

5795

U. S. COAST & GEODETIC SURVEY
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5795

Form 504
Rev. Dec. 1933

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

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 8
Hydrographic }

State Florida

LOCALITY

St. George Sound

~~Vicinity of Carrabelle~~

East Pass & Vicinity

1935

CHIEF OF PARTY

C. A. Egner

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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REG. NO.
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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. 8.

REGISTER NO. **5795**

State Florida, ~~Georgia~~

General locality St. George Sound, ~~Vicinity of Carrabelle~~

Locality East Pass, ~~Carrabelle~~ & Vicinity

Scale 1/10000 Date of survey Dec.-May, 19³⁵~~34~~-1934-35

Vessel Shore Party No. 23

Chief of Party C. A. Egner.

Surveyed by M. G. Elliott, Jr. Surveyor.

Protracted by M. C. Burr, C. A. Egner.

Soundings penciled by G. C. McGlasson.

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by H.V. Bennett & M. Silsberg

Verified by M. Silsberg

Instructions dated Nov. 30, 1934., 19

Remarks:

REPORT TO ACCOMPANY HYDROGRAPHIC SHEET

NO. 8

INSTRUCTIONS:

This sheet was executed under instructions dated November 30, 1934, for Project No. H-194, covering operations of Field Party No. 23 in Apalachicola Bay and St. George Sound.

SCALE:

The work on this sheet was done on the scale 1/10,000 to permit the development of all critical areas in East Pass and Carrabelle River.

LIMITS AND LOCALITY:

This sheet joins sheet #9 on the east at Longitude $84^{\circ}-38'.3$ and sheet #7 on the west at Longitude $84^{\circ}-42'.9$. The southern limit is Latitude $29^{\circ}-44.4$ and includes the sea buoy at East Pass. It extends north to $29^{\circ}-51.5$ to permit the development of Carrabelle River to a distance of about a mile above State Highway Bridge, Route No. 10.

This sheet covers the locality of St. George Sound, Carrabelle River and East Pass.

PURPOSE:

No recent survey has been made of this general area. It has been known that this is a changeable area, with the north beach line of the Sound receding, the depths in East Pass shifting due to strong currents and wave action, and the shapes of the points of land on George and Dog Island changing due to erosion and building up.

This survey, therefore, is intended to bring up-to-date the physical character of the locality.

Some maintenance work by the U. S. Engineers in East Pass and in the Carrabelle River has never been adequately charted.

METHODS:

Standard methods of hydrography were employed throughout. All fixes were by sextant on shore triangulation and topographic signals. All sounding was done either with the hand lead line or, in very shoal water, with a sounding pole. All deeper waters of the Sound was done with the launch RAMBLER; shoal waters along both shores and in the Carrabelle River with the Gondola and outboard motor.

CONTROL: HORIZONTAL:

Triangulation control was furnished by the 1st order scheme of Lt. G. L. Anderson in 1934, supplemented this year by 2nd order and 3rd order breakdown stations taken off from the 1st order scheme.

Topographic signals were located by intersection from the triangulation stations, or from 3-point fixes based on them, or in some localities by traverse along the beach where it was impossible to get proper intersections.

All work is on the N. A. 1927 datum.

The shoreline appearing on the sheet is from photographic compilation closely checked upon rodded shoreline taken from topographic sheets "J", "K", "L".

CONTROL -- VERTICAL:

The tidal reductions were controlled from two tide gages and staffs. The area being so divided as to take the best advantage of these.

Two portable automatic gages were established, one at Carrabelle, in the river, and the other just inside of west end of Dog Island. All soundings in the river were referred to the Carrabelle gage; the open area of the Sound and the Pass to the Dog Island gage.

The planes for these gages were obtained by a minimum of a weeks simultaneous comparison with the standard gage at Key West.

Since establishing the plane of the Dog Island gage a greater number of marigrams have been made which would make a better determination of this station.

