

5475

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-5475
~~Hydrographic~~

State Florida

LOCALITY

Santa Rosa Sound
~~Island~~

~~Range Point to Longitude 86° 57' 50"~~
Range Point and vicinity

1934

CHIEF OF PARTY

M. H. Reese

U. S. GOVERNMENT PRINTING OFFICE: 1934

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

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. 4 **T5475**

REGISTER NO. T-5475

State Florida

General locality Santa Rosa Island Sound

Locality Range Point and vicinity
to Longitude 86°57'30"

Scale 1:10,000 Date of survey photographs June 26 July 11, 1934.

~~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 S. S. Gill

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

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

Instructions dated June 7, 1934.

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

Scale factor 1.00.

- STATISTICS -

on

SHEET, FIELD NO. 4, REG. NO. T-5475

PHOTOS, NO. C-43 TO NO. C-48

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

	BY	DATE FROM TO
ROUGH RADIAL PLOT	<i>E. P. Hernandez Jr.</i> E. P. Hernandez Jr.	9/29/34
SCALE FACTOR (1.00)	<i>E. P. Hernandez Jr.</i> E. P. Hernandez Jr.	9/29/34
SCALE FACTOR CHECKED	<i>M. H. Reese</i> M. H. Reese	9/29/34
PROJECTION	<i>E. P. Hernandez Jr.</i> E. P. Hernandez Jr.	10/1/34
PROJECTION CHECKED	<i>H. C. Smith</i> H. C. Smith	10/1/34
CONTROL PLOTTED	<i>H. C. Smith</i> H. C. Smith	10/2/34
CONTROL CHECKED	<i>E. P. Hernandez Jr.</i> E. P. Hernandez Jr.	10/2/34
TOPOGRAPHY TRANSFERRED		
TOPOGRAPHY CHECKED		
SMOOTH RADIAL LINE PLOT	<i>F. A. Donadieu</i> F. A. Donadieu	10/15-16/34
RADIAL LINE PLOT CHECKED	<i>E. P. Hernandez Jr.</i> E. P. Hernandez Jr.	10/19/34
DETAIL INKED	<i>S. S. Gill</i> S. S. Gill	10/25/34
PRELIMINARY REVIEW OF SHEET	<i>E. P. Hernandez Jr.</i> E. P. Hernandez Jr.	11/19/34

~~Total area of sheet 17.0 sq. statute miles~~
~~AREA OF DETAIL INKED 3.06 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)~~
~~19.4 Statute Miles~~
~~LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)~~
~~Statute Miles~~
~~GENERAL LOCATION Santa Rosa Island Sound~~
~~LOCATION Range Point to Longitude 86°57'30"~~

DATUM North American 1927 (Unadjusted)

~~55.306" (1703.0 m.)~~
Latitude 30°21'55.376" (1705.2 m.)

STATION Agassiz 2 - 1910 - 34

~~49.044" (1209.6 m.)~~
Longitude 86°57'49.284" (1316.3 m.)

Lat 30°22' 40.087" (1234.4 m.)
Long. 87°03' 19.148" (511.2 m.)
Ref Station March 2, 1910

COMPILER'S REPORT

FOR

PHOTO TOPOGRAPHIC SHEET NO. T-5475

FIELD NO. 4

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.

The land area of ~~this sheet~~ *Santa Rosa Island* consists of sand dunes along the entire length of ~~the~~ island. Marsh and grass appear along the northern shore and the sand rises into dunes as one leaves the shore; grass and brush appear on the dunes. The shoreline was not easily determined along the north shore due to the grass and marsh spots showing black the same as the water. The high water line as determined by the field inspection party was used for tracing the shoreline on this sheet. ~~The tide in this area is approximately 1.2 feet. The low water line is shown by a dotted line in the case of the sand spits.~~

This sheet was compiled from photographs taken by the Aero Service Corporation, single lens camera. Photographs numbers 43 to 46 approximately parallel to Latitude $30^{\circ}23'$. *and 5 lens photos along the land North of Santa Rosa Sound.*

II. CONTROL:

(A) Sources.

