

5668

1265
290

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

DESCRIPTIVE REPORT

~~Tropics~~ }
Hydrographic } Sheet No. 2

State Florida

LOCALITY

Santa Rosa Sound

Western Entrance

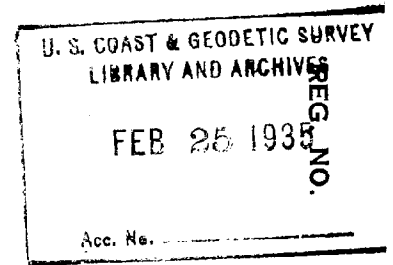
1934-5

CHIEF OF PARTY

I. E. Rittenburg

5668

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. 2

REGISTER NO. 5668

State Florida

General locality Santa Rosa Sound

Locality Western Entrance

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

Vessel Shore Party 15

Chief of Party L. E. Rittenburg

Surveyed by H. S. Cole

Protracted by J. A. McCormick

Soundings penciled by J. A. McCormick

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by S. B. Levin

Verified by S. B. Levin

Instructions dated Nov. 30, 1934, 19

Remarks:

GEOGRAPHIC NAMES

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>Fair Point</u>	Same			
	-----	<u>Old Navy Cove</u> <i>Omit</i>			
	<u>Deer Point</u>	Same			
	-----	<u>English Navy Cove</u> <i>(Place after sheet is inked)</i>			
	Grassy Point	<u>Grassy Point</u> ✓			
✓	<u>Santa Rosa Sound</u>	Same			
✓	<u>Range Point</u>	Same			
✓	<u>Sharp Point</u>	Same			
✓	-----	<u>Fishing Bend</u>			
✓	-----	<u>Sabine Point</u>			
✓	Little Sabine Bay	<u>Little Sabine Bay</u> ✓			
<p>Note: Old Navy Cove is beyond the limits of the survey and should not appear on the hydro sheet.</p> <p><i>All names have been inked on sheet except Grassy Point, Fishing Bend, Sabine Point and Little Sabine Bay H.B.</i></p>					

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET FIELD NUMBER 2,
1934, 35, WESTERN END OF SANTA ROSA SOUND, FLORIDA, PROJECT H. & T.
NUMBER 196.

AUTHORITY

This survey was executed under instructions from the Director, dated Nov. 30, 1934. Field work was done during the months of Nov., Dec., 1934 and Jan. 1935.

AREA COVERED AND JUNCTIONS.

The area covered by this survey is that portion of Santa Rosa Sound between Fair Point on the west Long. 87-12.8 and Range Point on the east Long. 87-05. This sheet joins hydrographic sheet field no. 4, 1935 on the east and will join a sheet on the western end during this field season or join a survey of the U. S. Engineers at the western end.

CONTROL

The basic triangulation control for this sheet was established by Lieut. j.g. M. H. Reese in 1934. This triangulation was almost sufficient in itself to furnish enough signals to control the hydrography. However, several additional stations were needed and these were built and cut in by sextant and recorded in the sounding volumes. There is only 1 ~~mark~~ signal (Mar) on the north and east end of this sheet which was located on the aluminum mounted topographic control sheets. This sheet is on the final adjusted North American Datum 1927. It was necessary to apply a correction factor of minus 3 meters in Lat. and minus 7.5 meters in longitude to all the geographic positions furnished by Lieut. j.g. M. H. Reese which are based on the field computations of Lieut. G. L. Anderson, 1934. Shoreline for this sheet was obtained from the air photo reduction party of Lieut. j.g. Reese and the same correction factors were also applied to place the shoreline data on the final corrected N. A. 1927 Datum.

METHODS

Standard hydrographic methods were used throughout this sheet. Three point sextant fixes were used to control the sounding lines. A 10 pound hand lead was used to obtain the soundings. Soundings were taken as close to both shorelines as possible with an outboard motor attached to a skiff. In general the 1 ft. curve was obtained in most places.

COMPARISON WITH CHART # 490

In general this survey agrees with Chart 490 except in " The English Navy Cove ". In this locality the waters have shoaled considerably. The detached 2 fathom curve in Lat. 30-20.7 Long 87-10 charted with a least depth of 11 ft. now shows a least depth of 9 ft. with shoal depths surrounding this least depth and the 2 fm. curve is now quite extensive and not detached as charted. In Lat 30-21.3 Long. 87-07.8 the chart shows a sounding of 13 ft. This survey shows 16 ft. in close proximity to the charted 13 ft. Several additional lines closely spaced were run here to either prove or disprove the 13 ft., but 16 ft. was the least depth found. The spit off Deer Pt. has shoaled and built out considerably and at present there is but 7 ft. of water at the lighted beacon.