CHARACTER AND LOCALITY:

This sheet covers the entrance into St. George

Sound through East Pass, work was extended south as to include the lighted buoy at the bar. The controlling depth through the Pass is 20 feet. This depth cannot be obtained by following the range, but good water can be had by obeying the buoys in this channel.

The shoals on the sheet are practically the same as compared with previous survey with the exception of St. George Shoal which extends eastward from St. George Island and is marked on the east end by the Bell Buoy.

A small shoal is forming just inside of Pilot Harbors extending westward of St. George Island.

The present controlling depth in Carrabelle River between Beacon #2 and the front range is 12 feet, this compares very favorably with the charted depth by the U. S. Engineers who have dredged this entrance. About 8 feet is accessible from the range on up until the docks are passed.

COMPARISON WITH PREVIOUS SURVEYS:

There has been very little change in the depths as compared with the present chart, with the exception of the above mentioned shoals.

The U. S. E. dredging in Carrabelle River was found to be as charted. On the present chart, No. 182, there is an area charted as dredged from C buoy #11 to Beacon #2 at the entrance of the River. The chart indicates a 14 foot channel in June 1933. No evidence was found to indicate that this area was dredged. Local

No dredged channel shown on Chart 182 (Ed. 2/11/35) which is contemporary with the present survey

authorities state that no dredging was done. The depths are consistently 14 feet or greater over this area.

DANGERS TO NAVIGATION:

In Carrabelle River there is a submerged wreck as shown on the sheet. While this wreck is not in the channel proper it is quite likely that vessels unfamiliar to this area would founder here.

It has been requested by some of the local boat owners that this be called to the attention of the proper authorities.

There exists as a very probable danger, in the form of a three inch pipe about a foot above M. L. W., $3/4$ of a mile south of the front range beacon of the East Pass range. This pipe was probably placed in this position to aid in the building of this range and was evidently forgotten when work was finished.

ANCHORAGES:

By the very beneficial characteristic of the two Islands on either side of East Pass in making a "hook" at the ends two well protected anchorages are afforded for small craft in all weather except from a northern blow.

COAST PILOT INFORMATION:

Is being forwarded as a part of a general Coast Pilot report for the season's work.

RECEDING NORTH SHORELINE:

It has been established beyond a doubt that the north shore of this sound has been receding. The facts that ascertain this are lost triangulation stations and the washing away of certain portions of the highway. Some of the old triangulation stations were recovered and found to be as much as 40 meters beyond the present high water line.

DEVELOPMENT OF SHOAL AREA:

Particular pains were taken in the development of all shoals. As much of the low water lines was obtained as was considered economical. On the outside of the islands where it was considered unsafe for the boats to sound an estimated distance of about 50 meters from the low water line, a line was sounded parallel to the beach.

WEATHER SIGNAL:

There is a storm signal tower in Carrabelle which is used to give weather signals to the local vessels and those that are passing in the Sounds. Though this tower is located on the highest part of town it is scarcely visible with the naked eye across the bay.

OYSTER BARS:

Instructions called for as many samples of the bottom as practical. This was done. Only one oyster bar was located in the area, this being just west of the entrance to Carrabelle River. This is, in general, not a prolific oyster area.

No oyster bar indicated by name was found on this sheet.
N.M.M.

GEOGRAPHIC NAMES:

Some of the names as charted were considered the best available. Where local usage of names were different from those on the present chart, these names were applied.

SOUNDING VOLUMES:

Due to a misunderstanding by the Surveyor in charge, separate volumes were not used when work was changed from the launch to the Gondola. This resulted in a long tedious job of straightening out the facts to establish statistics for this sheet.

It was considered better to leave the volumes as are, rather than attempt to transfer to new volumes in separating the work of both boats.

Respectfully submitted,

M.G. ELLIOTT

M. G. Elliott, Jr., Surveyor

by C. A. Egner.

