

5130

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

DESCRIPTIVE REPORT

Topographic Sheet No. 5130
~~Hydrographic~~

State Florida

LOCALITY
Vicinity of Nassau Sound
Florida East Coast

Upper Reaches of
~~Bald River to~~ Nassau River

1935

CHIEF OF PARTY

S. B. Grenell

U. S. GOVERNMENT PRINTING OFFICE: 1934

5130

Applied to drawing of Chart 577 Dec 27, 1935 - J.W.

Applied to new chart 841 Mar. 24, 1936 W. A. Snyder

" " " " 453 April 16, 1937 J. S. Ladd

Applied to Chart 1242 Mar. 16, 1937 G. H. S.

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. 5130

State Florida

General locality Vicinity of Nassau Sound
Florida East Coast

Locality Upper Reaches of
Bells River to Nassau 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. Grenall

Photographs plotted by:

~~Surveyed by~~ F. B. Hickman

Inked by W. C. Oliver

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-66 148 to 154

M-68 24 to 37.

Scale of Finished Print 1:20,000

Scale of Blue Print 1:21,638

--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. 5130

PHOTO NO. M-66 140 to PHOTO NO. 155
M-68 22 38

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>11-6-34</u>	<u>11-7-34</u>
PROJECTION CHECKED <u>F. B. Hickman</u>	<u>11-7-34</u>	<u>11-7-34</u>
CONTROL PLOTTED <u>W. R. Taylor, Jr.</u>	<u>11-7-34</u>	<u>11-8-34</u>
CONTROL CHECKED <u>A. C. Schrimper</u>	<u>11-9-34</u>	<u>11-9-34</u>
TOPOGRAPHY TRANSFERRED <u>W. C. Oliver</u>	<u>Various Times</u>	
TOPOGRAPHY CHECKED <u>S. B. Grenell</u>	<u>" "</u>	
SMOOTH RADIAL LINE PLOT <u>F. B. Hickman</u>	<u>11-12-34</u>	<u>11-30-34</u>
RADIAL LINE PLOT CHECKED <u>S. B. Grenell</u>		<u>11-30-34</u>
DETAIL INKED <u>W. C. Oliver</u>	<u>1-4-35</u>	<u>3-15-35</u>
AREA DETAIL INKED <u>123.0</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m. <u>33.1</u>	Statute Miles	
LENGTH OF SHORE LINE UNDER 200m. <u>84.2</u>	Statute Miles	
<u>Vicinity of Nassau Sound</u>		
<u>GENERAL LOCATION</u> <u>Florida East Coast</u>		
<u>LOCATION</u> <u>Upper Reaches of Bells River to Nassau River</u>		
DATUM STATION <u>Nassau, 1932'33</u>	LATITUDE <u>30-34 - 18.645 (574.2 M)</u>	
DATUM <u>N. A. 1937</u>	LONGITUDE <u>81-32 - 14.723 (392.3 M)</u> (adjusted)	

INSPECTION REPORT
for
COMPILATION No. 5130
Scale: 1:20,000

REFERENCE:-

In reviewing this compilation in the Washington office reference should be made to the General Report for 5-Lens Compilations forwarded with compilation 5114.

GENERAL INFORMATION:-

This compilation covers the headwaters of the Nassau River and a section of the fast land to the northward. Except for the roads and railroads the Nassau River is the only definite feature of importance on the compilation. This stream is exceptionally crooked and represents a great deal of careful adjustment in the compilation. The character of the land is such in this region that it would be almost impossible to rod in this stream system with a planetable.

TOPOGRAPHIC SYMBOLS:-

The roads, railroads and trails have been shown with the standard symbols. A section of the roadbed of a long abandoned logging tramroad passes through the southeast corner of the sheet and is indicated only by a more or less definite line of brush and second growth pine which now grows on the slightly elevated roadbed.

The areas shown as sparsely wooded have been quite thoroughly logged off; the pine timber being removed and the diœduous growth left standing. The swampy stretches which are mostly gum and other diœduous growth are still heavily wooded and indicate the general drainage system of the area.

CONTROL:-

The radial plot was entirely controlled by triangulation and traverse. The triangulation by C. D. Meaney, 1932 and C. M. Durgin, 1933 was inadequate to control the plot so a traverse in the shape of a T was run between first order stations KINGSLAND, ITALIA, and DUVAL N. BASE with a center tie at ITALIA. The closures on both sections of traverse were under two meters and the traverse stations held the plot excellently, furnishing adequate control.

COMPARISONS WITH CONTEMPORARY SURVEYS:-

Lieut. H. A. Paton made a topographic and hydrographic survey of the Nassau River in 1934. He carried plane table control for his hydrography to the vicinity of the S. A. L. R.R. bridge but from there on up the river his hydrography was controlled by the compiled shore line. There were several sections of rodged shore line as well as fixed hydro lines in the lower river which were checked against the compilation and the latter found to be correct. The agreement in this section was excellent - probably due to exceptionally well radial plot control.

*This bearing was not marked and
the relations are not shown on the compilation.
Bgg*

LANDMARKS FOR COAST PILOT NOTES:-

The above have been submitted by Lieut. H. A. Paton who executed the hydrographic surveys in this section.

