

5139

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

DESCRIPTIVE REPORT

Photo-
Topographic
Hydrographic

Sheet No. 30

Reg. No. T-5139

State Florida

LOCALITY

Lake George

Salt Springs Creek

Photos taken
1935

-1937-

CHIEF OF PARTY

Hubert A. Paton

U. S. GOVERNMENT PRINTING OFFICE: 1934

5139

Applied to Chert No. 687 November 1939 L.A.M.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

PHOTO • 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. 30

REGISTER NO. T-5139

T5139

State Florida

General locality Lake George

Locality Salt Springs Creek

Scale 1:10,000 Date of photos survey Feb. 28 & Mar. 13, 1935

Vessel Party No. 26

Chief of party Hubert A. Paton

Surveyed by see page 2

Inked by Robert H. Young and William C. Russell

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated March 4th, 1935, 19

Remarks: U. S. Army Air Corps Five Lens Camera No. 32-2 used.

Field Inspection in March and August, 1937

Notes on Compilation

Photo-compilation Sheet No. 30 (field)

Register No. T-5139

Photos: Five Lens Flight No. 12, Nos. 173 - 181, Feb. 28, 1935

No. 22, Nos. 859 - 864, Mar. 13, 1935

Scale Plot: by William C. Russell

April 17, 1937

Scale Factor used: 1.00

Projection by: Washington Office.

Control Plotted by: W. C. R.

May 20, 1937

Control Checked by: Hubert A. Paton

May 20, 1937

Topography Transferred by: H. A. P.

Sept. 3, 1937

Smooth Plot by: W. C. R.

Shoreline Inked by: W. C. R.

July 21, 1937

Other Detail Inked by: Robert H. Young

Overlay Sheet by: H. A. P.

Area of Detail Inked: 12.0 sq. statute miles.

Length of shoreline over 200 meters: 12.0 statute miles.

Length of shoreline under 200 meters: 4.0 statute miles.

General Location: Lake George, Florida.

Location: Salt Springs Creek.

Datum: North American, 1927 (field)

Datum Station: Nandez, 1935.

Latitude: $29^{\circ} 18' 55.13''$ (1697.4 meters)

Longitude: $81^{\circ} 41' 28.57''$ (771.0 meters)

Time
12:15 P.M.
11:45 A.M.
(No tide.
Lake at
mean river
level)

Ref. Sta.: Nandez, 1935

Lat.: $29^{\circ} 18' 55.13''$ (1697.4 m.) (unadjusted)
Long.: $81^{\circ} 41' 28.57''$ (771.0 m.)

Descriptive Report

to accompany

Photo-topographic Sheet No. 30

Register No. T-5139

✓ General Information:

This sheet is a survey of the northwest corner of Lake George and has Salt Springs Creek for its most important feature. It is joined on the north by T-5150 and on the south by T-5132. In order to furnish shoreline for the hydrographic surveys to be made by the Launch MIKAWA, detail on Salt Springs Creek was traced for about two-thirds of a mile beyond the normal tracing limits of the photos.

The photographs were taken at an elevation of approximately 5000 feet and the scale was very close to 1.00. There is no tide in Lake George and the lake was apparently at mean river level when the pictures were taken.

✓ Control:

Triangulation: All triangulation stations were located by Lieut. K. G. Crosby in 1935 and his unadjusted field values were used for this sheet. The closure on his arc in this area was practically zero, so no corrections were necessary.

Recoverable H. & T. Stations: Graphic Control Sheet YY, surveyed by Lieut. Comdr. L. D. Graham, in 1937, furnished two described H. & T. Stations - Salt and Tim. The first of these could be picked on the photos and was used for control but the latter could not be spotted as no reference points could be identified in the vicinity of the station. An attempt was made to use non-recoverable hydrographic signals but only two could be identified in the field - Man and Far, and of these, the latter failed to check the plot by about 6 meters.

*filed under
Number
T 5139*

There were no State Control Survey traverses on this sheet.

✓ Radial Plot:

The control for the radial plot was not as strong as on other sheets of this project. There were only two triangulation stations and two points, located by plane table, in the area covered by this sheet, that could be used. However there was some additional control on the adjacent sheets which helped sufficiently to permit the plot to be made without too much difficulty. For a description of the method used in mounting the photos, see descriptive report for Sheet T-5150.

