

5667

Form 504  
Rev. Dec. 1933  
DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY  
R. S. PATTON, Director

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 4 5667  
Hydrographic }

State Florida

LOCALITY

~~Gulf Coast-~~ Santa Rosa Island

Santa Rosa Sound

1934-5

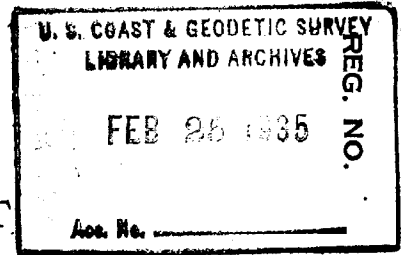
CHIEF OF PARTY

I. E. Rittenburg

U. S. GOVERNMENT PRINTING OFFICE: 1934

5667

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY



HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 4 5667

REGISTER NO.

State Florida

General locality ~~Gulf Coast~~ - Santa Rosa Island

Locality Santa Rosa Sound

Scale 1 - 10,000 Date of survey Dec. 1934 - Jan., 19 35

Vessel Shore Party No. 15

Chief of Party L. E. Rittenburg

Surveyed by W. C. Huebner

Protracted by J. A. McCormick

Soundings penciled by J. A. McCormick

Soundings in ~~Fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated Nov. 30, 1934, 19

Remarks:

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET NO. 4, SANTAROSA SOUND, FLORIDA. PROJECT H. & T. NO. 196.

Authority

This survey was executed in accordance with instructions from the Director of Nov. 30, 1934. Field work was done during december 1934 and January 1935.

Area covered and junctions

The area covered by this sheet is that portion of Santa Rosa Sound, Florida, between Longitudes 86-57.2 W and 87-05.0 W. This sheet joins hydrographic sheet field no. 2 on the east and sheet field no. 5 on the western end.

Control

Basic control for this sheet was the triangulation of M. H. Reese, 1934 with additional triangulation stations from the survey of 1910. Triangulation was supplemented by topographic stations located by this party on an aluminum mounted topographic control sheet field letter F both front and back sides. This sheet is on the final adjusted North American Datum, 1927. A correction factor of minus 3 meters in all latitudes and minus 7.5 meters in all longitudes was applied to all the G. P. furnished by Lieut. J. G. M. H. Reese to convert them to the final N.A. 1927 Datum as the computations of his party were based on the field computations of Lieut. G. L. Anderson, 1934. A correction factor of minus ~~9.0~~ 12.5 meters in Lats., and plus 9.0 meters in longs. were applied to the G. P.'s of the 1910 and earlier stations taken from S. P. 16, Triang. in Florida., to place these stations on the final adjusted datum. Shoreline for this sheet was obtained from the air photo reduction party of M. H. Reese and the same correction factors given above were used to place this shoreline on the final datum. This shoreline appeared to be correct.

Methods

Standard hydrographic methods were used throughout this sheet. Three point sextant fixes were used entirely. Soundings were obtained with a ten pound lead from a motor launch for most of this work. Soundings close to the shoreline were obtained with a sounding pole taken from a skiff with an outboard motor attached.

Comparison with Chart 1265

All that can be said under this heading is that this survey agrees very closely with the chart.

Discrepancies.

This sheet joins the soundings taken on sheet 5 except at line 90 to 91 N day. This sheet, 4, shows deeper soundings inshore from lines on sheet 5. This was investigated and it was found that the edge of the shoal area is very sharp and that an error in position of about 30 or 40 meters would correct this discrepancy. As the fix on position 90 N day sheet 4 was not very strong and in view of the fact that this area was covered on sheet 5 positions 79 - 85 X day and again investigated on positions 1 - 19 Y day it was decided to reject this short line 90 - 91 N day.

Dangers The only important dangers shown on this sheet are the projections of the one fathom curve into the channel on both sides. These projections are shown on chart 1265. It is very difficult to navigate this channel to carry the best water without the aid of some artificial aids to navigations.

Channels

Ten feet can be carried from the eastern end of the sheet to the western end. However, as mentioned above it is extremely difficult to carry over 6 feet without several aids to navigation which are lacking.

Tides A portable automatic tide gage was operated in the location shown on the sheet near signal Ranch 2, 1910. The tide reducers obtained from this gage were used in the reduction of the sounding records. Mean Low water on the staff as computed by a direct comparison with the gage maintained at Fishing Bend at the East entrance to Santa Rosa Sound was ~~2.3~~ 2.3 feet. However at a later date mean low water was furnished by the office as ~~2.4~~ 2.4 ft.

Landmarks for charts

There are no objects of sufficient prominence on this sheet to be classed as a landmark for charting purposes.

