5867

Form 504
Rev. Dec. 1933

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

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } Sheet No. 9.

State Florida

LOCALITY

~~Gulf Coast~~

St. George Sound.

Dog Island

193 5

CHIEF OF PARTY

C. A. Egner.

U.S. GOVERNMENT PRINTING OFFICE: 1934

5867

Form 537
Ed. Dec., 1930

REG. NO.

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. 9. 18

5867
REGISTER NO.

State Florida

~~General~~ locality ~~Gulf Coast~~ Dog Island

General Locality St. George Sound, ~~Dog Id.~~

Scale 1/20,000 Date of survey March-June-July, 1935

Vessel Field Party No. 23

Chief of Party C. A. Egner.

Surveyed by M. G. Elliott, R. E. Dille, Surveyors.

Protracted by V. F. Simmons, H. P. Theus, M. C. Burr.

Soundings penciled by G. C. McG. C. A. Egner.

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by C. F. McKinney

Verified by Harold W. Murray

Instructions dated Nov. 30, 1934; June 5, 1935., 19

Remarks: Sheet slightly incomplete due to sudden termination of work.

U. S. GOVERNMENT PRINTING OFFICE: 1931

D E S C R I P T I V E

R E P O R T

T O A C C O M P A N Y

Field Sheet No. 9.

Instructions

Original: Issued jointly to C. A. Egner, W. D. Patterson and I. Rittenburg for combined operations along the Gulf coast. Dated Nov. 30, 1934, the part under C. A. Egner comprising that section near Apalachicola, Fla. and extending east to Dog Island.

Supplemental: Dated June 5, 1935, extending work to the eastward as far as St. Marks L. H.

Purpose

To revise existing surveys, and provide comprehensive new surveys in new localities taken together with aerial photos.

Limits

Sheet #9 covers the eastern portion of St. Georges Sound from a junction with Field Sheet #8 on a north and south line in Long. 84--38.3, and extends eastward to Turkey Point. The Gulf side of Dog Island is sounded to include the three fm. curve (approx. 1½ miles offshore) from a similar junction with Sheet #8 and extends eastward completely surrounding the Island.

Originally, the Instructions called for work only as far east as the eastern end of Dog Id. When Supplemental Instructions came and it was expected that work would continue until the entire project was completed to St. Marks L. H., the limits of this sheet were changed to approximately its present form, there to join with Sheet #15 which extends to include Lighthouse Point and South Shoal. When word came that the party would have to disband, temporarily at least, as much work as could conveniently be executed was done on this sheet and no attempt made to start work on #15. That sheet now awaits reorganization of the party and continued work.

No work, therefore, has been done on Dog Island Shoal which need floating signals for control and can be more conveniently done on Sheet #15. The present limits of the sheet, therefore, represent an irregular line which must be overlapped later on the eastern edge. Work was stopped so abruptly that it was impossible to square off this sheet as one would like.

Methods

This area as all shoal water requiring sounding with the hand lead throughout. Depths are from zero to a maximum of 30 ft. All of the work was done by the usual hand lead methods operating from either the houseboat "Rambler" or from a 23' gondola type of large skiff. driven by a 9 H. P. outboard motor. Lines were run generally east and west except on the outside of Dog Id. where better development was gotten by running them north and south normal to the depth curves.

Spacing of lines was in general about 200 m. although the irregular character of the bottom necessitated a much closer spacing in large sections of the area. Compass course were steered in most all cases, particularly with the "Rambler", as natural ranges were seldom available.

Control--Horizontal

Triangulation was based on a scheme of 1st order stations established in 1934 spanning the Sound, all stations of which were recovered and used. These were used to located with third or second order accuracy additional stations on the beaches, spaced about a mile apart, for control of the topography.

Numerous topographic signals were established along the beaches and located by intersection, resection or traverse on Bristol board. Traverse was necessary in many cases due to the great distances across the Sound. As these traverses were short, between triangulation stations, no appreciable error was introduced.

Hydrography was entirely by sextant fix on these signals. Seldom were more than three or five soundings taken between fixes, so that the lines were well controlled.

Control--Vertical

A portable automatic tide gauge established inside the hook at the west end of Dog Id. controlled the tidal reductions through out the sheet. This gauge was in operation for months and a particularly long series of marigrams gave ample data for determining the plane. An early determination, by comparison with Key West, was later checked from a longer series, and found O. K. The range of tide in this area is small so no time nor height correction was applied at any point of the area.