✓ General Description of Topography:

Along the shore the land is low and heavily wooded with palms and deciduous trees. Along the north side of the sheet, Salt Springs Creek flows through marshes covered with

grass and bushes, spotted with wooded islands. Toward the south and west the ground rises moderately and is covered by scrub and pine. This higher ground approaches the shore near the southern portion of the sheet. The major portion of the area is known as the Jos. Hernandez Grant and is now owned by the Salt Springs Corporation. This grant extends from the sheet to the north down to the fire break about one-half mile south of Station Nandes. The Grant is surrounded by the Ocala National Forest.

hammocks in
the marsh, not in
the creek.

Roads:

There are only two important roads on this sheet. One has been constructed recently, has a shell surface, and is bordered on each side with fire breaks. This road extends across the entire length of the sheet. A dash and-dot line was used to denote these fire breaks as explained in the report of Sheet T-5150. The other important road is shown in the extreme northwest corner of the sheet. It is an asphalt pavement and is known as the Salt Springs Highway. Both of these roads are represented by a double solid line.

A double dashed line indicates the dirt roads that are passable for automobiles. The single dashed line indicates very poor roads, barely passable for trucks or tractors, or dim trails for foot traffic only. Several of these trails have been opened up in recent years by the C.C.C. to provide means of access to forest fires.

The fire break, running in a westerly direction about one-half mile south of Station Nandez, apparently had a trail in it at the time the photos were taken, but the under-growth has been permitted to spring up and the trail is not passable now.

Accuracy of Compilation:

The extreme northwest corner of the sheet was traced only to furnish shore line for the hydrographic sheets and it is not as accurate as the remainder of the sheet. No attempt was made to show the buildings in the vicinity of Salt Springs and the accuracy of the location of the roads in this area is doubtful.

The south central portion of the sheet falls beyond the normal tracing limits of both flights but there is little important detail in this area.

Comparison with Previous Surveys:

The U. S. Engineers compiled photos in 1933 for most of the area covered by this sheet. A comparison of the two surveys was made and the following differences noted.- There have been several new roads and trails constructed since the original survey. The projections do not check due to the use of field positions for the control, in the first compilation. The area within the normal tracing limits of this sheet checks fairly well but the Engineers did not attempt to show the finer details and it is recommended that this sheet be used instead. In the extreme northwest corner of our sheet, it is known that this compilation is weak and the location of the roads may not be as accurate as that shown on the U. S. Engineers sheets. In the case

of the shoreline however, our compilation has been made in more detail and it is certain from inspection in the field that it represents a truer picture of actual ground conditions, and should be used for the hydrographic sheets.

A comparison was made with G. C. Sheet ~~XX~~^{CS142 M.} by means of a tracing projected to the scale of this sheet. The plane table survey had located two portions of shoreline, one near Station Salt and the other near the highway bridge north west of Station Bills. In the first case, the shoreline checked very closely except for the pointed end of grass marsh in mid-stream near the mouth of Salt Springs Creek. Since the interpretation of such features on the photo was quite difficult, the compilation was changed to agree with the G. C. Sheet. In the other section of shoreline near Station Bills, there was a discrepancy of about 10 meters between the G. C. Sheet and the photo-compilation. The error lay in a northeast and southwest direction. Station Bills had picked quite accurately on the photos and its location was especially strong in this northeast and southwest direction on account of the highway nearby. Since the G. C. Sheet was on a 1:20,000 scale, part of the discrepancy could have arose from errors in tracing and projecting, and it was decided that the compilation was the more accurate survey in this case and its position was accepted.

changed
T-5139 to
agree with
G.C.S. after
study of
photos under
stereoscope.

Geographic Names:

The names shown on the overlay sheet have been obtained from the following sources.-

Symbol	Source
A	Well established by local usage.
B	Maps and charts of the Coast and Geodetic Survey.
C	U. S. Engineers, Route 13-B, Topographic Maps.
D	Florida State Road Dept., County Maps.
E	Preliminary print, Welaka Quadrangle, Florida Mapping Project.
F	U. S. Geological Survey, Ocala Division Map.
G	Official Map, Putnam County, 1914.
H	Ocala National Forest Map, U. S. Dept. of Agri.(old map).
I	Ocala National Forest Map, U. S. Dept. of Agri.(new map).
J	Florida State Map, U. S. Geological Survey.
K	G. C. Sheet, L. D. Graham, 1937.