Approved and forwarded,

C. A. Egner
C. A. Egner, Lieut.,
Chief of Party #23.

T I D A L D A T A

In Carrabelle River tidal reductions are based on a portable automatic gage established at the Three Brothers dock on the Carrabelle water front:

M. L. W. on the staff

In the open sound (all area except the Carrabelle River) reductions depend upon a portable automatic gage established in the anchorage inside the hook at the west end of Dog Island. This gage was maintained with difficulty due to rough water. It was finally successfully anchored by sinking lengths of pipe 6 feet in the sand by means of a water jet:

M. L. W. on the staff

Both planes depend upon simultaneous comparison with the Key West Standard gage. Sufficient data is now available for the Dog Island gage to establish an independent plane.

LIST OF SIGNALS SHEET NO. 8

TRIANGULATION

New 1935
 Red 1935
 R. R. Beacon 1935
 Carrabelle Storm Signal 1935
 Carrabelle 1934
 Sig 1935
 Carrabelle Light House 1934
 Front Light House 1935
 George 1934
 Dog Island West 1934

TOPOGRAPHIC

Pot` Rub
 Rap Half
 Twin Bee
 Lone Gab
 Tank Pas
 Prick Lat
 Chim No'
 Wind Trip
 Gas Dis
 Fr. R. Beacon
 Falc Daf
 Flag Ade
 Tan Tom
 End Tide
 By Rut
 Tro Dick
 Say Big
 Ter Ope
 Cent Har
 And Art
 So Pod
 But Out
 Mark Bar
 Day Rye
 Life Set
 El Up

STATISTICS FOR HYDROGRAPHIC SHEET NO. 8

DATE	DAY LETTER	BOAT	SOUNDINGS	POSITIONS	MILES	VOLUME
12/20/34	a	GONDOLA #1	208	53	5.75	1
12/21	b	"	351	91	10.0	1
1/21/35	c	"	316	82	14.6	1
1/21						
1/24	d	"	180	52	8.0	2
1/25	E	RAMBLER	386	101	15.7	2
1/28	f	GONDOLA #1	491	124	16.8	2
1/29	g	"	374	102	13.0	2
1/29	g	"	216	63	8.0	3
1/30	h	"	325	86	11.5	3
1/31	J	RAMBLER	385	102	15.5	3
2/1	K	"	401	101	16.1	3
2/4	L	"	107	25	4.6	3
2/4	L	"	694	174	28.9	4
2/6	m	GONDOLA #1	630	173	20.5	4
2/11	N	RAMBLER	50	12	2.5	4
2/11	N	"	173	41	5.7	5
2/14	P	"	301	73	13.3	5
2/18	Q	"	684	172	32.8	5
2/19	R	"	270	69	13.2	5
2/19	R	"	107	24	5.2	6
2/20	S	"	680	175	37.7	6
2/21	T	"	586	144	29.3	6
2/25	u	GONDOLA #1	298	77	10.0	6
2/25	u	"	152	37	5.0	7
3/7	v	"	303	87	8.3	7
3/8	w	"	124	33	5.0	7
3/14	x	"	55	13	1.5	7
3/18	y	"	815	205	28.2	7
3/18	y	"	160	40	5.5	8
3/21	z	"	518	135	25.7	8
3/22	a'	"	549	146	26.5	8
3/25	b'	"	243	61	8.0	8
3/25	b'	"	103	28	2.3	9
3/26	c'	"	56	16	2.0	9
3/27	d'	"	546	161	23.6	9
'24	e'	RAMBLER	341	97	12.2	10
TOTALS.....			12,178	3175	492.45	

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 12, 1935.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
11 volumes of sounding records for

HYDROGRAPHIC SHEET 5795

Locality East Pass and Vicinity, St. George Sound, Florida

Chief of Party: C. A. Egner in 1934-1935
Plane of reference is mean low water reading
2.0 ft. on tide staff at Dog Island West
5.3 ft. below B.M. 1

3.1 ft. on tide staff at Carrabelle
16.5 ft. below B. M. 1

Height of mean high water above plane of reference is 1.3 feet at
Dog Island West; 1.6 feet at Carrabelle.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

VERIFICATION REPORT H-3795 (1935)

1. CONFORMITY TO HYDROGRAPHIC MANUAL

The sounding records are neat and legible and conform to the requirements of the hydrographic manual. Signals were not listed at the top of each page of the sounding records. The records were changed from DD to dd in order to conform to the smooth sheet.

