

5131

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

DESCRIPTIVE REPORT

Topographic } Sheet No. 5131
~~Hydrographic~~ }

State Florida

LOCALITY

~~Florida East Coast~~

Vicinity of Nassau Sound

~~Nassau River to St. Johns River~~

Nassau River

1935

CHIEF OF PARTY

S. B. Grenell

U. S. GOVERNMENT PRINTING OFFICE: 1934

5131

Applied to drawing of Chart 577 - Dec. 20, 1935 - J.F.C.

plied to Chart 841 - March 24, 1936 - W.A. Bruder

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.

REGISTER NO. 5131

State Florida

General locality Florida East Coast Vicinity of Nassau Sound
Nassau River

Locality Nassau River to St. Johns River

Scale 1:20,000 Date of photographs: 9-21-33; 10-13-33
survey comp.: 19...

Vessel Aerial photo compilation party No. 18

Reviewed and recommended for approval:-

Chief of party Lieut. (j.g.) S. B. Grenell

Photographs plotted by:- F. B. Hickman

~~Surveyed by~~

Inked by John Tassapoulos

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated November 10, 1933, 19...

Remarks: Compilation of aerial photos Nos.:- M-68 36 to 50;

M-66 153 to 166 Blue print on a scale of 1:21,621 registered

--NOTES OF COMPILATION--

One copy of this form must accompany each chart from beginning to completion. The last draftsman, whose name appears on this form, is responsible for it and all personnell will endeavor to keep these forms up to date and correctly posted. This form is very important inasmuch as the final Descriptive Report of the chart compiled is based upon the information contained herein.

SHEET No. 5131

M-68 36

50

PHOTO NO. M-66 153 to PHOTO NO. 166

BY	START	FINISH
ROUGH RADIAL PLOT <u>B. B. Lewis</u>	_____	_____
SCALE FACTOR (.925) <u>B. B. Lewis</u>	_____	_____
SCALE FACTOR CHECKED <u>S. B. Grenell</u>	_____	_____
PROJECTION <u>A. M. Gruber</u>	<u>11-8-34</u>	<u>11-8-34</u>
PROJECTION CHECKED <u>F. B. Hickman</u>	<u>11-8-34</u>	<u>11-8-34</u>
CONTROL PLOTTED <u>W. R. Taylor, Jr.</u>	<u>11-10-34</u>	<u>11-10-34</u>
CONTROL CHECKED <u>R. C. Schrimmer</u>	<u>11-21-34</u>	<u>11-21-34</u>
TOPOGRAPHY TRANSFERRED _____	_____	_____
TOPOGRAPHY CHECKED <u>S. B. Grenell</u>	<u>Various Times</u>	_____
SMOOTH RADIAL LINE PLOT <u>F. B. Hickman</u>	<u>11-22-34</u>	<u>11-27-34</u>
RADIAL LINE PLOT CHECKED <u>S. B. Grenell</u>	_____	<u>11-27-34</u>
DETAIL INKED <u>John Tassapoulos</u>	<u>1-8-35</u>	<u>3-15-35</u>
AREA DETAIL INKED <u>122.0</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m. <u>53.2</u>	Statute Miles	
LENGTH OF SHORE LINE UNDER 200m. <u>84.3</u>	Statute Miles	
GENERAL LOCATION <u>Florida East Coast</u>	<u>Vicinity of Nassau Sound</u>	
LOCATION <u>Nassau River to St. Johns River</u>	<u>Nassau River</u>	
DATUM STATION <u>Duval North Base, 1932</u>	LATITUDE <u>30°-29'-24.100"</u> (742.1M) (Adj.)	
DATUM <u>N. A. 1927</u>	LONGITUDE <u>81°-37'-32.274"</u> (860.7M)	

INSPECTION REPORT
for
COMPILATION No. 5131
Scale: 1:20,000

REFERENCE:-

In reviewing this sheet in the Washington office reference should be made to the General Report for 5-Lens Compilations forwarded with Compilation No. 5114.

General Information:-

This compilation covers the general area westward from single lens 1:10,000 compilations of the Inland Route between Nassau River on the north to Lat. $30^{\circ} - 25'$ where a junction will be made later with the single lens 1:10,000 flights of the St. Johns River which will be compiled by Ensign T. M. Price.

The various topographical features have been clearly shown by conventional symbol and have been noted in the compilers report. No further comment is required by the Chief of Party.

Control:-

The radial plot was controlled entirely by triangulation and traverse from the following sources:

First Order Coastal Arc by C. D. Meaney, 1932
Coordinating scheme by C. M. Durgin, 1933
Traverse by the compilation party ITALIA to DUVAL NORTH BASE.