Bear Creek, a small branch of Salt Springs Creek, near the northwest corner of the sheet. Source of name, A, F, I.

Bills Branch, a small stream near south end of Salt Cove. Sources of name, A, H, & I. Referred to in description of Station Bills.

Bills Branch Road, Source of name, A & H. Referred to in description of Station Nandez. Originally this term applied to the dirt road that roughly parallels the new shell road but

has now been changed to the latter which is the only well traveled road.

Bills Branch Public Camp Ground. This is a new name, not shown on any of the previous maps of the region. It refers to a new public camp ground near the southeast corner of the sheet and the name is now in common use by local inhabitants.

Hopkins Prairie. Name derived from A, H, and I. Refers to a large open space in the "Ocala Scrub" on the southwest portion of the sheet, outside of the tracing limits.

Jos. Hernandez Grant. Source of name, A, F, H, & I. Refers to all the area north of the fire break near the south edge of sheet. The grant is now owned by the Salt Springs Corporation and is not included in the Ocala National Forest.

Lake George. All sources in agreement.

Lake Kerr. All sources in agreement. Most of this lake falls outside of the limits of this sheet. It consists of two lakes with a low strip of marsh between. The eastern end of the east lake falls on the extreme western end of this sheet.

Lisk Point. Source of name, A. and H. On "K", this name is spelled "List Point" which is probably an error due to the similarity of sound. This point marks the south end of Salt Cove.

Ocala National Forest. Source of name, A, F, H, I. Refers to the portion of this sheet that lies south of the Jos Hernandez Grant.

Salt Springs. Sources of name, A, C, D, F, G, & I. This term applies both to the large spring at the head of Salt Springs Creek and to the community in its vicinity.

Salt Springs Creek. Sources of name, C, E, F, G, & H. The term "Salt Springs Run" is shown on B, & K but all other maps use the "Creek" designation. Both terms are in local use but the name "Salt Springs Creek" is slightly more common. It is recommended that our charts be changed to agree with the other maps of this region.

Salt Springs Bar. Sources A, H, and I. Refers to the bar across the mouth of Salt Springs Creek.

Salt Cove. Sources A and K. The large open bight in the northwest corner of Lake George.

Salt Springs Highway, S. R. #45. Sources of name, A, E, H, & I. This paved highway crosses the northwest corner of the sheet. It is sometimes referred to as the New Salt Springs Highway to distinguish it from the Old Fort Gates Road which it replaced.

*For explanation of symbols
used see Page 6, Des. Report
T-5132.*

*Notes in red by
T.M.P.
upon review of 7/31/1938*

Respectfully submitted,

Hubert A. Paton
Hubert A. Paton, Lieut. C&GS.

Remarks

Decisions

1		
2		
3		ok for Planimetric Map only
4		
5		
6		ok for Planimetric Map only
7		
8		
9	the feature is not delineated on sheet.	
10	the lake is not delineated	
11	on this sheet. TM Price	
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GEOGRAPHIC NAMES
Survey No. T-5139

GEOGRAPHIC NAMES		Survey No. T-5139		On Chart No. 508		On previous survey No. T-2027		On U. S. Geographical Names Natl. For.		From local information (See D.R.)		On local Maps See D.R.		P. O. Guide or Map		Rand McNally Atlas		U. S. Light List	
Name on Survey		A	B	C	D	E	F	G	H	K									
✓	<u>Bear Creek</u>			✓	✓														1
✓	<u>Salt Springs Creek</u>	salt springs Run	salt springs	salt Spring Cr.	✓														2
✓	<u>Jos. Hernandez Grant</u>			✓	✓														3
✓	<u>Salt Springs Bar</u>			✓	✓														4
✓	<u>Salt Cove</u>				✓														5
✓	<u>Ocala National Forest</u>			✓	✓														6
✓	<u>Bills Branch</u>			✓	✓														7
✓	<u>List Point</u>			✓	✓														8
	Hopkins Prairie			✓	✓														9
✓	<u>Lake George</u>	✓	✓	✓	✓														10
	White Pop.			✓	✓														11
✓	<u>Salt Springs</u>			✓	✓														12
																			13
																			14
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Names underlined in red approved																			25
by <u>GVE</u> on <u>2/25/38</u>																			26
																			27

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 H. D. REED, JR.