Bottom Characteristics

The Instructions called for an unusually large number of bottom characteristics in order to furnish data on oyster bed formations. There were no oyster beds within the confines of this

sheet, but the additional characteristics will probably be useful nevertheless.

Description of the Area

While this sheet offers a wide deep channel useful as an alternate route entering St. Georges Sound, supplementing East Pass, its usefulness is limited due to the necessity of following it through the devious course between South Shoal and Dog. Id. Reef. This entrance is known as Duer Channel. Boats find it much simpler, after clearing South Shoal and leaving the whistle buoy "26", to make the bell buoy on the extension of the East Pass lighted range, and enter St. Georges Sound via this channel between Dog Id. and St. Georges Id.

In general, the depths throughout the sheet are irregular, although the shoals are easily definable. Edges of the bars are in many cases quite abrupt. The shoals take a general NE and SW direction showing fairly strong current action in this locality.

The north shore of Dog. Id. deepens into three or four fathoms of water quickly. An extensive bar reaches a mile NE of Dog Id., with a further long, narrow, shoal formed after a moderately regular channel off this point.

The north shore of the sound is receding from Carrabelle to Turkey Point. This amounts probably to 20 or 30 meters since the last survey. The shore is lined with stumps and other evidence of this recession. A long, grassy, island has formed about 3/4 mile offshore from this beach.

A shoal, bare at low water, extends south two miles from Turkey Point.

Outside of Dog Id. the beach is quite abrupt and marked by a continuous surf except after days of calm weather. The three-fathom curve, developed by the sounding, lies about one mile off the beach.

Eastward of Dog Id. an extensive shoal area reaches to Dog Id. Reef. This shoal acts as a barrier to the sound, though a 12 ft.(perhaps as deep as 14 ft, with further development) channel is available 300 meters off the SE corner of Dog Id. This channel is not valuable since shoaler water must be traversed if an attempt is made to carry around the NE tip of Dog. Id. The offshore side of Dog Id. is changable due to surf action and current along the beach.

The inshore side of Dog Id. remains fairly constant.

Comparison with Previous Surveys

Extensive changes have taken place since the last general

survey.

(1) The north beach (Carrabelle to Turkey Pt.) has receded an appreciable amount, probably 20 or 30 meters.

(2) The long grassy island which parallels the north beach in Lat. 29--52 to 53; Long. 84--33 to 36, is shown on the chart as a shoal bare at low water. It is now built up about 3 ft. about 1 foot above M.H.W.

(3) The long finger-like shoal 1½ miles NE of Dog. Id. shown on the chart as continuous from the island is now detached with a 12 ft. channel between.

(4) The extensive shoal areas lying north of the channel about one mile north of the middle of Dog Id. are much altered in shape and extent. Depths, probably, are about the same.

(5) The 18 ft. curve offshore from Dog. Id. shows some changes in its contour.

(6) The "Swash" channel close inshore to the SE corner of Dog Id. probably has shoaled somewhat from the 14 ft. shown on the chart, though further development is needed here.

(7) The 6 ft. shoal charted in Lat. 29--51.4; Long. 84--31.0 now has 5 ft. though additional development is needed. Less water may be found. Its position is unchanged.

Anchorages

The area off the north shore of Dog Id. offers good protection anchorage from southerly weather. There is little protection anywhere in northerly weather, though boats may anchor most anywhere in sufficient water in good weather. Holding ground is none too good, as it is mostly sand, hard in places.

Dangers

None, except the shoals noted.

Shoreline

Though the topographer rodded in the shoreline completely throughout this area, the shoreline on the sheet represents reduction from the photo-compilation celluloid sheets reduced to this scale directly by means of the reduction camera.

Channels

As described above, a depth of 13 ft. at M. L. W. can be carried from Duer Channel through the length of this sheet.

Buoys

There are no floating aids to navigation within the confines of this sheet.

Coast Pilot Information

This forms a part of a general report.

List of Signals Used

The original herewith; the duplicate under the fly leaf of Sounding Volume No. 1.

Statistics

Forms a part of this report.

Geographic Names.

Charted names have been retained.

Tidal Data

Note on separate sheet. Curves showing the reducers used are included herewith.

See appended hereto a special note for the reviewer, listing a few items omitted due to the sudden termination of the work

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Respectfully submitted,

C. A. Egner.
Chief of Party.

Note for the reviewer.