Comparison With Contemporary Surveys:

All junctions have been completed with adjoining compilations. Shore-line detail has been checked in the Nassau River, Cedar Creek and Dunn Creek with rodged detail from the aluminum control sheets executed by Lieut. H. A. Paton in 1934. *Broward Creek*

Landmarks and Coast Pilot Notes:

The above have been submitted for this area by H. A. Paton in 1934.

Bridge Data:-

Draw, span and clearance have been shown on the overlay sheet for the highway and A. C. L. R.R. bridges crossing Cedar Creek on the south edge of the compilation. *(Clearance from Bridge Back) Broward*

Names on Overlay Sheet:-

All names shown on the overlay sheet were taken from current issues of charts and Geological Survey Quadrangles of the area.

Progressive Military Quads

Respectfully submitted,

S. B. Grenell
S. B. Grenell,
Chief of Party

REPORT OF COMPILATION:-

Radial Line Plot:

This sheet was compiled by the standard radial line plot method. Some difficulty was experienced in holding plot at station CARLOS, flight M-66. Due to lack of control on flight M-68, part of the traverse run KINGSLAND to ITALIA to DUVAL NORTH BASE was used. The plot was rerun in the area surrounding, and controlled by BROOKS - SCANLON W.T. which was picked in error on several photographs.

Common points were found in error in several places which error was attributed to both obscurity of detail and misinterpretation of landmarks.

Plot was continued across the North Junction with no trouble there being no scale difference in the two sheets.

Adjustment of Photographs:-

Excessive tilt was encountered throughout both flights, M-66 and M-68 necessitating minute adjustment between points. Additional points were supplied by interlacing definite radial positions. Points for the most part were, however, well selected and distributed.

INTERPRETATION:

Pictures were not very clear on flight M-66 and considerable difficulty was experienced in defining detail, much of this was caused by sun glare over water areas. Heavily wooded tracery on this sheet indicates the natural drainage of the land. These swampy areas are composed largely of gum and cypress trees. Telegraph lines are shown by strip of open area paralleling the main highway.* Broken high water line and marsh lining indicates partially flooded areas - such conditions are noted along the eastern border of the sheet.

COMPARISONS WITH CONTEMPORARY SURVEYS:-

Junctions with adjoining sheets made in this office are complete and satisfactory. The shoreline was checked against hydro sheets and found to be correct except shoreline of Cedar Creek and Dunn Creek at 30°-25'. Through check with rodded shoreline executed by party of H. A. Paton, error was found in plotted points in this area. After careful check of control picked on photographs. Station BROOKS - SCANLON W. T. was found picked consistently in error on practically all photographs. After correction was made and new points intersected shoreline traced checked perfectly with field topography. An additional check was noted in the agreement of docks, trestles etc of compilation to rodded topography of the field party.

NOTE:- Upper reaches Pumpkin Hill Creek compiled on this sheet for ~~San Antonio~~ hydro party under H. A. Paton and superseded tracing on single lens ~~in Review~~ 1:10,000 scale sheet No. 5235 *celluloid*

Blue tracing on eastern border of sheet was incorporated as a junction medium through use of camera projector in order that these single lens sheets could be dispatched to the Washington D.C. office on schedule.

* In most places the broken H.W.L. has been made continuous. The broken marsh lines show partially flooded areas.

COMPARISONS WITH OTHER SURVEYS:-

The area covered by this compilation has not been recently charted; therefore no checks could be made relative to the removal of detail. Checks were made with two Geological charts, and general features were found very similar.

ACCURACY AND COMPLETENESS:-

Area covered by this sheet is complete in every detail. As nearly as can be determined from the photographs, all well defined detail is located with a probable error of not more than 4 meters; less well defined detail is located with a probable error of not more than 10 meters.

PHOTOGRAPHS:-

No.	to	No.	Date	Time	Stage of Tide
M-66	154	166	9-21-33	9:30AM	High Tide
M-68	37	50	10-13-33	9:30AM	High Tide

John Tassapoulos
John Tassapoulos
Draftsman

Approved:

S. B. Grenell
S. B. Grenell

The statement of probable error given above is considered too high. A better estimate would be 0.3 to 0.5 m.m. for well defined detail and 0.3 to 1.0 m.m. for other detail.

Frank G. Emeline

Survey No. 15131GEOGRAPHIC NAMES 242Date. 7-11-35
47Chart No. 1243, 577

Diagram No. _____

*, Approved by the Division of Geographic Names, Department of Interior.

Ø, Not Approved by the Division of Geographic Names, Department of Interior.