Positions checked ^{on} by Ruling Machine

Grid inked on machine by H. D. REED, JR.

Intersections inked by H. D. REED, JR.

Points used for plotting grid:

x = 285,000 FT.
y = 1,810,000 FT.

x 300,000
y 1,800,000

x 270,000
y 1,800,000

x
y

x 270,000
y 1,820,000

x
y

x 300,000
y 1,820,000

x
y

Triangulation stations used for checking grid:

x = 279,694.21 FT., y = 1,811,520.32 FT.

- | | |
|------------------------------------|----------|
| 1. <u>Nandez, 1935 (Ref. Sta.)</u> | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ | 8. _____ |

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Geodetic positions from transverse Mercator coordinates

State Fla East Station X 285,000
y 1,810,000

x		log S_g	
C		log (1200/3937)	9.48401583
$x' (=x-C)$	- 215,000	log (1/R)	
$x'^3/(6\rho_0^2)_g$	- 3.80	log S_m	
S_g	214,996.20	cor. arc to sine	-
		log S_1	4.81646454
log S_m^2	9.632944	log A	8.50937402
log C	1.154862	log sec ϕ	0.05949675
log $\Delta\phi$	0.787806	log $\Delta\lambda_1$	3.38533531
		cor. sine to arc	+ 1003
y		log $\Delta\lambda$	3.38534534
ϕ' (by interpolation)	29° 18' 46".5205	$\Delta\lambda$	2428".5404
$\Delta\phi$	- 6.1349	λ (central mer.)	81° ' "
ϕ	29° 18' 40".3856	$\Delta\lambda$	
		λ	81° 40' 28".5404

Station X 270,000
y 1,800,000

x		log S_g	5.36171906
C		log (1200/3937)	9.48401583
$x' (=x-C)$	- 230,000	log (1/R)	2555
$x'^3/(6\rho_0^2)_g$	- 4.65	log S_m	4.84576044
S_g	229,995.35	cor. arc to sine	- 872
		log S_1	4.84575172
log S_m^2	9.691521	log A	8.50937464
log C	1.154376	log sec ϕ	0.05937874
log $\Delta\phi$	0.845897	log $\Delta\lambda_1$	3.41450510
		cor. sine to arc	+ 1147
y		log $\Delta\lambda$	3.41451657
ϕ' (by interpolation)	29° 17' 07".5147	$\Delta\lambda$	2597".2668
$\Delta\phi$	- 7.0129	λ (central mer.)	81° ' "
ϕ	29° 17' 00".5018	$\Delta\lambda$	
		λ	81° 43' 17".2668

Explanation of form:

$$x' = x - C$$

$$S_g = x' - \frac{x'^3}{(6\rho_o^2)_g}$$

$$S_m = \frac{1}{R} \left(\frac{1200}{3937} \right) S_g$$

R = scale reduction factor

ϕ' is interpolated from table of y

$$\Delta\phi = C S_m^2$$

$$\phi = \phi' - \Delta\phi$$

$$\Delta\lambda_1 = S_1 A \sec \phi$$

$$\log S_1 = \log S_m - \text{cor. arc to sine}$$

$$\log \Delta\lambda = \log \Delta\lambda_1 + \text{cor. arc to sine}$$

$$\lambda = \lambda(\text{central mer.}) - \Delta\lambda$$

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Geodetic positions from transverse Mercator coordinates

State Fla East Station x 270,000
y 1,820,000

x		log S_g	
C		log (1200/3937)	9.48401583
$x' (=x-C)$	- 230,000	log (1/R)	
$x'^3/(6\rho_0^2)_g$	- 4.65	log S_m	
S_g	229,995.35	cor. arc to sine	-
		log S_1	4.84575172
log S_m^2	9.691521	log A	8.50937343
log C	1.155347	log sec ϕ	0.05961279
log $\Delta\phi$	0.846868	log $\Delta\lambda_1$	3.41473794
		cor. sine to arc	+ 1148
y		log $\Delta\lambda$	3.41474942
ϕ' (by interpolation)	29° 20' 25".5258	$\Delta\lambda$	2598".6597
$\Delta\phi$	- 7.0286	λ (central mer.)	81° ' "
ϕ	29° 20' 18".4972	$\Delta\lambda$	
		λ	81° 43' 18".6597

