on Boat Sheet #61. A few discrepancies of shoreline between Boat Sheet #60 and this map drawing was noted but, in comparing the final drawing with the smooth hydrographic, it is believed that all these small discrepancies will be negligible. From past experience it has been found that most of these errors were due to the projecting of the shoreline onto the Boat Sheets.

COMPARISON WITH SURVEYS BY OTHER ORGANIZATIONS

The U. S. Engineers Survey, Sanford to Titusville, 1935, Sheets 8, 9 and 10 compared very well with the exception of the shoreline which evidently represents Mean High Water. The datum of the control stations differs with this Map Drawing. The shore line as shown on this map drawing represents the low water line as interpreted from the photographs at the time they were taken.

2

COMPARISON WITH CHARTS #458 & #509

Comparison of detail was not possible due to the difference in scale.

PREPARATION FOR INKING

The surface of this sheet was not prepared in any way for inking. A clear celluloid cover sheet was used during the latter part of the inking. This method of protecting the finished portions of the sheet has the advantage of entire visibility at all times. The slight abrasive action which may occur in handling is negligible compared to that which an unprotected sheet is subjected to.

TIDES

Both the five lens and the nine lens photographs were taken when the lake level at Lake Monroe was approximately two feet below mean lake level.

MISCELLANEOUS

The dead palm islets shown near Osceola, Clark Hammock and near the northwest edge of the Map Drawing were formed by floating logs, consisting mostly of palm trees, being caught in eddies and grounding. Some of the dead palms on these islets reach a height of approximately 20 feet.

Respectfully submitted,

David R. Shallenberger
David R. Shallenberger

Forwarded;

Robert A. Lipp
Chief of Party

Source of Geographic Names

Field Sheet 43
 Register No. T-5691

	Local usage	USCGS Chart #458 & #509	G.C. Sheet	Coast Pilot	Light List	U. S. G. S. State of Florida 1932	Off. RD. Map FSRD 1936	Dept. of Agric.	Sec. Map of Florida Mikawa 1939	Boat Sheet #60
St. Johns River	X	X		X	X	X	X	X		
Lake Harney	X	X		X		X	X	X		
Deep Creek	X	X								
Cow Creek	X									
Underhill Slough	X									
Duck Slough	X									
Gator Point	X									
Osceola	X					X		X		
Cow Creek (town)	X									
Clark Hammock	X									
Florida East Coast Ry.	X	X						X		
Cow House Slough	X									
Log Landing									X	
Gator Slough									X	
Cooks Ferry		X								
Reeds Landing		X								
Smiths Landing		X								

(Authorities for local usage are as follows:
 H. Alderman, Charley Rea, Jack Geiger and
 R. L. Borden of Geneva, Florida. Also O. F.
 Allen of Osceola, Florida.)

GEOGRAPHIC NAMES

DEEP CREEK

A stream flowing in a southerly direction and joining the St. Johns River on the east side just north of the Florida East Coast Ry. bridge.

COW CREEK

A stream flowing in a southwesterly direction and joining Deep Creek on the east side approximately one mile from the junction of Deep Creek with the St. Johns River.

UNDERHILL SLOUGH

A slough on the northeast shore of Lake Harney at station Underhill and approximately $1\frac{1}{2}$ miles east of the St. Johns River.

DUCK SLOUGH

A slough on the northwest shore of Lake Harney, midway between Gator Point and the St. Johns River.

GATOR POINT

A point of land on the west shore of Lake Harney about $\frac{1}{2}$ mile north of station Cypress and approximately one mile south of Duck Slough.

OSCEOLA

A community on the west shore of the St. Johns River about $\frac{1}{2}$ mile north of the Florida East Coast Ry. bridge. The U. S. Coast Pilot, 1936, gives this name as "Oceola", but this form of spelling is not substantiated by any other sources. It is recommended that the spelling be corrected to "Osceola".

COW CREEK (town)

A community on the Benson Springs-Titusville Division of the Florida East Coast Ry. just west of the stream named Cow Creek.

CLARK HAMMOCK

An area of hammock land on the south bank of the St. Johns River between U. S. E. Traverse Stations 170-00 and 219-36.60 and approximately one mile north of Osceola.

COW HOUSE SLOUGH

A slough on the west side of the St. Johns River approximately $\frac{1}{2}$ mile north of Osceola.

LOG LANDING

This is a landing on the south side of the St. Johns River at the very western edge of the sheet. It is not recommended for charting purposes and it has been left off the overlay sheet.

GATOR SLOUGH

This is the same slough as Cow House Slough described above. This name is not recommended for charting.

SELF EXPLANATORY NAMES

The following names are all in agreement and well established by local usage.