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

- (a) Triangulation by M. H. Reese, 1934.
- (b) Triangulation by J. H. Peters, 1919-1920. *used on T5276*
- (c) Triangulation by R. L. Schoppe, 1927.
- (d) Triangulation by G. H. R., 1910.

The geographic positions as established by G.H.R., 1910, and R. L. Schoppe 1927, were corrected to the North American 1927 Datum. Using first order triangulation station Cove-3 1930, as this was the only station appearing in this section common to the schemes, a conversion factor was obtained whereby the geographic positions of these stations on the North American Datum were corrected to the North American 1927 Datum. The correction was found to be -9.7 meters in forward latitude, + 9.7 meters in

See memorandum Page 5

back latitude, +14.7 meters in forward longitude, and -14.7 meters in back longitude. This correction was applied to stations Top 1927, Red 1919, and Agassiz-2 1910.

*data from
field computations
of first order
etc.
page 5*

Another correction was applied to the triangulation done by M. H. Reese 1934, which was +5.1 meters in forward longitude, -5.1 meters in back longitude, -0.2 meters in forward latitude, and +0.2 meters in back latitude. This conversion factor was obtained by using stations Marsh-2 1919, Top 1927, Red 1919, and Ranch-2 1919. This correction was applied to stations Range-3 1934 and Black-2 1934.

*see attached
memo to
sheet T,
5476
page 5*

No control stations established by other organizations were used in the compilation of this sheet.

(B) Errors.

The control used in the compilation of this sheet was found adequate, except all control was located along the center line of flight. *For the Santa Rosa Island Area* Otherwise, No errors were found in the compilation of this sheet.

~~(C) Discrepancies No discrepancies in the geographic positions of the control stations were found.~~

III. COMPILATION:

(A) Method.

The usual single lens photograph 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 fluctuations, but trouble was experienced due to the flatness of intersections in areas distant from adjacent principal points.

(C) Interpretation.

Only the graphic symbols approved by the Board of Surveys and Maps (1932) were used in the compilation of this sheet, except the symbol ~~thus~~ ($\{$) which was used to denote brush.

(D) Information from other sources.

There was no information taken from any sources other than those mentioned herein.

(E) Conflicting names.

There are no conflicting names on the different charts of this area. All names shown on the overlay sheet were obtained from the U.S. C. & G.S. charts covering this area. *See name list at back*

IV. COMPARISON WITH OTHER SURVEYS:

The junctions of this sheet with sheets to the East (T-547⁶) and West (~~T-547⁵~~) are satisfactory.
T5474

V. LANDMARKS:

List of landmarks in this area is submitted by Lieut. 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: *S. S. Gill*
S. S. Gill,
Draftsman.

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

MEMORANDUM TO ACCOMPANY SHEET NO. T-5475.

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 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	N.A. 1927 FINAL POSITION (UNADJUSTED)		CORR 'N	N.A. 1927 ^{Field} FINAL
Range 3	30 20 49.652	1388.5	-3.1	1391.6
	87 04 45.890	1225.6	-1.7	1227.3
Red	30 21 04.563	1036.5	-2.9	1039.4
	87 00 01.256	33.5	-1.2	34.7
Top	30 21 04.563	140.5	-2.5	143.0
	87 02 18.102	483.4	-1.9	485.3
Black 2	30 21 22.203	683.7	-3.2	686.9
	87 01 01.574	42.0	-1.7	43.7

(Average Correction: Lat. -2.9; Long. -1.6)

Note The original field computations of Reese 1934 triangulation and the correction of the older triangulation to North Am. 1927 datum were based on Field Positions on 1927 datum of the First Order Triangulation. (See page 2 and 3 preceding) Prior to completion of the compilation the First order Arc was adjusted in this office and a considerable change made in the field computations. Reese re computed his triangulation on the office adjusted positions of the first order arc and shifted his projection as stated above.

