

5477

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

DESCRIPTIVE REPORT

Topographic } Sheet No. T-5477
Hydrographic }

State Florida

LOCALITY

Santa Rosa Island SOUND

~~WILLIAMS CREEK SHOAL AND WESTWARD~~

~~Longitude 86° 50' 00" to 86° 52' 30"~~

WEST of WILLIAMS CREEK

1934

CHIEF OF PARTY

M. H. Reese.

U. S. GOVERNMENT PRINTING OFFICE: 1934

5477

Applied to Chart 871 - July 12, 1946. M. M. R. ¹⁰⁰⁰ 1000

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 **T5477**

REGISTER NO. T-5477

State Florida

General locality Santa Rosa Island **SOUND**

West of WILLIAMS CREEK SHAL AND WESTWARD
Locality Longitude 86°50'00" to 86°57'30"

Scale 1:10,000 Date of photographs July 11, 19 34.
and June 26

~~Vessel~~ Air Photo Compilation Party No. 24, Pensacola, Fla.

Chief of party M. H. Reese.

Surveyed by See data sheet in the descriptive report.

Inked by F. A. Donadieu

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

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

Instructions dated June 7, 19 34.

Remarks: Compiled and printed on scale of 1:10,000.

Scale factor 1.00.

- STATISTICS -

on

SHEET, FIELD NO. 6, REG. NO. T-5477

PHOTOS, NO. C-49 TO NO. C-51

DATE OF PHOTOGRAPHS 7/11/34 TIME 9 A. M.

	BY	DATE FROM TO
ROUGH RADIAL PLOT	<u>E. P. Hernandez, Jr.</u>	<u>9/29/34</u>
SCALE FACTOR (1.00)	<u>E. P. Hernandez, Jr.</u>	<u>9/29/34</u>
SCALE FACTOR CHECKED	<u>M. H. Reese</u>	<u>9/29/34</u>
PROJECTION	<u>E. P. Hernandez, Jr.</u>	<u>10/1/34</u>
PROJECTION CHECKED	<u>H. C. Smith</u>	<u>10/1/34</u>
CONTROL PLOTTED	<u>R. E. Wagner</u>	<u>10/2/34</u>
CONTROL CHECKED	<u>E. P. Hernandez, Jr.</u>	<u>10/2/34</u>
TOPOGRAPHY TRANSFERRED		
TOPOGRAPHY CHECKED		
SMOOTH RADIAL LINE PLOT	<u>F. A. Donadieu</u>	<u>10/3/34</u>
RADIAL LINE PLOT CHECKED	<u>E. P. Hernandez, Jr.</u>	<u>10/4/34</u>
DETAIL INKED	<u>F. A. Donadieu</u>	<u>10/4-10/9/34</u>
PRELIMINARY REVIEW OF SHEET	<u>E. P. Hernandez, Jr.</u>	<u>11/19/34</u>
TOTAL AREA OF SHEET	<u>17.1</u> sq. Statute Miles	
AREA OF DETAIL INKED	<u>2.5</u> sq. Statute Miles (Land Area)	
AREA OF DETAIL INKED	sq. Statute Miles (Shoals in Water Area)	
LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore)	<u>16.5</u> Statute Miles	
LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)	<u>1.75</u> Statute Miles	
GENERAL LOCATION	<u>Santa Rosa Island</u>	
LOCATION	<u>Longitude 86°50'00" to 86°57'30"</u>	
DATUM	<u>North American 1927 (Unadjusted)</u>	
STATION	<u>COVE 3 - 1930-1934</u>	

Unadjusted { Lat. 30°22'43.482" (1523.7 m.)
values { Long. 86°52'55.024" (1469.1 m.)
for COVE 3 (USED)

Latitude 30°22'49.475" (1523.5 m.)
Longitude 86°52'55.054" (1469.4 m.)

Lat. 30°23'45.006" (1385.9 m) (unadjusted)
Long 86°55'06.752" (180.3 m)
Ref. Sta. Camp 1930

(Unadjusted)
adjusted

COMPILER'S REPORT

FOR

PHOTO TOPOGRAPHIC SHEET NO. T-5477

FIELD NO. 6

I. GENERAL INFORMATION:

Instructions dated June 7, 1934.

The information used in the compilation of this sheet was obtained from the notes and sketches on the field photographs and from members of the field inspection party in areas in which the draftsman could not determine the exact nature of the detail from the photographs.

