

5514

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

DESCRIPTIVE REPORT

Topographic }
Hydrographic } Sheet No. T-5514

State Florida

LOCALITY

St. George Sound

St. George Island
(Eastern Part)

~~Cedar Point to Pilot's Harbor~~

1935

CHIEF OF PARTY

M. H. Reese

U. S. GOVERNMENT PRINTING OFFICE: 1934

Shoreline at Eastern End applied to dng. of Ch. 182 July 1939 R
Applied in front * Ch. 183 - Oct 1939 J.A.B.

" " " " 1114 Oct 1939 J.A.B.

" * Ch. 1262 Dec. 1939 - J.A.B.

" to Ch. 1261 3/9/43 J.A.B.

Applied to Gulf Coast ~~Chart 1261~~ 1/3 WCG & WAB. 5/31/46

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. T-5514

line 182 & 183

State.....Florida.....

General locality.....St. George Sound.....

(Eastern Port)

Locality.....St. George Island (Cedar Point to Pilot's Harbor).....

Scale.....1:20,000.....Date of ~~survey~~ ^{photos}.....Sept. 19.....19 34

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

Chief of party.....M. H. Reese.....

Surveyed by.....See data sheet in descriptive report.....

Inked by.....L. L. Wright.....

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 on scale of 1:20,000. Printed by photo-lithography on scale of 1:20,000. Scale factor 1.00.

- STATISTICS -

on

SHEET, FIELD NO. _____, REG. NO. T-5514

PHOTOS, NO. C-122 TO NO. C-135

DATE OF PHOTOGRAPHS Sept. 19, 1934 TIME 9:35 a.m.

	BY	DATE FROM TO
ROUGH RADIAL PLOT	--	
SCALE FACTOR (1.00)	--	
SCALE FACTOR CHECKED	--	
PROJECTION	<i>E. P. Hernandez, Jr.</i> E. P. Hernandez, Jr.	4/4/35
PROJECTION CHECKED	H. C. Smith	4/4/35
CONTROL PLOTTED	H. C. Smith	4/5/35
CONTROL CHECKED	<i>H. C. Ingerson</i> H. C. Ingerson	4/6/35
TOPOGRAPHY TRANSFERRED		
TOPOGRAPHY CHECKED		
SMOOTH RADIAL LINE PLOT	<i>H. C. Ingerson</i> H. C. Ingerson	4/8/35
RADIAL LINE PLOT CHECKED	<i>L. L. Wright</i> L. L. Wright	4/8/35
DETAIL INKED	<i>L. L. Wright</i> L. L. Wright	5/15/35
PRELIMINARY REVIEW OF SHEET	<i>E. P. Hernandez, Jr.</i>	5-17-35

TOTAL AREA OF SHEET 67.0 sq. Statute Miles
 AREA OF DETAIL INKED 7.4 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)
 44.4 Statute Miles
 LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)
 10.1 Statute Miles

GENERAL LOCATION St. George Sound

LOCATION St. George Island (Cedar Pt. to Pilot's Harbor)
 Eastern Part

DATUM North American 1927

Latitude 29°42'04.572" (140.8 m.)

STATION GAP 1934 (Adjusted)

Longitude 84°47'54.007" (1451.8 m.)

SHELL 1935 (Unadjusted)

29° 41' 04.011" (123.5 m.)
 84° 48' 32.415" (871.7 m.)

COMPILER'S REPORT

FOR

PHOTO TOPOGRAPHIC SHEET NO. T-5514

I. GENERAL INFORMATION:

Instructions dated June 7, 1934.

The information used in compiling this sheet was obtained from notes and sketches made by the field inspection party and from aerial photographs of the area.

This compilation is composed of the major portion of St. George Island, from Pilot's Harbor to Cedar Point. This narrow island stretches from the northeast to the southwest on this compilation, forming a sort of bow with the greatest change in curvature occurring at the narrowest part of the island which is opposite The Gap.

The Gulf coast line is a smoothly curving, sandy beach whereas the side of the island on St. George Sound is very broken and marshy. There are few cultural features on the part of the island on this compilation and practically no shore line features. Vegetation consists principally of pine trees and grass, with a few scattered scrub oaks and palmettos.

At times of extremely high tide, water flows over the island at The Gap, draining into St. George Sound.

This sheet was compiled from photographs Nos. C-122 to C-135, inclusive, taken September 19, 1934, at 9:25 a.m. with the Aero Service Corporation's single-lens camera. The flight runs in a northeast-southwest direction on the compilation.

The difference between high and low water is so small (mean range of tide 1.5 - 1.6 feet) that only the high water line, as determined by the field inspection party, was traced on the compilation.

II. CONTROL:

(A) Sources.