NAMES ON OVERLAY SHEET:-


All names were taken from current issues of charts and Geological Survey Quadrangles. The latter were used only in checking names; the detail is too generalized and inaccurate on the quadrangles for a direct comparison.

BRIDGE DATA:-

There are two bridges across the Nassau River in Lat. $81^{\circ} - 36.5'$ - the S. A. L. R.R. and U. S. Hwy. #17 with data shown on the overlay as follows:

U.S. Hwy. #17	Fixed Span	Vertical clearance	13' M.L.W.
S.A.L. R.R.	" "	" "	15' M.L.W.

Respectfully submitted,


S. B. Grenell
Chief of Party #18

REPORT OF COMPILATION:-RADIAL LINE PLOT:-

This sheet was compiled by the standard radial line plot method. No difficulty was experienced except that some stations fall off on a few pictures. A few of the plus traverse stations fall off on all pictures. Common points between the flights held and the adjoining sheets were on the same scale. Where control points fell off a small amount on some prints the discrepancy could be attributed to dim detail for the tie-in.

ADJUSTMENT OF PHOTOGRAPHS:-

Excessive tilt was encountered between the two flights in the vicinity of the Nassau River. Radial points were well selected and spaced except between Lat 30 - 41 - 30 - 40 and Long. 81 - 31 and 81 - 30. The method of interlacing points was used to run the detail through the area.

INTERPRETATION:-

Pictures were clear except for sun spots along the 1:10,000 junction. The line of trees and brush extending from Lat. 30 - 33.2; Long. 81 - 33.2 to Lat. 30 - 36.9; Long. 81 - 30.8 indicates an abandoned tramroad. The heavily wooded tracery on this sheet indicates the natural drainage of the land. These swampy areas are composed largely of gum and g press trees. The narrow opening in trees, running parallel to the main road, shows a telegraph line. The broken highwater lines in the eastern part of the sheet indicates partially flooded areas.

COMPARISONS WITH CONTEMPORARY SURVEYS:-

Junctions with adjoining sheets were made in this office and are complete and satisfactory. The shoreline was checked against the hydro sheets, and checked within the allowable limits. Small differences, probably being due to difference of interpretation.

COMPARISONS WITH OTHER SURVEYS:-

The area covered by this compilation has not been charted at any recent date; therefore, there are no details to be removed from the charts. An old Geological Survey Map, St. Marys Quadrangle, covers the area and the general features are very similar.

ACCURACY AND COMPLETENESS:-

The 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 with an error of not more than 10 meters.

See Review

PHOTOGRAPHS:-

<u>No.</u>	<u>to</u>	<u>No.</u>	<u>Date</u>	<u>Time</u>	<u>Stage of Tide</u>
M-66	142	154	9-21-33	9:30 AM	High Tide
M-68	24	37	10-13-33	9:30 AM	Low Tide

W.C. Oliver
W. C. Oliver,
Draftsman

Approved:

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

REVIEW OF AIR PHOTO COMPILATION T 5130
1:20,000

1. Comparison with Graphic Control Surveys

(a) T 4899, T 6190b, T 6223a (1934), 1:10,000

Slight discrepancies in shoreline with the above plane table surveys have been examined and rectified by replotting the compilation from the photographs except for a few differences of 0 to 0.5 mm which are apparently due to sketching between rod readings.

(b) All information and detail shown on the above listed graphic control surveys within the area of the compilation is now shown on the compilation except the temporary topographic signals and magnetic meridians.

2. Comparison with Recent Hydrographic Surveys

(a) H 5754, H 5757, H 5800 (1934), 1:10,000

A small island at lat. $30^{\circ} 33.6'$, long. $81^{\circ} 31.3'$ has been added to the compilation which is not shown on H 5757 covering this area. This has been referred to the reviewing section and has now been added to the hydrographic survey. Several small shoreline corrections have been made on the compilation but these do not affect the soundings. The hydrographic surveys listed above are now in agreement with the compilation.

3. Comparison with Former Surveys

(a) T 614 (1857) 1:10,000, and T 1232a (1871), 1:20,000

The portions of the above surveys covering this area show no important changes. The compilation is complete and adequate to supersede the portions of the above mentioned surveys which it covers.

4. Recoverable Stations

The recoverable topographic stations which are shown on the graphic control surveys T 4899, T 6190b and T 6233a and are covered by the compilation have been added to the compilation in this office.

Triangulation stations added to the compilation in the office are

Moon 1934

Lofton 1934

Gardner 1934

Nassau Stack 1934

Cuno 1934

Plotted by L. C. Lande; checked by Joseph A. Anderson.

Descriptions of the recoverable topographic stations are filed on Form 524 under the graphic control survey numbers T 4899, T 6190b and T 6223a.

5. Remarks

(a) The accuracy of 4 and 10 meters given on page 3 of the preceding report is high for work on this scale. A better estimate would be 0.3 to 0.5 mm for intersected points and 0.3 to 1.0 mm for other detail.

(b) The projection diagonals have been checked in this office and found correct. No further check has been made during this review.