Station x 300,000
y 1,820,000

x		log S_g	
C		log (1200/3937)	9.48401583
$x' (=x-C)$	- 200,000	log (1/R)	
$x'^3/(6\rho_0^2)_g$	- 3.06	log S_m	
S_g	199,996.94	cor. arc to sine	-
		log S_1	4.78505814
log S_m^2	9.570129	log A	8.50937342
log C	1.155347	log sec ϕ	0.05961482
log $\Delta\phi$	0.725476	log $\Delta\lambda_1$	3.35404638
		cor. sine to arc	+ 869
y		log $\Delta\lambda$	3.35405507
ϕ' (by interpolation)	29° 20' 25".5258	$\Delta\lambda$	2259".7223
$\Delta\phi$	- 5.3147	λ (central mer.)	81° ' "
ϕ	29° 20' 20".2111	$\Delta\lambda$	
		λ	81° 37' 39".7223

Explanation of form:

$$x' = x - C$$

$$S_g = x' - \frac{x'^3}{(6\rho_o^2)_g}$$

$$S_m = \frac{1}{R} \left(\frac{1200}{3937} \right) S_g$$

R = scale reduction factor

ϕ' is interpolated from table of y

$$\Delta\phi = C S_m^2$$

$$\phi = \phi' - \Delta\phi$$

$$\Delta\lambda_1 = S_1 A \sec \phi$$

$$\log S_1 = \log S_m - \text{cor. arc to sine}$$

$$\log \Delta\lambda = \log \Delta\lambda_1 + \text{cor. arc to sine}$$

$$\lambda = \lambda(\text{central mer.}) - \Delta\lambda$$

5139

Geodetic positions from transverse Mercator coordinates

State Fla EastStation X 300,000
Y 1,800,000

x		log S_g	5.30102335
C		log (1200/3937)	9.48401583
$x' (=x-C)$	- 200,000	log (1/R)	2555
$x'^3/(6\rho_o^2)_g$	- 3.06	log S_m	4.78506473
S_g	199,996.94	cor. arc to sine	- 659
		log S_1	4.78505814
log S_m^2	9.570129	log A	8.50937463
log C	1.154376	log sec ϕ	0.05938076
log $\Delta\phi$	0.724505	log $\Delta\lambda_1$	3.35381353
		cor. sine to arc	+ 868
y		log $\Delta\lambda$	3.35382221
ϕ' (by interpolation)	29° 17' 07.5147	$\Delta\lambda$	2258.5110
$\Delta\phi$	- 5.3028	λ (central mer.)	81° ' "
ϕ	29° 17' 02.2119	$\Delta\lambda$	
		λ	81° 37' 38.5110

Station _____

x		log S_g	
C		log (1200/3937)	9.48401583
$x' (=x-C)$		log (1/R)	
$x'^3/(6\rho_o^2)_g$	-	log S_m	
S_g		cor. arc to sine	-
		log S_1	
log S_m^2		log A	
log C		log sec ϕ	
log $\Delta\phi$		log $\Delta\lambda_1$	
		cor. sine to arc	+
y		log $\Delta\lambda$	
ϕ' (by interpolation)	° ' "	$\Delta\lambda$	"
$\Delta\phi$	-	λ (central mer.)	° ' "
ϕ		$\Delta\lambda$	
		λ	

Explanation of form:

$$x' = x - C$$

$$S_g = x' - \frac{x'^3}{(6\rho^2)_g}$$

$$S_m = \frac{1}{R} \left(\frac{1200}{3937} \right) S_g$$

R = scale reduction factor

ϕ' is interpolated from table of y

$$\Delta\phi = C S_m^2$$

$$\phi = \phi' - \Delta\phi$$

$$\Delta\lambda_1 = S_1 A \sec \phi$$

$$\log S_1 = \log S_m - \text{cor. arc to sine}$$

$$\log \Delta\lambda = \log \Delta\lambda_1 + \text{cor. arc to sine}$$

$$\lambda = \lambda(\text{central mer.}) - \Delta\lambda$$

PLANE COORDINATES ON TRANSVERSE MERCATOR PROJECTION

State Fla. East Station Nander 1935

λ (Central meridian)

81° 00'

ϕ 29° 18' 55.13"

λ

81 41 28.57

$\Delta\lambda$ (Central meridian- λ)

41 28.57

$\Delta\lambda$ (in sec.)