Sources of control used on the compilation are the following:

(a) Triangulation by Lieut. Geo. L. Anderson, 1934.

(b) Triangulation by Lieut. C. A. Egner, 1935.

(B) Errors.

No errors were found.

III. COMPILATION:

(A) Method.

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

(B) Adjustment of plot.

The photographs were, as a whole, very close to scale and no excessive amount of tilt or distortion was encountered.

(C) Interpretation.

Only the graphic symbols approved by the Board of Surveys and Maps (1932) were used on this sheet, with the exception of the symbol (}) used to denote brush.

(D) Information from other sources.

The positions for stations U.S.E.D. (Oyster Point) and Concr. Mon. marked P.R.M. Log were taken from Lieut. C. A. Egner's aluminum sheets, and transferred to the compilation.

(E) Conflicting names.

Chart No. 183 shows the name "St. George Islands" whereas Chart No. 182 shows "St. Georges Island".

The only noticeable island near this island which is not named is a very small marsh island opposite Pilot's Harbor; hence it is believed that the name "Island" should be singular in character.

The sound along this island is called "St. George Sound" and for the sake of uniformity, if for no other reason, St. George should not be possessive in character. It seems that "St. George" merely identifies the word "Island".

For the above reasons, it is recommended that the name "St. George Island" be used.

IV. COMPARISON WITH OTHER SURVEYS:

(A) The junction with sheet T-5508 on the Southwest is satisfactory.

(B) A comparison with older charts discloses the fact that the whole of the inner coast line of St. George Island has changed in spots, the greatest changes occurring where there is the most marsh. The most noticeable changes are as follows:

1. The extreme northeast tip of the island has changed its shape. This tip is apparently larger than it formerly was. (See Chart 182).
2. Pilot's Harbor is not as large as it is shown on Chart No. 182.
3. The configuration of the coast line on St. George Sound opposite The Gap has changed materially from that shown on Chart 182.
4. A small point of land to the east of Shell Point does not appear on Chart No. 182.
5. There is a fairly large pier shown on Chart No. 183 to the east of Cedar Point. The field party reports that this is an old, fisherman's pier and the photographs show that it is much smaller than that shown on the old chart.
6. There are quite a few changes in the shore line to the east and west of Cedar Point, too small and numerous to mention in detail. A casual comparison of the compilation with Chart No. 183 will disclose these changes.

(C) The shore line of Lieut. C. A. Eger's aluminum sheets of this area was compared with that shown on this compilation, by tracing it on the back of this compilation in blue. This blue line has been left on the celluloid for office inspection. The major discrepancies between the two are as follows:

1. At Lat. $29^{\circ}43.8'$ - Long. $84^{\circ}44.1'$ there is a discrepancy of 32 meters.
2. The shore line to the east and south of The Gap has a maximum difference of approximately 18 meters. The shore in this section is very low and the difference is probably caused by misinterpretation of high water line.
3. There is a maximum difference of 25 meters between The Gap and Shell Point.
4. Between Shell Point and topo station TREE there are two places where there are differences of 30 meters.
5. From topo station TREE west to topo station AXE the greatest discrepancy is 22 meters; however, there are a number of places where the difference is 10 meters or less.

6. There is a difference of 15 meters on the point of land to the east of Cedar Point, and a difference of the same amount to the immediate west of Cedar Point.

7. The marsh island on which is located topo station MARSH is much larger on the aluminum sheet than on this compilation. The south end of this island would fall where this compilation shows a part of the mainland. The maximum difference in this instance is 45 meters. This is an extremely marshy section and high water line is difficult to delineate.

8. Just east of topo station AXE there is a difference of 35 meters, and west of station ONE 1935 a difference of 80 meters. This party is unable to account for these large differences -- unless it was an error in rodding, as the shore line was distinct on the photos and the area carefully checked as to plot and tracing; also the marked topo stations were tied in on the photographs and used for additional control.

In all the above cases, the shore line on the compilation was checked with extreme care, but could not be changed. As mentioned above, most of the pictures were very close to scale, and it is believed that the compilation is correct.

V. LANDMARKS:

Landmarks of value to navigation in this area are submitted by the hydrographic party under Lieut. C. A. Egner.

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: L. L. Wright
Draftsman.

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

This compilation is believed to have a probable error of 0.3 to 0.5 m.m. for interrupted points and 0.3 to 0.8 m.m. for other detail.
A.S.E.

Survey No. T-5514

Chart No. 182, 183

*, 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.

(M 100)

REVIEW OF AIR PHOTO COMPILATION T 5514

Scale 1:20,000

Comparison with Graphic Control Surveys

(a) T 6312 (1935), scale 1:20,000

T 6312 includes the north shore of St. George Island from The Gap eastward.