Coast Pilot notes

The original copies of these notes were furnished Lieut. Commdr. H. A. Cotton as directed. The duplicate copy of this report is attached to sheet No. 2.

Statistics.

Statute miles of sdg. lines	370.8
Number of soundings taken	10,168
Number of positions taken	2,206

W. C. Huebner, Surveyor,  
Coast & Geodetic Survey

I. E. Rittenburg, Lieut.,  
Coast & Geodetic Survey  
Chief of Party.



Verifiers Report on H-5667

May 8<sup>th</sup> 1935

The records conform to the requirements of the General Instructions excepting triangulation station MARSH was not listed in the records ~~was listed~~.

The usual depth curves have been completely drawn. The field plotting was complete to the extent prescribed in the Hydrographic Manual excepting the Degrees and Minutes were not shown. ~~Now shown on Smooth Sheet.~~

The coast line was inked by the field draftsman. Signal SNAQ was erroneously spelled SNUQ. ~~Corrected~~

On Capt. Ellis advise Position 31U near Signal DER was left for the reviewer.

There are no Topo or Air Photo sheets available.

The junctions with contemporary adjacent sheets are not available as these sheets have not been verified.

J. A. Knopf

Comand H. W. M  
11/1/35

T-5476  
T-5475

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. ...5.667

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	2206 .....
Number of positions checked	...368 .....
Number of positions revised	....8. .....
Number of soundings recorded	10168 .....
Number of soundings revised	...11 .....
Number of signals erroneously plotted or transferred	0 .....

Date: MAY 8, 1935  
Verification by F. A. Knapp  
Review by *[Signature]*

Time: 82¼  
Time: 52kr.

# GEOGRAPHIC NAMES

Survey No. H5667

Date. Mar. 5, 1935

**FLORIDA**

Chart No. 1265

*Names underlined in red approved April 1, 1935*

Diagram No. 1265

*Harlow Bacon*

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>Santa Rosa Sound</u>	Same			
	<del>-----</del>	<u>Santa Rosa Island</u>			
	<u>Range Point</u>	Same			



LAC

March 11, 1935.

~~W~~ E

Division of Hydrography and Topography:

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in  
7 volumes of sounding records for

HYDROGRAPHIC SHEET 5667

Locality Santa Rosa Sound, Florida

Chief of Party: I. E. Rittenburg in 1934-1935  
Plane of reference is mean low water, reading  
2.3 ft. on tide staff at 10 miles northeast of bridge, Santa Rosa Sound  
~~7.7~~ 6 ft. below B.M. 1

Height of mean high water above plane of reference is 1.4 feet.

Condition of reports satisfactory except as noted below:

*Atty* *Starnamer*  
Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5667 (1934-35)

Santa Rosa Sound, Santa Rosa Island, Florida

Surveyed in 1934-35

Instructions dated November 30, 1934 (I. E. Rittenburg)

Hand Lead Soundings

3 Point Fixes on Shore Signals

Chief of Party - I. E. Rittenburg.

Surveyed by - W. C. Huebner.

Protracted by - J. A. McCormick.

Soundings penciled by - J. A. McCormick.

Verified and inked by - F. A. Knapp.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual. The Descriptive Report is clear and comprehensive and adequately covers all matters of importance.

2. Compliance with Instructions for the Project.

This is a well executed survey and complies with the instructions for the project.

3. Sounding Line Crossings.

The agreement of soundings on crosslines with those on the main system of lines is excellent.

4. Depth Curves.

The usual depth curves may be satisfactorily drawn including portions of the low water curve.

5. Junctions with Contemporary Surveys.

The junction with H-5705 (1935) on the east and with H-5668 (1934-35) on the west will be considered in the reviews of those surveys.

6. Comparison with Prior Surveys.

a. H-1108 (1871).

The depths shown on this survey are in fair general agreement with the present survey. Minor changes in shore line are also noted. Because of the time elapsed between the two surveys, together with the fact that there are no important shoals on the old survey not fully developed on the present survey, it is unnecessary to consider in detail the various changes noted.

7. Comparison with Chart 1265.

Within the area of the present survey, the chart is based on the survey discussed in the preceding paragraph and contains no additional information which needs consideration in this review.

8. Field Plotting.

The field protracting and plotting are satisfactory and conform to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

This survey is complete and no additional work is required.

10. Superseding Old Surveys.

Within the area covered the present survey supersedes the following surveys for charting purposes:

H-1108 (1871) in part.

11. Reviewed by - Leo S. Straw, May, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*  
Chief, Section of Field Records.

*L. O. Polbit*  
Chief, Division of Charts.

*Paul A. Smith*  
*Acting* Chief, Section of Field Work.

*R. R. Rubens*  
*act.* Chief, Division of H. & T.

*Applied to drawing of Chart 1265 - Oct. 11, 1935 - JFW.*