DANGERS

The extensive 1 fm. shoal with a tip in Lat. 30-21.1 Long 87-08.5 and the shoal in Lat 30-20.7 Long. 87-10 are the principal dangers near the channel. There is a rock pile in Lat. 30-21 Long 87-10 covered with $1\frac{1}{2}$ ft. of water. This rock pile is in general depths of 8-9 ft. Deer Pt. Lighted Beacon does not mark the end of the spit making out from Deer Pt. There is but 7 ft. of water at the beacon now and only 2 ft. of water at the day beacon.

CHANNELS

Santa Rosa Sound is one of the principal natural waterways comprising the Intracoastal Waterway connecting Pensacola and Choctawhatchie Bays. Depths considerably deeper than the controlling depths at the eastern end of the Sound can easily be carried the full length of this sheet. There is narrow channel dredged to a least depth of 7 ft. leading to the Pensacola Beach Casino. This channel has a small turning basin at the inshore end. *62 ft. is shown by this survey.*

STATISTICS

Statute miles of Sounding Lines	422.1
Number of soundings taken	17078
Number of positions taken	4178

TIDES

A portable automatic tide gage was operated at Fishing Bend in the location shown on the smooth sheet for the entire progress of this survey. Mean Low Water on the staff as furnished by the office was 3.3 ft.

COAST PILOT NOTES

This is furnished as a separated report. The original copy will be given to Lieut. Commdr. H. A. Cotton as per instructions received and the duplicate copy will be included in the report for the entire seasons work.

LANDMARKS FOR CHARTS

This is furnished as a separate report and is attached hereto.

H. S. Cole,
Surveyor.

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Pensacola, Fla.

Jan. Feb. 7, 1935, 193

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

I. E. Rittenburg

Chief of Party.

DESCRIPTION	POSITION					DATUM	METHOD OF DETERMINATION	CHARTS AFFECTED
	LATITUDE			LONGITUDE				
	°	'	D. M. METERS	°	'			
Tank Quarantine ✓	30	20	551	87	09	846	NA 1927 Triang	1265 & 490 ✓
* Tank Pen Beach Casino ✓	30	19	1676	87	08	734	" " "	" " ✓

DELETE								
Radio Towers ✓	30	19.7		87	10.2	No longer there		✓

AIDS TO NAVIGATION								
Fair Point Lt. Bn. ✓	30	21	1722	87	12	1176	NA 1927 Triang	1265 & 470 ✓
Deer Pt. Lt. Bn. ✓	30	20	778	87	10	1555	" "	" " ✓
Deer Pt. Day Mark ✓	30	20	974	87	11	52	" "	" " ✓

A list of objects carefully selected because of their value as landmarks as determined from seaward together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) off-shore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

* *

COAST PILOT NOTES HYDROGRAPHIC SHEET FIELD NO. 2. PROJECT H&T 196
SANTA ROSA SOUND, FLORIDA.

Page 74 before heading Pensacola Bay
(Reverse directions; these are given from Pensacola Bay)

From a point 0.2 mile west of Fair Point beacon steer a course of 145 true for 1.0 mile then 130 true for 1.8 mile to a point 0.2 mile south of Deer Pt. Lighted Beacon, then 77 true for 1.0 mile keeping to the southward of the 1 fm shoal in English Navy Cove, then 82 true for 1.0 mile through the centre of the draw then 58 true for 0.8 mile to avoid shoal spit to the south of the channel then 76 true ~~35 true~~ ~~for 6 5/8 miles~~, for 6 5/8 miles, then steer 74 true for 2.1 miles then 77 true for 0.8 mile then 85 ~~miles~~ true for 0.6 mile, then 81 true for 1.2 mile then 84 for 2.4 miles to Beacon 5. Care must be exercised in navigating the channel with a vessel drawing over 6 ft. for the last 2 1/2 miles of the 6 5/8 mile reach mentioned above. The channel is narrow and shoals with a least depth of 6 & 7 ft. project into the channels ~~on~~ on both sides with no aids to navigation. The above courses are good for 10 feet if the navigator can stay in the channels.

Verification Report on H-5668

May 23, 1935

The records and sheets conform to the requirements. They are complete and satisfactory in all but a few minor details, as mentioned under "Remarks".

The usual depth curves can be completely drawn except in these vicinities:

The 6 and 12 ft. curves around Quarantine bulkhead (N 30-20.2, W 87-09.5).