Since field work was stopped abruptly, no opportunity was given to square off the limits of the sheet properly at its eastern edge, and run in a few cross lines.

Some additional work is needed on the sheet which should be taken up when work is resumed in this locality. Transfer of the ends of the sounding lines has been made to sheet No. 15 which was to have adjoined this sheet on the east. The additional work may be accomplished on #15, then, without sending this sheet again into the field.

(1) Additional sounding should be done close inshore on the outside of Dog Id. to permit complete drawing of the 6 and 12 ft. curves. This was not done due to continued rough weather, the gondola being swamped with loss of several instruments. Calm weather will be needed.

(2) More lines should be run in the "Swash" channel close by the SE corner of Dog Id. (area 250 m. SE of signal Ob)

(3) The shoal in Lat. 29°-51'.3; Long 84°--31'.0 should have more development.

(4) Additional development of the southern and western limits of the extensive shoal 2 miles south of Turkey Pt. with several split lines between regular lines too far apart.

(5) Split lines in Lat. 29°--51'.3; Long 84°--33'.3 to show least water at a point which appears to be the controlling depth proceeding westward from Duer Channel.

(6) Additional cross lines in the area east of Dog Id.

Though requested of the photo-compilation party, the marshy islands paralleling the beach in Lat. 29°-52'to 53'; Long 84°--33' to 36', were not drawn on the sheet prior to the shipment of the celluloid sheets to Washington. Mr. Reese has now been transferred to another assignment, so it is necessary that the office be requested to insert these islands on this sheet. For this reason, the zero curve has been left off in this locality.

The air photo compilation shows a more extensive shoal area than that defined by the hydrography. This may be due to the fact that the photos were taken in 1934 while the hydrography was done in 1935. The zero curve has been added as defined by the hydrography and the islands transferred from the graphic control sheet, T-6314 A (1935).

RHH

LIST OF SIGNALS USED

SHEET NO. 9.

Triangulation		Topographic			Hydrographic
Carrabelle L. H. 1934	Abe	Rub	Two	Top	Sex
Front L. H. 1935	Front	Day	Now	Spit	
Sig 1935		Mark	Tail	Out	
Rear Range Bn. 1935	Rear	Tank	Kid	El	
New 1935		Lone	Gul	Kin	
Fish 1935		Rap	Cro	Flag	
Ark 1935		Put	Not	Ac	
Point 1935		Pine	Unk	Vin	
Fitch 1935		Is	Bug	Fini	
Turk 1935		Kno	Sly	Ob	
Dog 1934		So	Pod	Gib	
Middy 1935		Us	Con	Dig	
Dog Id. West 1934	West	Like	Ruf	Sid	
Red Beacon 1935	Red	Camp	Tri	Oar	
		Tag	Dun		
		Hat	Jan		
		The	Tau		
		Hi	Ant		
		Cut	Es		
		Inn	Rye		
		Pal	Kap		
		Cad	Rho		
		That	Tel		
		Own	Meg		
		Many	He		
		Or	Art		
		One	Up		
		Cent	Del		
		Saw	Ump		
		Tur	Alf		
		Pen	Eta		
		Tine	Tat		
		Sal	Sum		
		Nug	Bay		
		Get	Mar		
		Nel	Vic		
		Who	End		
		Hag	Back		
		By	Tre		
		Mak	Big		
		Act	Lap		

Statistics for Sheet #9.

It is to be observed that some confusion has been occasioned by the fact that the field party failed at the start to segregate the work of the Rambler from the Gondola. In one or two volumes both boats appear; also, the sequence of days has been carried through from one boat to another.

There was, however, no confusion in the plotting of the smooth sheet. It was therefore thought advisable to make no attempt to straighten the matter out. While this was not according to the Instructions for Hydrographic work and is obviously out of order, no essential damage has been done.