The section of Santa Rosa Island

~~The area~~ covered by this sheet consists mostly of sand. Sand dunes are found along all of the northern part of Santa Rosa Island covered by this sheet. These dunes, which are up to 20 feet high, are usually covered with brush, and appear as a dark area on the photograph. Along the northern shore of the island there are a few small, shallow ponds and some small marshy areas. Sand spits are found along the northern shore of the island.

The high water line, as determined by the field inspection party, was used for tracing the shoreline on this sheet.

The range of tide along the shores of the island is approximately 1.2 feet. The difference between the high and low water mark is small except on the sand spits in which case the low water line is shown by ~~dash~~ *dotted* lines.

This sheet was compiled from the Aero Service Corporation, single lens type camera, photographs numbers C-49 to C-54, running approximately east and west along Latitude 30°23'.

and from five lens photos by the same company

II. CONTROL:

(A) Sources.

The following sources of control were used in the compilation of this sheet.

- (a) ~~Triangulation~~ by F. L. Peacock, 1930.
- (b) ~~Triangulation~~ by U. S. Geological Survey.
- (c) Publication No. 16.
- (d) Triangulation by G. L. Anderson, 1934/

The geographic positions of the stations located by F. L. Peacock, ~~U. S. Geological Survey~~, and Publication No. 16 are on the North American Datum. These positions were corrected to the North American 1927 Datum by obtaining a factor by comparison of positions of stations located on the North American Datum and recovered and located on the North American 1927 Datum in 1934 by first order triangulation by G. L. Anderson.

~~JEE MEMORANDUM~~ — *Pages*

The factor used was obtained by comparison of the position of Cove 3 on the North American Datum and its position on the North American 1927 Datum. This station was the only one on this sheet which was calculated on both Datums.

The factors were found to be -9.7 meters in forward Latitude, +9.7 meters in back Latitude, +14.7 meters in forward Longitude, and -14.7 meters in back Longitude.

*data
obtained
from field
computation*

The control was adequate in the eastern section of the sheet, but weak in the western section due to the lack of control except near the line of flight.

(B) Errors.

There were no errors in control used on this sheet.

~~(C) Discrepancies:~~

~~No discrepancies in the position of control were found.~~

III. COMPILATION:

(A) Method.

The ~~single line~~ radial line method of plotting was used in the compilation of this sheet.

(B) Adjustment of plot.

The photographs of this area are free from excessive tilt and scale fluctuation, but trouble was experienced due to the flatness of intersections in areas further away from adjacent principal points.

(C) Interpretation.

The graphic symbols used in the drafting of this sheet are the symbols as approved by the Board of Surveys and Maps (1932), except the symbol (§) which was used to denote brush.

(D) Information from other sources.

No information other than mentioned under "General Information" was used in the compilation of this sheet.

(E) Conflicting names.

There are no conflicting names on the different charts of this area.

IV. COMPARISON WITH OTHER SURVEYS:

The junction of this sheet on the West with sheet No. ^{T-5475} is satisfactory, *and also to East with sheet no. T-5479*

A close comparison of this sheet with previous charts of this area is impossible, due to the large difference in scale. The general shape of the island has not changed from previous surveys.

V. LANDMARKS:

~~There are no landmarks of any value to navigation in this area.~~ *Landmarks in this area are submitted by Lt. I.E. Rittenburg.*

VI. RECOMMENDATIONS FOR FURTHER SURVEYS:

To the best of my knowledge, this sheet is complete in all detail of importance for charting purposes, and no additional survey is required.

Submitted by: *F. A. Donadieu*
F. A. Donadieu,
Draftsman.

M. H. Reese
Approved: M. H. Reese,
Chief of Party.

This compilation is considered correct within 0.3 to 0.5 m.m. for interested points and 0.3 to 0.8 m.m. for other detail.
736

5

MEMORANDUM TO ACCOMPANY SHEET NO. T-5477.

The shore line of this compilation, bordering on Santa Rosa Sound, has been checked against the G.C.S. sheet of Lieut. Rittenburg and also against the smooth plotted hydrographic sheet executed under his direction. Practically no discrepancies were found, and the ones that were discovered have been rectified.

