

5489

U. S. COAST & GEODETIC SURVEY  
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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  
~~Hydrographic~~

Sheet No. T-5489

State Florida

### LOCALITY

Pensacola Bay

West End of Santa Rosa Island

Santa Rosa Coast Guard

Long. 87° 12' 30" to Long. 87° 17' 30"

Station and Vicinity

1935

CHIEF OF PARTY

M. H. Reese

U. S. GOVERNMENT PRINTING OFFICE: 1934

5489

Applied to Chart 413 - Oct. 1936. N.J. Sante  
Applied to Chart <sup>#</sup>872 - Jan. 1947. A.G. H. V. 5/5/48

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. 1

REGISTER NO. T-5489 **T5489**

State Florida

General locality Pensacola Bay

Locality West End of Santa Rosa Island (Long. ~~87°12'30"~~ to Long. ~~87°17'30"~~)

Scale 1:10,000 Date of photographs July 11, 1934

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

Chief of party M. H. Reese

Surveyed by See data sheet in 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, 1934

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

Scale factor 1.00.

- STATISTICS -

on

SHEET, FIELD NO. 1, REG. NO. T-5489

PHOTOS, NO. C-31 TO NO. C-37

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>10/15/34</u>
PROJECTION CHECKED	<u>H. C. Smith</u>	<u>10/15/34</u>
CONTROL PLOTTED	<u>H. C. Smith</u>	<u>10/17/34</u>
CONTROL CHECKED	<u>M. B. Gill, Jr.</u>	<u>10/17/34</u>
TOPOGRAPHY TRANSFERRED		
TOPOGRAPHY CHECKED		
SMOOTH RADIAL LINE PLOT	<u>S. S. Gill</u>	<u>10/29/34</u>
RADIAL LINE PLOT CHECKED	<u>E. P. Hernandez, Jr.</u>	<u>10/29/34</u>
DETAIL INKED	<u>F. A. Donadieu</u>	<u>10/30 - 10/31/34</u>
PRELIMINARY REVIEW OF SHEET	<u>E. P. Hernandez, Jr.</u>	<u>1/26/35</u>

AREA OF DETAIL INKED 1.4 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)  
9.7 Statute Miles

LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)  
1.2 Statute Miles

GENERAL LOCATION Pensacola Bay

LOCATION Santa Rosa Island (Long. 87°12'30" to Long. 87°17'30")

DATUM North American 1927 (Unadjusted)

30-19-21.784 (670.8m)  
Latitude 30°19'05.978" (184.1 m.)  
87-13-56.118 (1499.4m)  
Longitude 87°15'20.450" (546.1 m.)

1934  
STATION Coast Guard Cupola 1919-1934

COMPILER'S REPORT

FOR

PHOTO TOPOGRAPHIC SHEET NO. T-5489

FIELD NO. 1

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 area covered by this sheet consists mostly of sand. A few small lakes and ponds are found, and some marshy areas. Low sand dunes are found in the southern part of the island. There are pine trees and brush near the marshy areas.

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 and, therefore, the low water line is not shown on the sheet. The high water line, as determined by the field inspection party, was used for tracing the shoreline on this sheet.

A three point fix was taken at Station Prince and is shown on this sheet with a circle.

This sheet was compiled from photographs taken by the Aero Service Corporation with single lens type camera; photographs Nos. C-31 to C-37, running approximately East and West along Longitude 30°19'.

II. CONTROL:

(A) Sources.

The following source of control was used in the compilation of this sheet:

(a) Triangulation by M. H. Reese, 1934. (A three point fix, Prince, was made by this party).

The geographic positions of the stations in the area covered by this sheet and located by Lieut. M. H. Reese are on the North American 1927 Datum (Unadjusted).

The control in this area was adequate, but careful use of it had to be made when radial plot was drawn, because most of the control was 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 lens 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. This island is very narrow, and as the line of flight is approximately along the center of the island the intersections obtained are not very definite except near the principal point.

The scale of the photographs covering this area was very close to scale of projections and, therefore, very little adjustment was necessary.

(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 ( ? ) that was used to denote brush.

Channels are shown by broken lines.

(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 East and West with sheet No. T-5474 and sheet No. T-5490, respectively, is satisfactory.

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. The marsh area near Longitude 87°13' on chart No. 490 has evidently disappeared.

By comparison with chart No. 413, which covers the western part of this sheet, it can be seen that the northern and southern shores of the island have changed a little near Longitude 87°16'. A small, shallow pond has formed in the northern section of the island east of the above longitude.

V. LANDMARKS:

The landmarks of value to navigation are reported on Form 567, by Lieut. I. E. Rittenburg's party.

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

**NOTE:**

The computation of Reese's local scheme of triangulation and the adjustment of the older schemes to N. A. 1927 datum for use on the photo compilations in this area were originally based on the field computations of the First Order Arc (N. A. 1927). When the First Order Work was later adjusted in this office the values of the Field Computations were considerably changed. These adjusted values of the First Order Arc were furnished to Reese before the completion of the compilations. Reese recomputed his local scheme of triangulation using the new adjusted values of the First Order Stations from which he had started and closed on. The differences between his original and final field computations are given on the opposite page for this particular area. Since these differences were fairly constant over the area of any one compilation Reese shifted his projection on each compilation where the differences were plottable. This was necessary only on those compilations on which the control had been plotted prior to the receipt of the adjusted First Order Work.