The 6 ft. curve along Casino channel (N 30-20.2, W 87-08.9).

The 6 ft. curve around the neck of land forming the southern approach to the bridge (N 30-20.6, W 87-09.0).

The zero curve is not defined on this sheet.

The field plotting was complete. There are no omissions and none of the field drafting had to be done over.

The junction with contemporary sheet H-5667 (1934-35) is satisfactory. There are no other contemporary adjacent sheets received to date.

New plotted correctly on Smooth Sheet

Remarks: (1) Hydro station JOE is incorrectly plotted on the smooth sheet. The maximum displacement of positions in whose fixes JOE figures is about 30 yds. The verifier, with the approval of Mr. Bush, deems the error too small to have material effect on the depth curves or upon critical soundings. Fixes involving JOE have therefor not been replotted, with the single exception of those locating a row of piling near East Dock, (N 30-22.3, W 87-05.9). (2) The approximate locations of the beginnings of sounding lines were not noted in the records. Inasmuch as the hydrography is closely developed, and lines are many, much time would have been saved by such notation in the records. (3) Most of the soundings for B day had to be changed on the smooth sheet to conform with corrections made in the records by the Tides Office. (4) In the close development at N 30-21.3, W 87-07.7 there is a 3 ft. discrepancy between crossing courses 138-140G and 86-89HH. (5) Positions 45 to 47Z (N 30-20.4, W 87-08.9) are said, in the records, to mark the high-water line. There is some question as to whether low-water is not meant instead of high. No soundings are given for these positions. (6) In the records the soundings of inshore lines along both shores are accompanied by numerous references to the positions of shoals and sand bars, but the remarks are neither sufficient nor definite enough to permit the delineation of the shoal areas. Verifier suggests that these features may appear on the air-photos from which T-5474 is compiled. These photos have not yet been received from the field party. (7) At position 61FF (N 30-22.4, W 87-05.4) reference is made to a lone piling and an old dock, neither of which is located in the records or plotted on the sheet.

lone piling now plotted on smooth sheet opposite Pos. 61FF

The low-water line is not shown on this sheet as it is not delineated by soundings and does not appear on Air-photo Compilation T-5474.

Respectfully submitted,

S. Benedict Levin
S. Benedict Levin

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5668

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

Number of positions on sheet	.4178
Number of positions checked86
Number of positions revised	...2..
Number of soundings recorded	170.78
Number of soundings revised	{ .628..... (24 (wrong) c/c "B" day tide reducer)
Number of signals erroneously plotted or transferred	..!...

Date:

Verification by S. B. Levin
and inking
Review by *Leo Strain*

168 hr
Time: 24 days
Time: 15 1/2 hr

HYDROGRAPHIC SURVEY NO. 5668

Smooth Sheet yes

Boat Sheet 1

Sounding Records 12 Vols. _____

Descriptive Report yes

Title Sheet yes

List of Signals page 1 vol 1

Landmarks for Charts (Form 567) Descriptive Report

Statistics yes

Approved by Chief of Party none typed but not signed

Recoverable Station Cards (Form 524) Filed against T5474 (if any)

Special Chart for Lighthouse Service none rec'd May 23, 1935
(Circular Nov. 30, 1933)

Remarks _____

260

March 13, 1935

FE.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
12 volumes of sounding records for

HYDROGRAPHIC SHEET 5668

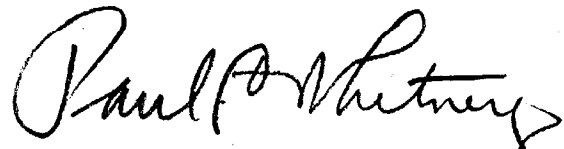
Locality Santa Rosa Sound (Western Entrance), Florida

Chief of Party: I. E. Rittenburg in 1934-1935
Plane of reference is mean low water reading
3.3 ft. on tide staff at Fishing Bend
11.4 ft. below B.M. 1

Height of mean high water above plane of reference is 1.4 ft. at
Fishing Bend.

Condition of records satisfactory except as noted below:

In entering tide reducers for "B" day apparently the wrong tide
curve was read due to a crossing of the curves.


Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5668 (1934-35)

Santa Rosa Sound, Western Entrance, Florida
Surveyed in 1934-35
Instructions dated November 30, 1934 (I. Rittenburg)

Hand Lead Soundings

3 Point Fixes on Shore Signals.

Chief of Party - I. E. Rittenburg.
Surveyed by - H. S. Cole.
Protracted by - J. A. McCormick.
Soundings penciled by - J. A. McCormick.
Verified and Inked by - S. B. Levin.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. The tide reducer "B" day, Volume 1, was incorrect. The reductions have been corrected in the office and the penciled soundings revised on the smooth sheet.
- b. Stamp No. 26 was not used. No differentiation was made between the plotting and checking of triangulation points, topographic signals, and hydrographic signals in the lettered note at the bottom of the smooth sheet. It was assumed that all the signals were checked in the field.
- c. Hydrographic signal "Joe" was plotted on the smooth sheet 10 meters in error. It has been corrected in the office. Boat's positions depending on this signal, except positions 42 and 43R, which locate a row of piles, were not revised because the small displacement of soundings did not warrant the change.
- d. The notes in the "Remarks" column should have been more clear and complete.
- e. There is a discrepancy between the notations in the "Remarks" column of the sounding records, page 47, volume 9, and the air photo compilation T-5472, delineating the shoal area off Sabine Point (lat. 30°20.4', long. 87°08.95'). The sounding records note that the positions were taken at the high water line, whereas the air photo compilation T-5474 shows this to be a low water area. The photographs for this area are not available at the present time. It is not certain whether a high water islet exists here or whether the notation in the sounding records was intended for the low water line, inasmuch as the positions were taken at a minus $\frac{1}{2}$ foot tide. This matter has been referred to the field party.

*High water Islet
here, see letter
from Chief of
Party, June 20, 1935
attached to this
Descriptive Report.*

*L.S.
6/25/35.*

- f. At position 61 FF, page 24 of Volume 11 (lat. $36^{\circ}22.4'$, long. $87^{\circ}05.4'$), a note in the "Remarks" column appears thus: "Passed outside old dock and inside lone piling." The dock was not shown on the boat sheet nor on the smooth sheet and is not shown on the air photo compilation. A sketch of the area has been sent to the field party to add the location of the dock.

Ruins of old dock here now shown as indicated by tracing & letter from Chief of Party. see letter June 21, 1935 attached from Chief of Party.

The Descriptive Report is clear and comprehensive and satisfactorily covers all matters of importance.

*L.S.
6/25/35*

2. Compliance with Instructions for the Project.

The work is in conformity with the instructions.

3. Sounding Line Crossings.

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

4. Depth Curves.

The usual depth curves may be satisfactorily drawn.

5. Junctions with Contemporary Surveys.

The junction on the east with H-5667 (1934-35) is excellent.

The contemporary survey joining on the west has not as yet been received.

6. Comparison with Prior Surveys.

- a. H-585 (1856)
H-1108 (1871)
H-2186 (1894).

The depths shown on the above surveys are in fair general agreement with the present survey, except in English Navy Cove, where considerable shoaling has taken place. Minor changes in shoreline are also noted. Because of the time elapsed between these surveys and the present survey, together with the fact that there are no important shoals on the old surveys not fully developed on the present survey, it is unnecessary to consider in detail the various changes noted.

- (1) The 13 foot sounding (charted) in lat. $30^{\circ}21.3'$, long. $87^{\circ}07.8'$ is evidently one fathom too shoal. Sixteen feet in a close development was the least depth obtained in this spot on the present survey. The 13 foot sounding on H-1108 (1871) should be disregarded in future charting.

7. Comparison with Charts No's. 490 and 1265.

a. Hydrography.

Within the area of the present survey the chart is based on surveys discussed in the preceding paragraph and contains no additional information which needs consideration in this review, except that the 5-3/4 foot sounding originating with H-2186 (1894) in lat. 30°19.95', long. 87°11.25' is charted as 6 feet on Chart No. 490 and as 5 feet on Chart No. 1265.

b. Aids to Navigation.

- (1) The Light Beacon and Day Beacon at Deer Pt. are charted 150 meters SE $\frac{1}{2}$ S and 270 meters SE $\frac{3}{4}$ S from the location by triangulation on the present survey. In LHN to M No. 16, 1932, the authority for the charted position of the Light Beacon, it is stated that the depth is 6 feet, which checks the depth on the present survey; whereas, the charted position falls in depths of 22 feet on the present survey, which tends to disprove the charted position.
- (2) The charted position of the Day Beacon (authority LHN to M No. 17, 1932) falls in 13 feet of water on the present survey. The present location shows 2 feet of water at the Day Beacon.
- (3) The location of these beacons as shown on the present survey will be used for future charting. The matter will be covered in the next Notice to Mariners.