R, Referred to the Division of Geographic Names, Department of Interior.

San Carlos Creek, Camp Pt., Pecos River, N. - (2)

Status	Name on Survey	Name on Chart		New Names in local use	Names assigned by Field	Location
		On 1243	On 577	On P.M.M.	Quad.	Jacksonville, Fla.
	<u>Starrett Creek</u>	Same	Same	✓	Same	✓ S
	<u>Samples Creek</u> ?	"	"	✓	"	✓ S
	<u>Henderson Landing</u>	None	None	✓	"	✓ S
	<u>Burton Creek</u>	Same	"	✓	"	✓ S
	<u>Nassau River</u>	"	Same	✓	"	✓ S R P
	<u>Burton Island</u>	None	None	✓	"	✓ S
	<u>Mink Creek</u> ?	Same	"	✓	"	✓ S
	<u>Wrights Landing</u>	None	"	✓	"	✓ S
	<u>Deese Creek</u>	Same	"	✓	"	✓ S
	<u>Deese Landing</u>	None	"	✓	"	✓ S
	<u>Lotton Point</u>	Same	—	✓	"	✓ S
	<u>Lotton Creek</u>	"	—	✓	"	✓ S
	<u>Christopher Creek</u>	"	Same	✓	"	✓ S
	<u>Back River</u>	"	"	✓	"	✓ F
	<u>Inconstation Creek</u>	"	—	✓	"	✓ S
	<u>Pearson Island</u>	"	—	✓	"	✓ S
	<u>Tisonia</u>	None	—	✓	"	✓ S R
	<u>Seaton Creek</u>	"	—	✓	"	✓ S
	<u>Seaton Landing</u> ?	"	—	✓	"	✓ S
	<u>Thomas Creek</u>	Same	—	✓	"	✓ S R P
	<u>Seaboard Air Line Ry</u>	"	None	✓	"	
	<u>Atlantic Coast Line R.R.</u>	"	"	✓	"	
	<u>Broward</u>	None	—	✓	"	✓ J

Date. 7-11-35

GEOGRAPHIC NAMES 142

Survey No. F-5131

Chart No. 1243, 577

Diagram No. _____

Approved by the Division of Geographic Names, Department of Interior. ✕

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart		New Names in local use	Names assigned by Field	Location
		On 1243	On 577	On P.M. Quad.	Jacksonville	
	<u>Clapboard Creek</u>	Some	Same ✓		✓ Same ✓	M
	<u>Browns Creek</u>	"	Brown's Creek ✓		Brown's Creek ✓	J
	<u>Browns Island</u>	"	Brown's Island ✓		Brown's Island ✓	J
	<u>Pelotes Island</u>	"	Same ✓		✓ Same ✓	J
	<u>Terrapin Creek</u>	None	Terrapin Branch		✓ " ✓	J
	<u>Dunn Creek</u>	Same	Dunn's Creek ✓		✓ " ✓	J
	<u>Eastport</u>	"	Same ✓		✓ " ✓	J. Eastport P
	<u>Sweetwater Creek</u>	"	" ✓		✓ " ✓	J
	<u>Dosin</u>	"	" ✓		✓ " ✓	J
	<u>Fitzpatrick Creek</u>	"	" ✓		✓ None ✓	M.
	<u>Broward River</u>	"	" ✓		✓ Same ✓	J
	<u>Trout River</u>	"	" ✓		✓ " ✓	J
	<u>Lem Turner Road</u>	None	None		✓ " ✓	
	Walt Bay (omit)	"	"		✓ " ✓	J
	<u>Duval</u>	"	"		✓ " ✓	J R
	<u>Jacksonville Municipal Airport</u>	None	"		✓ None	
	<u>U.S. Highway No. 17 (Yulee Road)</u>	None	"		✓ Yulee Road	
	<u>Drummond Point</u>	Some	Some ✓		✓ Same ✓	J
	<u>Broward Point</u>	"	" ✓	Not on F-5131	✓ " ✓	J
	<u>Pumpkin Hill Creek</u>	"	" ✓		✓ " ✓	F
	<u>Edwards Creek</u>	"	" ✓		✓ " ✓	S
	<u>Broward Islands</u>	"	Broward's Islands ✓		✓ " ✓	S
		names approved 10/25/35 KTA				

GEOGRAPHIC NAMES

Survey No.