St. Johns River; Lake Harney; Florida East Coast Ry.

MISCELLANEOUS

The names "Smiths Landing", "Reeds Landing" and "Cooks Ferry" shown on Charts #509 and #458 are no longer in use and it is recommended that they be deleted from these Charts.

T-5691

Remarks.

Decisions

	Remarks.	Decisions
1		USCB
2		287810
3		"
4		288810
5		287810
6		"
7		"
8		"
9		288810
10		"
11		"
12		
13	Deletion from charts 458,509 recommended	287810
14	" " " "	288810
15	" " " "	"
16	Not recommended for charting by Desc. report.	"
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. **T-5691**

GEOGRAPHIC NAMES		Survey No. T-5691									
Name on Survey											
	A.	B.	C.	D.	E.	F.	G.	H.	K.		
St. Johns River ✓											1
Lake Harney ✓											2
Deep Creek ✓											3
Cow Creek ✓											4
Underhill Slough ✓											5
Duck Slough ✓											6
Gator Point ✓											7
Osceola ✓											8
Cow Creek (vill.) ✓											9
Clark Hammock ✓											10
Cow House Slough ✓											11
Florida East C. R. R. ✓											12
Cooks Ferry											13
Reeds Landing ✓											14
Smiths/Landing ✓											15
Log Landing ✓											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

by L. Heck on 7/17/39

M 234✓R

Entered in red approved
by L. Heck on 7/17/39

REVIEW OF AIR PHOTO COMPILATION NO.

Chief of Party: Riley J. Sipe

Compiled by: D.R.S.

Project: HT-168

Instructions dated:

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)

NONE

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, around Osceola

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

High water line not definite around Lake Harney.

Low water line used at the time pictures were taken.

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)

NONE

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)

NONE

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 _____ 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:

1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.

YES

2. The degrees and minutes of Latitude and Longitude are correctly marked.

YES

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

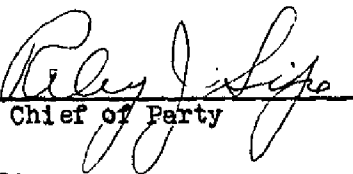
(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time.

NONE

17. Remarks:

18. Examined and approved;


Chief of Party

19. Remarks after review in office:

Reviewed in office by:

Examined and approved:

Chief, Section of Field Records

Chief, Section of Field Work

Chief, Division of Charts

Chief, Division of Hydrography
and Topography.

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 J. P. DUNICH

Grid inked on machine by S. KASS

Intersections inked by J. P. DUNICH

Points used for plotting grid:

28°-45'-00" X = 494,659.43
81°-01'-00" Y = 1,605,321.62

28°-45'-00" X = 467,956.55
81°-06'-00" Y = 1,605,334.70

28°-47'-00" X = 483,983.37
81°-03'-00" Y = 1,617,444.15

28°-49'-00" X = 494,662.82
81°-01'-00" Y = 1,629,560.74

28°-49'-00" X = 467,976.93
81°-06'-00" Y = 1,629,573.84

X
Y

X
Y

X
Y

Triangulation stations used for checking grid:

X = 478,620.48

1. Ocala (USE.) 1935 Y = 1,649,688.09
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

DIVISION OF CHARTS

Section of Field Records

REVIEW OF PHOTOGRAPHIC SURVEY T-5691

Graphic Control Surveys

C.S. 177 M (1939) 1:10,000

C.S. 178 M (1939) 1:10,000

These graphic control surveys show only the location of hydrographic signals and the magnetic declination. The latter agrees closely with the present charts.

Previous Topographic Surveys

T-1512 (1883) 1:80,000

T-5691 supersedes the section of T-1512 which it covers.

Hydrographic Surveys

H-6435 (1939) 1:10,000

The review of H-6435 and comparison with T-5691 were completed by the hydrographic reviewing unit with the exception of minor adjustments of the low water line which have been completed at this time.

Comparison with Chart 688

T-5691 was applied to chart 688 prior to this review. No change has been made in T-5691 since its application to the chart.

Shoreline

The sand beaches on this map are of a very indefinite character and the shoreline has therefore been drawn with a light line. This is contrary to usual practice but no field inspection notes are shown on the photographs and it is impracticable to make any change in this office. In part of the marsh areas the marsh symbol back of the light line is shown broken to indicate that it is more or less flooded at higher lake levels. In this case the light line has been used to indicate the best shoreline for charting.

T-5691

Reviewed in office by - F. H. McBeth

Inspected by - B. G. Jones

Thos O'Brien
Chief, Section of Field Records.

K.T. Adams
Chief, Topography Section.

Examined and Approved:

J.S. Borden
Chief, Division of Charts

G. Hude
Chief, Division of Coastal
Surveys.