*B. J. Jones*




MEMORANDUM TO ACCOMPANY SHEET NO. T-5489

The triangulation on this sheet was originally computed and plotted from positions obtained by field computations of the first order arc. After the first order arc was adjusted, there was a large discrepancy between the adjusted and field positions. It was therefore necessary to change the projection in order to agree with the computations based on the adjusted positions. The factor was -2.7 (average) in latitude and -7.2 (average) in longitude, and was obtained by the stations listed below:

<u>STATION</u>	<u>N. A. 1927 FIELD POSITION</u>		<u>CORR'N</u>	<u>N.A.1927 FINAL (UNADJUSTED)</u>
East Battery		(1637.5)		(1640.3)
Observation	30 19 06.820	210.0	-2.7	207.3
Tower		(392.4)		(398.8)
1934	87 15 45.312	1210.6	-6.4	1204.2
Lakes		(1174.1)		(1176.8)
	30 19 21.874	673.5	-2.7	670.8
1934		(96.2)		(103.6)
	87 13 56.398	1506.8	-7.4	1499.4
Prince		(1258.6)		(1261.4)
	30 19 19.126	588.9	-2.7	586.2
1934		(431.1)		(438.5)
	87 12 43.863	1171.9	-7.4	1164.5
Entrance 3		(785.8)		(788.6)
	30 19 34.482	1061.8	-2.8	1059.0
1934		(695.2)		(702.3)
	87 11 33.980	907.8	-7.4	900.4

-- Average Correction Latitude -2.7; Longitude -7.2 --

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



REVIEW OF AIR PHOTO COMPILATION T-5489  
Scale 1:10,000

Comparison with Graphic Control Survey

T-6321a (April-May 1935), 1:10,000

There is some difference in the high water line in the vicinity of the Coast Guard station. This is due to interpretation. The plane table survey being more recent than the photographs, the compilation was changed to agree with the plane table sheet. Since the photographs were not clear on the details of docks in the vicinity of the Santa Rosa Coast Guard station, these were transferred from the plane table sheet.

Comparison with Contemporary Hydrographic Survey

H-5823 (April-May 1935), 1:10,000

There were no discrepancies between the compilation and the hydrographic sheet.

Comparison with Previous Topographic Surveys

There have been very large changes in the location of the high water line and also changes in the location of docks, buildings, etc. The compilation is complete except for interior detail on Santa Rosa Island which was omitted in accordance with the military regulations governing that area, and adequate to supersede the following previous surveys for charting:

T- 566 (1856), 1:10,000

T-2189 (1895), 1:10,000

T-3792 (1920), 1:20,000

Comparison with Chart 413 (1:10,000)

The compilation shows extensive shoreline changes in the vicinity of the Coast Guard station.

The compilation shows that the Santa Rosa Coast Guard station has been moved to a new location.

A landmark, triangulation station Tower, East Battery, 1934, has been omitted from the compilation along with other structural details in that vicinity in accordance with military regulations. A row of piling at 87° 16.1' and 30° 19.4' has not been shown on the compilation but it is shown on the hydrographic survey H-5823.

Chart 490 (1:30,000)

The comparison with chart 413 also applies to chart 490 with no exceptions.

Nov. 10, 1936.

*H. H. Schleiter*

## REVIEW OF AIR PHOTO COMPILATION NO. T-5489

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 detail necessary is shown.

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)

All differences have been noted.

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 supplementary surveys for this sheet.

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)

No prints or maps from other sources were used for this compilation.

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.

No other surveys of this area have yet been made.

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 has been complied with.

7. ✓ High water line on marshy and <sup>sandy</sup> ~~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, shoals, rocks, and~~ and sand bars, 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)  
There are no recoverable objects to be described on Form 524.
  
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) *-293-(1935), 313(1935)*  
A list of landmarks was furnished on Form 567.
  
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 in this area.
  
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)  
  
All obtainable geographic names are shown on the overlay tracing.
  
13. The geographic datum of the compilation is N.A. 1927 (Un- and the reference station is correctly noted. adjusted)
  
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)  
  
Yes.
  
15. The drafting is *fair* 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:

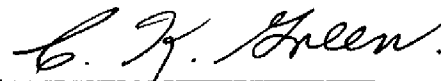
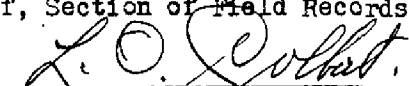
18. Examined and approved;

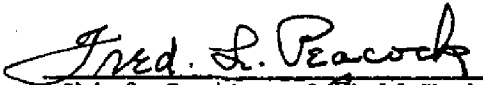
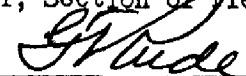
  
M. H. Reese,  
Chief of Party

19. Remarks after review in office:

Reviewed in office by: *H. H. Schleiter* ✓ *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.