C. A. Egner.

Date	Day Letter	Boat	Soundings	Positions	Miles	Volume
2/28	A	Rambler	226	62	10.4	1R
3/1	B	"	297	81	13.2	1R
3/4	C	"	654	163	29.9	1R
3/5	D	"	344	89	16.1	1R
		"	294	69	11.9	2R
3/6	e	Gondola	203	56	8.6	2R
3/8	F	Rambler	306	78	14.1	2R
3/14	G	"	597	151	27.6	2R
3/15	H	"	177	47	9.2	2R
	H	"	251	64	11.2	3R
3/19	j	Gondola	357	97	12.0	3R
3/20	K	Rambler	449	122	16.2	3R
3/26	L	"	86	23	3.2	3R
4/3	l	GONDOLA	240	60	11.8	3R
4/4	M	RAMBLER	64	15	3.2	3R
5/23	N	"	218	65	7.8	4R
5/27	P	"	558	96	21.5	4R
6/12	Q	"	94	11	1.5	4R
6/13	R	"	294	83	12.0	4R
6/21	S	"	628	120	27.0	5R
6/24	T	"	498	92	23.5	5R
6/25	U	"	523	99	23.0	5R
6/25	U	"	120	21	6.0	6R
6/26	V	"	543	96	25.0	6R
7/26	W	"	662	160	34.0	7R
7/29	X	"	637	158	29.2	7R
7/30	Y	"	301	77	17.0	7R
4/1	m	Gondola	644	165	27.6	1G
4/2	n	"	492	138	23.0	1G
4/3	p	"	260	69	13.0	1G
4/4	q	"	175	46	8.1	1G
4/4	q	"	306	79	12.9	2G
6/5	r	"	475	81	16.0	3G
6/6	s	"	759	128	23.0	3G
6/7	t	"	433	74	15.0	3G
6/10	u	"	75	16	2.0	3G

Statistics, Continued.

Date	Day Letter	Boat	Soundings	Positions	Miles	Volume
6/10	u	Gondola	445	83	12.0	4G
6/11	v	"	674	120	24.0	4G
6/12	w	"	76	21	2.5	4G
6/13	x	"	263	44	8.5	4G
6/14	y	"	92	17	3.5	4G
7/23	z	"	358	94	11.5	5G
7/29	a'	"	155	35	4.8	6G
7/30	b'	"	45	13	3.0	6G
		Total:	15402	3478	636.5	13 Vol.

HYDROGRAPHIC SURVEY NO. 5867

Smooth Sheet ~~yes~~

Boat Sheet 1

Sounding Records 13 Vols.

Descriptive Report yes

Title Sheet yes

List of Signals In D.R. & Vol 1

Landmarks for Charts (Form 567) ~~no chartable objects~~ yes

Statistics yes

Approved by Chief of Party no

Recoverable Station Cards (Form 524) none

Special Chart for Lighthouse Service (Circular Nov. 30,1933) no

Remarks

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5867

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

Number of positions on sheet	3478
Number of positions checked	24
Number of positions revised	6
Number of soundings recorded	15,402
Number of soundings revised	42
Number of signals erroneously plotted or transferred	✓

Date: April 10, 1936

Inked by C. F. McKinney

Verification by Harold W. Murray — Time: 26 " 5 1/4 hrs.

Review by R. J. Christman — Time: 14 1/4 hr

GEOGRAPHIC NAMES

Survey No. 5867

Date. Sept. 12, 1935

Chart No. 182

Diagram No. 182

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
	Carrabelle ✓				
	St. James Island ✓				
	Turkey Point ✓				
	St. George Sound ✓				
	Dog Island ✓				
	Gulf of Mexico ✓				
		Carrabelle River ✓			
		Names approved 9/13/35			
		K T Adams			

(M-136)

rae

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

March 2, 1936.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
13 volumes of sounding records for

HYDROGRAPHIC SHEET 5867

Locality St. George Sound, Dog Island, Fla.

Chief of Party: C. A. Egner in 1935
Plane of reference is mean low water reading
2.0 ft. on tide staff at Dog Island
5.3 ft. below B.M. 1

Height of mean high water above plane of reference is 1.6 feet.

Condition of records satisfactory except as noted below:

Ham

Acting Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Verification Report on H-5867 (1935)

1. Condition of Records.

The records are neat and legible and conforms to the requirements of the H. M.

2. Shorelines and Signals

a. The shoreline shown on this sheet originates with T-5513 (1934) and T-5511 (not registered). These air photo sheets have been compared

b. The signals used originate with plane table graphic control sheets: T-6352a, T-6352b, T-6314a and T-6314b; all 1935 surveys. ✓

3. Sounding Line Crossings

Agreement of cross lines is satisfactory ✓

4. Depth Curves

The usual depth curves may be satisfactorily drawn within the limits of the survey including the major portions of the low water curve. ✓ Half-foot soundings were freely used in smoothing out irregularities.