GEOGRAPHIC NAMES										
Survey No.										
Name on Survey										
	A.	B.	C.	D.	E.	F.	G.	H.	K.	
* <u>Edwards Flats</u>	577									1
* <u>Tiger Point</u>	577									2
* <u>Buckhorn Bluff</u>	577									3
										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
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										17
										18
										19
										20
										21
										22
										23
										24
* Geographic Names standard examined 6-28-90 REE										25
										26
										27

M 234

REVIEW OF AIR PHOTO COMPILATION NO. 5131

Chief of Party: S.B. Grenell

Compiled by: John Tassapoulos

Project: F.P. 4, Ga., Party #18

Instructions dated: Nov. 10, 1933.

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)
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)
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)
Transverse Italia to Dural N. Base
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.
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)
7. ✓ High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

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) ✓
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)
Form 524 by H.A. Paton, 1934
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)
Form 567 by H.A. Paton, 1934
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) ✓ ?
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)
13. The geographic datum of the compilation is *N.A. 1927* and the reference station is correctly noted. *Adjusted*
14. ✓ Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j) ✓
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. ✓
 2. ✓ The degrees and minutes of Latitude and Longitude are correctly marked. ✓

3. ✓ All station points are exactly marked by fine black dots.
4. ✓ Closely spaced lines are drawn sharp and clear for printing.
5. Topographic symbols for similar features are of uniform weight.
6. ✓ All drawing has been retouched where partially rubbed off.
7. ✓ Buildings are drawn with clear straight lines and square corners where such is the case on the ground.

(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:

18. Examined and approved;

April 3, 1935

J. B. Borden

Chief of Party

19. Remarks after review in office:

Reviewed in office by:

Frank G. Jenkins

Examined and approved:

C. K. Green

Chief, Section of Field Records

L. O. Lobnitz

Chief, Division of Charts

J. B. Borden

Chief, Section of Field Work

G. H. Hude

Chief, Division of Hydrography
and Topography.

REVIEW OF AIR PHOTO COMPILATION T 5131
Scale 1:20,000

Comparison with Graphic Control Surveys

(a) T 6234 (1934), 1:10,000 covers a short section of Back River in the northeast corner of this compilation.

No discrepancies.

(b) T 4899 (1934), 1:10,000 covers all of Nassau River and Pumpkin Hill Creek shown on this compilation.

No discrepancies.

All detail on T 6234 and T 4899 within the limits of this compilation is shown on T 5131 except temporary stations, temporary tide station, and magnetic meridian.

Comparison with Contemporary Hydrographic Surveys

(a, b, and c) H 5757, H 5799 and H 5800 (1934,1935) scale 1:10,000

There are no conflicts between the hydrography and T 5131.

Comparison with Previous Topographic Surveys

(a) T 1232a (1871), 1:20,000, covers eastern third of T 5131.

Numerous changes have occurred in the many small islands in Nassau River, Pumpkin Hill Creek, and Edwards Creek. The islands shown on this compilation are all that are now in existence.

The general outline of streams and high ground has remained practically the same.

T 5131 is adequate to supersede T 1232a for the area covered.

(b and c) T 1332b (1871), 1:20,000, and T 550 (1855), 1:10,000, cover a small area of Browns Creek.

The large marsh island at the mouth of Browns Creek is no longer in existence.

T 5131 is adequate to supersede T 1232b and T 550 for the area covered.

(d) T 551 (1855), 1:10,000, covers a small part of the compilation north of lat. 30° 25'.

The compilation is adequate to supersede T 551 for the area it covers.

Comparison with Charts(a and b) Charts Nos. 577, 1243

Turner Pond (lat. $30^{\circ} 24.9'$, long. $81^{\circ} 38.2'$) does not extend north of lat. $30^{\circ} 25'$ as shown on the charts.

Mill Pond on chart 577 at lat. $30^{\circ} 26.5'$, long. $81^{\circ} 39'$ is no longer in existence.

San Carlos Creek (lat. $30^{\circ} 25'$, long. $81^{\circ} 32.8'$) does not extend north to join Browns Creek as shown on the charts.

Additional corrections to the chart as a result of this survey have been discussed under Comparison with Previous Topographic Surveys.

No new landmarks or aids to navigation have been submitted within the limits of this compilation. All aids to navigation on the charts are shown on this compilation.

Remarks

Eleven triangulation stations were added to the compilation by

M. D. CROOK and checked by J. C. Lande.

July 31, 1935.

M. D. CROOK

Frank G. Eskine

Our ninety hours were spent reviewing the sheet. A great deal of radial plotting was necessary to clear up discrepancies with the Graphic Control Surveys amounting to from 0.5 mm. to 2.0 mm. In a majority of the cases the compilation was found in error. Quite a bit of detail was added to the compilation from the photographs, among the additions were several islands and fill docks.

J. C. Lande

See note on next page.