A comparison of the shoreline of T 5514 with that of T 6312 is discussed in detail in descriptive report T 5514. The compilation is accepted as correct.

All detail on T 6312 within the limits of T 5514 is shown on T 5514 except the magnetic declination, numerous temporary signals and one U.S.C. & G.S. concrete monument which is partially undermined by tides.

(b) T 6311a (1935), scale 1:20,000

The only detail shown on T 6311a within the limits of the compilation is three stations and a small island. Described station "Marsh" is on this island. The size of the island shown on T 6311a (also on the card form 524 for "Marsh") does not agree with the photographs. The compilation is considered correct for this island.

The detail shown on T 6311a within the limits of the compilation is shown on T 5514 except the magnetic declination and one temporary signal.

(c) T 6311b (1935), scale 1:20,000

T 6311b includes the north shore of St. George Island from Gap Island west to triangulation station Cedar, 1934.

Station "Chop" (d) as plotted on T 5514 did not check the position given on the filed card nor that shown on T 6311b. Lieutenant Reese made a special trip to this point in the field and found that the position shown on T 5514 is correct. The card and T 6311b have been corrected.

A comparison of the shoreline of T 5514 with that of T 6311b is discussed in descriptive report, T 5514. The compilation is accepted as correct.

All detail shown on T 6311b (within the limits of the compilation) is shown on T 5514 except the magnetic declination and temporary stations.

Comparison with Previous Topographic Surveys

- (a) Misc. 13 (1853), 1:20,000

Eastern entrance of St. George Sound.

This sheet is on a local datum.

T 5514 is adequate to supersede Misc. 13 for the area covered.

- (b, c, d) T 646 (1857), 1:20,000; T 647 (1856), 1:20,000;
T 648 (1857), 1:20,000

Numerous changes have taken place since these old surveys were made, recessions of shoreline amounting to 100 meters in places.

More bluffs are shown on T 646, T 647 and T 648 than are shown on the compilation. The bluffs shown on T 5514 are all that are of charting value today.

T 5514 is adequate to supersede T 646, T 647 and T 648 for the area covered.

Comparison with Contemporary Hydrographic Surveys

- (a) H 5794 (1935), scale 1:20,000

H 5794 includes the western one third of T 5514.

No discrepancies.

^{lv}
On oyster bar west of Cedar Pt. has been transferred to T 5514 from H 5794.

- (b) H 5795 (1935), scale 1:10,000

H 5795 includes (within the limits of the compilation) only the eastern tip of St. George Island.

No discrepancies.

- (c) H 5819 (1935), scale 1:20,000

H 5819 includes the eastern two thirds of T 5514.

Piling for old beacons are shown on H 5819 about 750 meters southeast of Beacon "K". These piles can not be picked up from the photographs and are not shown on T 5514.

Comparison with Charts

(a and b) Charts Nos. 182 and 183, 1:80,000

Corrections to the charts as a result of this survey are covered on page 4 of the descriptive report.

Lights and beacons on the charts are shown on this survey. An additional day mark (Mud Island Flats Beacon) is shown on T 5514.

No landmarks appear on the charts and none have been recommended for the area covered by this survey.

July 31, 1935.

T. GOSHEN

Frank G. Eskin

REVIEW OF AIR PHOTO COMPILATION NO.

Chief of Party: M. H. Reese

Compiled by: L.L.Wright

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)

Yes.

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)

Noted in report.

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. ~~used.~~

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 were 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.

Yes. Mentioned in 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)

Noted in report.

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

Yes.

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)

Noted in report. Only high water line shown.

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)

~~None~~ By hydro. party under Lt. C. A. Egner.

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)

By hydro party under Lieut. C. A. Egner. - *True*

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)

None.

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)

Yes.

13. The geographic datum of the compilation is N. A. 1927 and the reference station is correctly noted. (Unadjusted)

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:

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.

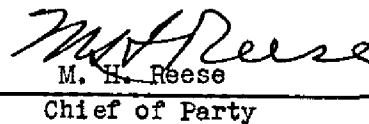
3. All station points are exactly marked by fine black dots.
4. Closely spaced lines are drawn sharp and clear for printing.
5. Topographic symbols for similar features are of uniform weight.
6. All drawing has been retouched where partially rubbed off.
7. Buildings are drawn with clear straight lines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


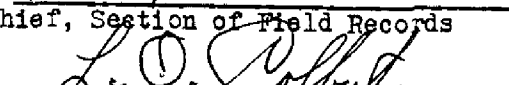
18. Examined and approved;


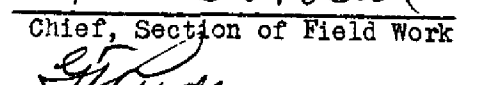

M. H. Reese
Chief of Party

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.