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

REVIEW OF AIR PHOTO COMPILATION NO. T-5475

Chief of Party: M. H. Reese

Compiled by: S. S. Gill

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)
Wreck shown on previous charts at approximately Latitude 30°22' and Longitude 86°59' is now strewn along the beach and is no longer to be shown on charts.
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)
There were no ground surveys by plane table, sextant or theodolite to supplement the photographic plot. *Comparisons with graphic control surveys made after completion of the plot.*
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)
submitted.
No blueprints or maps from other sources were ~~used for this chart.~~
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.
There were no contemporary plane table or hydrographic surveys made before this sheet was forwarded to the office. *See memorandum.*
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)
The above was mentioned 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 from notes and sketches on the field photographs.

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."

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- 871 WAB 6/4/47	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
✓	<u>Santa Rosa Sound</u>	Same			
✓	<u>Santa Rosa Island</u>	"			
✓	<u>Gulf of Mexico</u>	"			
✓	<u>Range Point</u>	"			
✓	<u>East Bay</u>	"			
<p>The two surveys will be compiled as one and for this reason the nomenclature is confine to one list.</p>					
<p>APPROVED NAMES UNDER SURVEY</p> <p><i>W. J. Woods</i></p>					

REVIEW OF AIR PHOTO COMPILATION T-5475

Comparison with Contemporary Graphic Control Surveys

T-6319a (1935), 1:20,000
T-6320a (1935), 1:20,000
T-6250b (1934), 1:10,000

Graphic control survey T-6250b has 3 temporary topographic signals that fall slightly outside the high water line shown on the compilation but in each case an examination of the photos shows a definite shoal area. The compilation has not been changed. T-6250b at triangulation station Clam 1934 at lat. $30^{\circ} 23'$, long. $87^{\circ} 01.4'$ has a short strip of rodded shoreline, both the high water line and the low water line. The compilation agrees with the high water line but the low water line is so indefinite on the photos that no attempt has been made to show it.

All detail shown on the above graphic control surveys has been shown on the compilation except the temporary topographic signals and magnetic meridians.

Comparison with Contemporary Hydrographic Surveys

H-5834a (1935), 1:20,000
H-5667 (1935), 1:10,000
H-5822 (1935), 1:20,000

An error of 0.0 mm to ^{1.0}~~0.1~~ mm has occurred in the transferring of the compilation shoreline to H-5667. No correction in H-5667 has been made as it is felt the difference is not large enough to warrant it. H-5834a and H-5822 are in agreement with the compilation.

Comparison with Former Surveys

T- 797 (1860), 1:20,000
T-1193 (1871), 1:20,000
T-2159 (1895), 1:10,000
T-3792 (1920), 1:20,000

The portions of the above surveys covered by the compilation are in general agreement with the compilation. This compilation is complete and adequate to supersede the portions of the above surveys which it covers.

Comparison with Charts 490 and 1265

Two small docks shown on chart 1265 between long. $87^{\circ} 03'$ and $87^{\circ} 04'$ at lat. $30^{\circ} 23.8'$ are gone.

L. C. Lande
B. G. Jones

Nov. 11, 1936.

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)

The low water mark was not shown due to the small difference in low and high tide except in case of the sand spits.

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 were no recoverable objects, *other than triangulation station*

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 submitted by Lt. I. E. Rottenburg.
~~There were no landmarks suitable for navigation.~~

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 were no bridges on this chart.

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 geographic names are shown on the overlay tracing. No new names were found.

13. The geographic datum of the compilation is N.A. 1927 Un- and the reference station is correctly noted. adjusted *to the datum of the compilation*

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

Junctions with sheets to the East and West are satisfactory.

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:

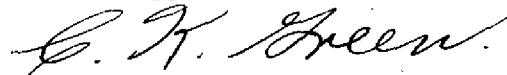

18. Examined and approved;

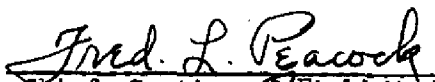
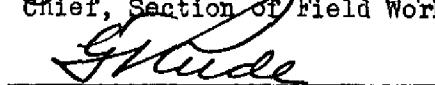

M. H. Reese,
Chief of Party

19. Remarks after review in office:

Reviewed in office by: *H. C. Lande* ✓ *B. G. Jones*

Examined and approved:


Chief, Section of Field Records

Chief, Division of Charts


Chief, Section of Field Work

Chief, Division of Hydrography
and Topography.