This sheet was originally compiled on triangulation data computed from the field positions of the first order arc. After adjustment was made, there was a considerable difference between the adjusted positions and the field positions. Therefore, it was necessary to change the projection of the compilation. The amount and the manner in which this projection was changed are given below:

STATION	<i>positions shown on compilation</i> N.A. 1927 FINAL POSITION (UNADJUSTED)		CORR'N	N.A. 1927 <i>Field</i> FINAL
Peak 3	30 22 26.003	800.7	-2.8	803.5
	86 55 17.208	459.5	-6.5	466.0
John 3	30 23 00.352	10.8	-3.7	14.5
	86 51 27.493	734.0	-6.4	740.4
Cove 3 <i>adjusted</i>	30 22 49.482	1523.7	-3.3	1527.0
	86 52 55.024	1469.1	-6.5	1475.6

(Average Correction: Lat. -3.3; Long. -6.6)

M. H. Reese
M. H. Reese,
Chief of Party, C. & G. S.

Remarks

Decisions

1	Not to be charted	
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GEOGRAPHIC NAMES

Survey No. **T-5477**

871 new
4/47

Name on Survey

	A	B	C	D	E	F	G	H	K	
<u>Florida State Highway No. 53</u>										1
<u>U.S. Highway No. 98</u>										2
<u>Santa Rosa Sound</u> 1265										3
<u>Santa Rosa Island</u> 1265										4
<u>Gulf of Mexico</u> 1265										5
										6
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Names underlined in red approved

by *O. T. Agnew* on 2-3-36

REVIEW OF AIR PHOTO COMPILATION T-5477

Comparison with Contemporary Graphic Control Surveys.

T-6249b (1934) 1:10,000; T-6250a (1934) 1:10,000

The compilation shoreline has been changed slightly in a few places and is now in agreement with Graphic Control Survey T-6249b.

All detail shown on the above Graphic Control Surveys has been shown on the compilation except temporary topographic signals and magnetic meridians.

Comparison with Contemporary Hydrographic Surveys.

H-5033 (1930) 1:20,000; H-5705 (1935) 1:10,000.

H-5033 shows some minor differences in shoreline from that shown on the compilation. H-5033 was surveyed in 1930 and the photos used in compiling were taken in 1934 and is probably the cause of this difference.

The compilation in the vicinity of lat. $30^{\circ} 23.5'$, long. $86^{\circ} 55'$ did show some sand bars but H-5705 in this area shows spoil banks that do not bare at low water. Since H-5705 was surveyed 7 months after the photos were taken the sand bars have been removed from this compilation and the shoal delineation on H-5705 accepted.

Comparison with Former Surveys.

T-1192 (1870) 1:20,000; T-4241 (1927) 1:20,000;

The compilation shows only minor time changes from the above topographic surveys. The compilation is complete and adequate to supersede the portions of the above surveys which it covers.

Comparison with Chart 1265.

The compilation shows more detail than chart 1265 otherwise there are no outstanding differences.

L. C. Lande

REVIEW OF AIR PHOTO COMPILATION NO. T-5477

Chief of Party: M. H. Reese

Compiled by: F.A. Donadieu

Project: Florida Compilation

Instructions dated: June 7, 1934

- ✓ 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)

All necessary information for bringing the charts up to date is shown on this compilation.

- ✓ 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)

There is no such detail on this sheet.

- ✓ 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)

None of the above mentioned surveys were necessary.

- ✓ 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 submitted.

- ✓ 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.

Topo sheets and this compilation are in agreement.

- ✓ 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)

Control and adjustment of photo plot are discussed in the descriptive report.

- ✓ 7. High water line on marshy and ~~marshy~~^{sandy} coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

The high water line was drawn on field photographs by the field inspection party and this was used for tracing.

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~~ sand bars, rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)

Yes. See descriptive report.

- ✓ 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)

There are no recoverable objects of value on this sheet other than triangulation stations.

- ✓ 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)

Landmarks in this area are submitted by Lt. I. E. Rittenburg.

- ✓ 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)

There are no bridges on this sheet.

- ✓ 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)

The names on the overlay tracing are the only names in this area, and are taken from U.S.C. & G. Survey charts. ~~field adjusted~~

- ✓ 13. The geographic datum of the compilation is N.A. 1927 (unadjusted) and the reference station is correctly noted. ~~(Field Computations)~~

- ✓ 14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)

The junctions to the West and to the East are in agreement.

- ✓ 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.
- ✓ 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)

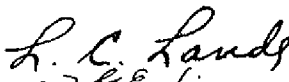
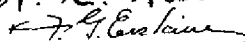
16. No additional surveying is recommended at this time.

17. Remarks:


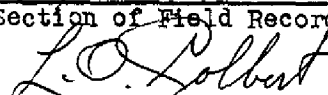
18. Examined and approved;


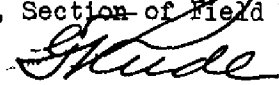

M. H. Reese,
Chief of Party

19. Remarks after review in office:

Reviewed in office by: 


Examined and approved:


Chief, Section of Field Records

Chief, Division of Charts


Chief, Section of Field Work

Chief, Division of Hydrography
and Topography.