2488.57

log $\Delta\lambda$	<u>3.39594986</u>	log S_m^2	<u>9.654118</u>
Cor. arc to sine	<u>1053</u>	log C^*	<u>1.1549356</u>
log $\Delta\lambda_1$	<u>3.39593933</u>	log $\Delta\phi$	<u>0.8090534</u>
log cos ϕ	<u>9.94048583</u>		
colog A	<u>1.49062607</u>	ϕ	<u>29° 18' 55.13</u>
log S_1	<u>4.82705123</u>	$\Delta\phi$	<u>+ 6.4425</u>
Cor. sine to arc	<u>+ 800</u>	ϕ'	<u>29 19 01.5725</u>
log S_m	<u>4.82705923</u>		
log 3937/1200	<u>0.51598417</u>	Tabular difference of y for 1" of ϕ'	
log R	<u>2555</u>		
log S_g	<u>5.34301785</u>	y (for min. of ϕ')	
log S_g^3	<u>16.0290536</u>	y (for seconds of ϕ')	<u>+ 1,811,520.32</u>
log $1/6\rho_o^2R^2$	<u>4.5821873</u>	y	
log $(S_g^3/6\rho_o^2)_g$	<u>0.6112409</u>		
S_g	<u>220,301.70</u>	log sin $\frac{\phi+\phi'}{2}$	
$(S_g^3/6\rho_o^2)_g$	<u>4.09</u>	log $\Delta\lambda$	
x'	<u>- 220,305.79</u>	log $\Delta\alpha_1$	
	<u>5</u>	log $(\Delta\lambda)^3$	
	<u>2,000,000.00</u>	log F	
x	<u>279,694.21</u>	log b	
		$\Delta\alpha_1$	
		b	
		$\Delta\alpha$	
		$\Delta\alpha$	

* Take out C first for ϕ and correct for approximate ϕ' .

(R 349)

$$x = 2,000,000.00 + x'$$

$$x' = S_g + \left(\frac{S_g^3}{6 \rho_0^2} \right)_g$$

$$S_g = \frac{3937}{1200} S_m R$$

$$\log S_m = \log S_l + \text{cor. sine to arc}$$

$$S_l = \frac{\Delta \lambda_1 \cos \phi}{A}$$

$$\log \Delta \lambda_1 = \log \Delta \lambda - \text{cor. arc to sine}$$

$$\left(\frac{S_g^3}{6 \rho_0^2} \right)_g = \frac{S_g^3}{6 \rho_0^2 R^2}$$

$$\phi' = \phi + \Delta \phi$$

$$\Delta \phi = C S_m^2$$

$$\Delta \alpha = \Delta \lambda \sin \frac{\phi + \phi'}{2} + F(\Delta \lambda)^3$$

S_m = distance in meters from point to central meridian

S_l = distance in meters from point to central meridian reduced to sine

S_g = grid distance in feet from point to central meridian

R = scale reduction factor

Values of y in minutes and tabular difference for one second, scale reduction factors, $\text{colog } A$, and $\log C$ are given in auxiliary tables.

REVIEW OF AIR PHOTO COMPILATION NO. T-5139

Chief of Party: Hubert A. Paton

W. C. Russell
Compiled by: R. H. Young.

Project: HT168

Instructions dated: Mar. 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) No Important detail.
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)
The position of the tide gage house, off shore, was plotted from the theodolite cuts taken by L. D. Graham.
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 transmitted.
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) No large nor unusual adjustments were necessary.
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) None on sheet.
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) submitted by L. D. Graham together with G. C. Sheet YY.
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) No Landmarks.
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) No bridges over navigable streams. The bridge over Salt Springs Creek, shown on the photos has now been removed.
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. A. 1927 and the reference station is correctly noted. Yes. Field positions were used, the are not having been adjusted.
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. New symbol for fire breaks used.
 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.

17. Remarks: The shoreline in the northwest corner of the sheet should be used for the hydrographic sheets. Other detail may not be located very accurately. Houses and other detail missing in this extreme corner.

18. Examined and approved;

Hubert A. Paton
Hubert A. Paton
Chief of Party

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5139

Scale 1:10,000

Data Record

Triangulation to 1935.