6. Comparison with chart 1243 and U. S. G. S. St. Marys Quadrangle

Two docks are shown on the compilation at lat. $30^{\circ} 33.9'$, long. $81^{\circ} 36.8'$ and lat. $30^{\circ} 39.6'$, long. $81^{\circ} 31.4'$ which are not shown on chart 1243. Triangulation Station Nassau Stack 1934 at lat. $30^{\circ} 33' 1763$ m., long. $81^{\circ} 31' 530$ m. viewed from Nassau River and recommended as a landmark on graphic control survey T 4899 is shown on the compilation.

Comparison with the U. S. Geological Survey quadrangle shows the same general outline of swamps as indicated on this compilation by the heavy tree symbol.

Main through roads and the more important of the secondary roads are shown complete on this compilation by double solid and double dashed lines respectively. These roads are not complete on the quadrangle which was surveyed in 1918.

Neither the quadrangle map nor this compilation is complete for the minor roads. The quadrangle sheet shows numerous roads by double dashed lines which do not show at all on the photographs or show as very fine lines and are apparently only woods roads or trails.

On the other hand this compilation shows most of the minor roads (fine lines on the photographs) by single dashed lines. No doubt some or many of these roads are passable most of the year, are in general local use as feeders to the main highways and should have been selected by field inspection and shown on the compilation by a narrow double dashed line to indicate their importance for charting. Such selection cannot be accurately made from the photographs in this office. The branch line of the Seaboard Air Line Ry. shown on the quadrangle between lat. $30^{\circ} 40.5'$, long. $81^{\circ} 38.5'$ and lat. $30^{\circ} 40'$, long. $81^{\circ} 42.7'$ evidently has been abandoned and overgrown with brush as no trace of it shows on the photos and it has not been shown on the compilation.

Checked by B. G. JONES
Oct. 22, 1935.

L. C. Lande
L. C. LANDE
Sept. 27, 1935.

B. G. Jones

Date Aug. 27, 1935 GEOGRAPHIC NAMES

Survey No. T-5130

Chart No. _____

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
✓	<u>Nassau River</u>	1243	✓		
	<u>Back River</u>	"	✓		
	<u>Nassauville</u>	"	✓		
	<u>Homer landing</u>	"	✓	USE Quad. St. Marys	
	<u>Jerry landing</u>		✓	"	
	<u>Tofton Creek</u>	1243	✓		
	<u>Cuno Creek</u>	?	✓	USE Quad. St. Marys	
	<u>Gardner Creek</u>	1243	✓		
	<u>Pearson Island</u>	"	✓		
	<u>Halfmoon Island</u>	"	✓ (one word)		
	<u>Lumber Creek</u>	"	✓		
	<u>U.S. Highway #17</u>		✓		
	<u>Seaboard Air Line Ry.</u>	1243	✓		
	<u>Thomas Creek</u>	"	✓		
	<u>Mills Creek</u>	—	✓		
	<u>Dead River</u>	—	✓		
	<u>Phummer Creek</u>		✓	USE Quad. St. Marys	
	<u>Tofton</u>	1243	✓	"	
	<u>Lanceford Creek</u>	"	✓	"	
	<u>O'Heil</u>	"	✓	"	
	<u>Bell River</u>	"	✓		
	<u>Chester</u>	"	✓		
	<u>Black Rock</u>	—	✓		

Date. Aug. 27/1935 GEOGRAPHIC NAMES

Survey No. T-5730

Chart No. _____

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
	<u>Boggy Swamp</u>		✓	U.S.E. Quad. St. Marys	
	<u>Tom Man Swamp</u>		✓	"	
	<u>Plummer Swamp</u>		✓	"	
	<u>Yulee</u>		✓	"	
	<u>McQueen Swamp</u>		✓	"	
	<u>Vaughn Ldg.</u>		✓	"	
	<u>Liquid Island</u>			"	
	<u>Becker</u>		✓	"	
	<u>Christopher Creek</u>	same	✓		
	<u>Add</u>				
	<u>Martin Island</u>	chart 1242	✓		
	<u>Italia</u>		✓	St Marys Quad	
	<u>Hero</u>		✓	"	
	<u>JOHNSONS NECK</u>	-Approved H-5754 FGE	✓		
	<u>HEDGES</u>		✓		
		At.			
		Names approved 10/29/35			
		KTA			

REVIEW OF AIR PHOTO COMPILATION NO. 5130

Chief of Party: S. B. GREENELL

Compiled by: W. C. Oliver

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

Instructions dated: 11-10-33

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)
No charted detail to be changed.
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)
Section of traverse Δ Kingsland, Δ Italia, Δ Dural N.B.
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 reefs,~~ 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) ✓
2 bridges listed in Des. Rept.
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;

March 26, 1935

S. B. Greenell
Chief of Party

19. Remarks after review in office:

Reviewed in office by: *L. C. Hande* *Sept 27, 1935*
W. B. Jones

Examined and approved:

C. K. Green
Chief, Section of Field Records

L. O. Lobert
Chief, Division of Charts

F. B. Jordan
Chief, Section of Field Work

G. Hude
Chief, Division of Hydrography
and Topography.