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- 585 (1856) in part.
H-1108 (1871) " "
H-2186 (1894) " "

11. Note to Compiler.

Attention is called to the fact that this hydrographic survey, H-5668 (1934-35), is the authority for the high water islet in lat. 30°20.4', long. 87°08.95'.

12. Reviewed by - Leo S. Straw, June, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

R. O. Robert
Chief, Division of Charts.

Francis S. Borden
Chief, Section of Field Work.

G. H. Hulse
Chief, Division of H. & T.

80-DEM

June 17, 1936.

To: Lieutenant Isidor Rittenburg,
U. S. Coast and Geodetic Survey,
P. O. Box 869,
Pensacola, Florida.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: H 5668, Santa Rosa Sound, West Entrance, Florida.

Two tracings of sections of H 5668 (field sheet No. 2), Santa Rosa Sound, West Entrance, Florida, are inclosed. Tracing No. 1 shows position 61 FF where the note "Passed outside old dock and inside lone piling" occurs in the sounding records. The dock was not shown on the boat sheet, the smooth sheet, nor the air photo compilation. Please indicate on the sketch the position of this dock.

There is a discrepancy between the notation in the "Remarks" column of the sounding records and air photo compilation T 5474 delineating the shoal area off Sabine Point as indicated on tracing No. 2. The sounding records note that the positions were taken at the high water line, whereas the air photo compilation shows this to be a low water area. It is not certain whether a high water islet exists in this area, since the soundings were taken when the tide was $-1/2$ foot. Please inform this office which of these features is correct.

(Signed) PAUL C. WHITNEY

Inclosures.

Acting Director.

80CKG

POST-OFFICE ADDRESS:

20

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

P.O.Box 869, Pensacola, Fla.,
June 20, 1935.

1935 JUN -22- AM 9:44

The Director,
U. S. Coast & Geodetic Survey,
Washington, D. C..

From: Lieutenant I. E. Rittenburg,
U. S. Coast & Geodetic Survey.

Subject: H 5668, Santa Rosa Sound, West Entrance, Florida.
Your enclosed letter of June 17, 1935 # 80-DRM

There are enclosed with this communication, 2 tracings of sections of sheet H 5668 (field sheet # 2), and your letter of June 17, 1935 ref. # 80-DRM.

On tracing # 1, the dock referred to is shown in pencil in its approximately correct position. For your information all that is left of this dock is the dilapidated piling.

You are informed that the area in question on tracing # 2 is a high water islet. This islet was walked around and allowance made for the stage of tide. There was a very definite high water line around the islet. This has been checked since receipt of your letter and found to be the correct way to show this islet. It is therefore recommended that it be shown as it is on the hydrographic sheet and not on the air photo compilation sheet.

I. E. Rittenburg, Lieut.,
Coast & Geodetic Survey.

Information applied to Sheet
6/25/35

Tracing #1

Note in sounding record:
"passed outside old dock and
inside lone piling"

MAF

piling of frame of dock

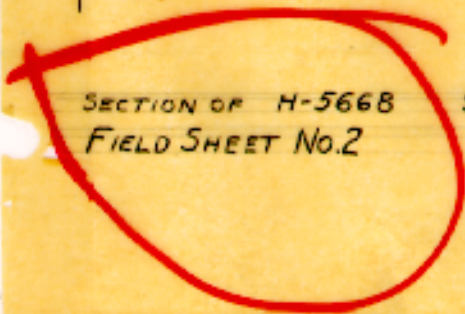
CREEK 3-1934

2
2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

EAST DOCK 1934



87°05'



SECTION OF H-5668
FIELD SHEET No. 2

SANTA ROSA SOUND, WEST ENTRANCE, FLORIDA
SCALE 1:10000

Tracing #2

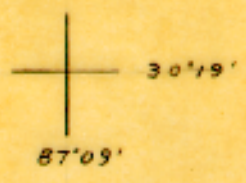
WEST UPRIGHT
PENSACOLA BRIDGE
1934

Limits of sand shoal on Air
Photo Compilation T-5474

As shown on boat sheet
H.W. 1934

△ TANK-
QUARANTINE-1934
"SIL"

SABINE PT.



SECTION OF H-5668
FIELD SHEET No 2

SANTA ROSA SOUND, WEST ENTRANCE, FLORIDA
SCALE 1:10 000

Applied to drawing of chart 1265 - Oct. 10, 1935 - J.F.W.
applied to chart 871
Applied to chart 872 Nov. 6 1947
M.R.