Photographs taken February and March 1935. Refer to page 2, descriptive report, T-5139.

Field inspection, March and August 1937.

Planetable graphic control surveys, March 1937.

Hydrographic surveys, 1937.

The field inspection was made for the purpose of interpreting the photographs. T-5139 is of the date of the photographs except for the following details:

- (1) From 1937 graphic control surveys:
 - (a) Location of described recoverable topographic stations.
 - (b) Short sections of shoreline not easily interpreted from the photographs.
- (2) From field inspection:
 - (a) The nonexistence of a trail which appeared to have existed at the time the photographs were taken. The trail was in a fire break extending east and west in latitude $29^{\circ} 18.5'$.
- (3) Location of the tide gage house by theodolite cuts in 1937.

Graphic Control Surveys

CS 142 M (1937), 1:20,000

CS 142 M is on 1:20,000 scale whereas T-5139 is on 1:10,000 scale. CS 142 M was surveyed to locate hydrographic control, obstructions, and aids to navigation. Very little shoreline or other detail is shown.

In general the air photographs show the detail clearly and the field inspection was adequate. T-5139 has been carefully compared with and corrected against the field photographs and notes, the above graphic control survey, and the recent hydrographic surveys. In case of any differences between the graphic control survey and T-5139, the latter is correct.

All detail on the above graphic control survey within the area of T-5139 is now shown on T-5139 except magnetic declination, and temporary planetable stations.

Previous Topographic Surveys

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

This is an inadequately controlled reconnaissance survey. It has been examined in connection with T-5139 but no detailed comparison was necessary. T-5139 is adequate to supersede the section of T-2027 which it covers.

Recent Hydrographic Surveys

H-6266 (1937), 1:20,000

The above hydrographic survey is on a scale of 1:20,000 whereas T-5139 is on 1:10,000 scale.

The shoreline on the hydrographic survey was transferred by projector from the air photographic survey. The accuracy of the transfer was not checked during this review.

There are no conflicts between the soundings on H-6266 and the detail on T-5139.

Comparison with Chart 508 (Plate corrected to 11/12/36), scale 1:40,000

The pier at the entrance to Salt Springs Creek is gone. No ruins were indicated on the photographs or located by the hydrographic or graphic control surveys.

The field inspection notes show that the bluff does not extend to Lat. 29° 17.3' as charted; at least it is not of sufficient height at that latitude to warrant charting.

Recoverable hydrographic and topographic stations

Two recoverable hydrographic and topographic stations appear on this survey and are filed under the number of this survey (T-5139).

Landmarks

None recommended within the area of T-5139.

Temporary hydrographic stations

A number of temporary hydrographic stations along Salt Springs Creek were located on the photographs by the field inspection party and radial plotted. These stations will be removed from the drawing after the hydrographic sheet is reviewed.

Changes

All cypress shoreline on T-5139 was redrafted in this office from open tree symbols to a light line in accordance with Field Memorandum No. 1 (1938). The shoreline as drafted by the field party was in accordance with instructions issued to the party prior to Field Memorandum No. 1 (1938).

Drafting

The drafting on this sheet was neat and the detailing complete.

Descriptive Report

The descriptive report was complete and satisfactorily covered all items of importance except that no statement of accuracy was given. From a review of the sheet it is believed that the probable error in geographic position is 8-10 meters except in the area north of latitude 29° 20' and west of longitude 81° 43.3' where the probable error may be somewhat greater (refer to bottom of page 4, descriptive report).


Additional Work

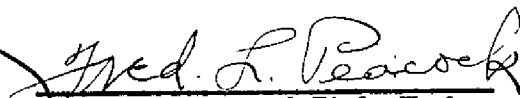
This survey is complete and adequate for chart compilation.

Reviewed in office by T. M. Price, Jr., May 31, 1938.

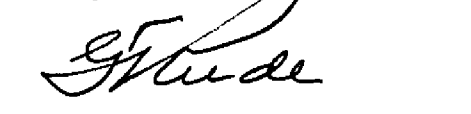
Inspected by B. G. Jones

Examined and approved:


Thos. B. Reed
Chief, Section of Field Records


Fred L. Peacock
Chief, Section of Field Work


K.T. Adams
Chief, Division of Charts


G. H. Hude
Chief, Division of Hydrography
and Topography.