5. Junctions with Contemporary Surveys.

a. The junction with H-5795 (1935) on the west is satisfactory. ✓ In the vicinity of Lat. 29°50.6', Long. 84°38.3'; however, only of the present survey may be more fast depths. In this connection, a 12 foot sdg on H-5795 (1935) in Lat. 29°50.4', Long. 84°38.3

(line 109-110 m, blue) which falls between a 4 and 5 foot rdg on the present survey was found to have been incorrectly ✓ relieved. The correct sounding is 2½ fat and has been so shown on the smooth sheet.

b. Other field sheets adjoining this survey have not as yet been ✓ received in this office.

6. Field Abstract.

Field protracting & plotting were accurate and conform to ✓ the requirements of the H. M.

7. Remarks

a. This sheet was inked by Mr. McKenny. ✓

8. Verified by Harold W. Murray April 10, 1936 ✓

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5867 (1935) FIELD NO. 9

Dog Island, St. George Sound, Florida
Surveyed in Mar. - June - July 1935
Instructions dated November 30, 1934, June 5, 1935 (C. A. EGNER).

Hand Lead Soundings. 3 Point fixes on shore signals.

Chief of Party - C. A. Egner.
Surveyed by - M. G. Elliott, R. E. Dille.
Protracted by - V. F. Simmons, H. P. Theus, M. C. Burr.
Soundings penciled by - G. C. McGlasson, C. A. Egner.
Verified and inked by - Harold W. Murray, C. F. McKenney.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual.

The Descriptive Report is very complete and satisfactorily covers all the items of importance.

2. Compliance with Instructions for the Project.

The plan and character of development are in accordance with the instructions for the project. However, due to the unexpected ending of the field season a number of areas remain where additional work is desirable. (See Descriptive Report, page 6.)

3. Shoreline and Signals.

The shoreline originates with air photo compilations T-5513 (1934) and T-5511 (1934). The latter has not yet been reviewed.

The signals come from graphic control surveys T-6314a and b (1935) and T-6352a and b (1935).

4. Sounding Line Crossings.

The sounding line crossings are satisfactory, the depths generally agreeing within 1 foot or less.

5. Depth Curves.

Within the area of the survey, the usual depth curves may be satisfactorily drawn.

6. Junction with Contemporary Surveys.

The junction with H-5795 (1935) to the west is satisfactory.

No contemporary surveys have been made to the south and east but no difficulty will be encountered in joining the present survey to the information now on Chart 182, pending the extension of surveys in this vicinity.

7. Comparison with Prior Surveys.

H-655 (1858), H-688 (1858-9), H-734 (1860), H-1156 (1872) H-1331b (1876).

These surveys are all on a scale of 1:20,000. Extensive changes have taken place since the above surveys were made. General features can be identified but the location and outline of many of the shoals have changed and are evidence of the changeable nature of this area. A listing of the various differences would serve no useful cartographic purpose. The present survey shows a much closer development of the area and none of the information from the older surveys has been retained. Because of the many changes, the lapse of time since the surveys were made, and the closer development on the present survey, H-5867 (1935) should supersede the above surveys for future charting purposes.

8. Comparison with Chart 182 (New Print dated March 11, 1936).

a. Hydrography.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraph and contains no other information that needs to be discussed in this review.

b. Aids to Navigation.

No aids to navigation are maintained within the area of the present survey.

9. Field Plotting.

The field plotting was accurate and fully satisfied the requirements of the Hydrographic Manual.

10. Additional Field Work Recommended.

This survey is satisfactory and no further work is required in that area. The additional work needed in the uncompleted area is specified on page 6 of the Descriptive Report.

11. Superseding Old Surveys.

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

H-655 (1858) in part
H-688 (1858-9) in part
H-734 (1860) " "
H-1156 (1872) " "
H-1331b (1876) " "

12. Reviewed by - R. J. Christman, April 22, 1936.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

L. O. Colbert
Chief, Division of Charts.

Fred. L. Peacock
Chief, Section of Field Work.

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

Applied to Chart Cor. 1114 June 11, 1938. H.E. MacEwen
Only the critical depths and other important changes applied to
Chart Cor 182 July 1939 R.
applied to ch. 1261 Apl. 1943 - GVE.

Appd 8-12-68 AJS. Fully.