2. DEPTH CURVES

The zero curve is found in places. The six, twelve and eighteen foot curves are complete within the limits of this survey.

3. FIELD PLOTTING

The field plotting is complete to the extent required for the soundings. A number of soundings were omitted where the lines turned and had to be plotted. Position 7a plotted so close to the edge of the dock that it was omitted. (Lat. 29-51.2', Long. 84-40.2') There exists a questionable spot at (Lat. 29-49.3', Long. 84-39.9), The fixes, time and boat sheet agree with the records but the hydrography does not look rational. *Accepted. X.M.M.*

4. OFFICE PLOTTING

The line 29-41v (Lat. 29-50.8, Long. 84-40.5) was not plotted in the field due to conflict with the topography. The high water line was corrected to conform to the compilation, and the line plotted. The wreck at Lat. 29-46.8, Long. 84-39.5) was taken from T-5513(1934). The anchorage symbol at (Lat. 29-46.8, Long. 84-39.5) was taken from chart 182.

5. JUNCTIONS

The only junction ^{at this date} is to the west and to date H-5819(1935) has not been verified.

6. DISCREPANCIES

There is a doubtful crossing at (Lat. 29-51.2, Long. 84-40.1) Pos. on 8b-9b where a 6 ft falls between a 3 ft and 2 ft. sounding. *Small Channel here. X.M.M.*
Pos. 58j-59j (Lat 29-49.1, Long. 84-42.5) are swingers and were changed to check time and boat sheet.

Respectfully submitted,

M. Silverberg

July 29, 1935

Top sheets: Signals T-6312(1935), T-6314a(1935) and T-6314b(1934) - Graphic Control
Shoreline T-5573 A.P. other A.P. sheets not registered.

HYDROGRAPHIC SURVEY NO. H5795

Smooth Sheet 1

Boat Sheet 1

Sounding Records 11 Vols. _____

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes in Vol. 1

Landmarks for Charts (Form 567) No Yes

Statistics Yes

Approved by Chief of Party C. A. Emer

Recoverable Station Cards (Form 524) _____

Special Chart for Lighthouse Service _____
(Circular Nov. 30, 1933)

Remarks _____

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5795

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

Number of positions on sheet	3175
Number of positions checked	36
Number of positions revised	2
Number of soundings recorded	12,178
Number of soundings revised	32
Number of signals erroneously plotted or transferred	0

Date: July 29, 1935

Verification by *M. S. Bentley*
Inked by *EB Bennett*
Review by *H. W. Murray*

Time: 43²
26'
Time: $\frac{693}{4}$ hrs.
Chrs.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5795 (1934-35) - FIELD NO. 8

East Pass and Vicinity, St. George Sound, Florida
Surveyed in 1934-35

Instructions dated November 30, 1934 (C. A. Egner)

Hand Lead and Pole Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - C. A. Egner.

Surveyed by - M. G. Elliott, Jr.

Protracted by - M. C. Burr and C. A. Egner.

Soundings penciled by - G. C. McGlasson.

Verified and Inked by - H. V. Bennett and M. Silverberg.

1. Condition of Records.

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

- a. Signals were not consistently listed at the top of each page of the sounding records.
- b. No chart containing objects for locating aids to navigation for use by the Lighthouse Bureau nor "Landmarks for Charts" on Form 567 covering this area have been received from the field. Landmarks submitted.
- c. A number of black can buoys were incorrectly noted in the records as black nun buoys. These were corrected in the office.

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

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

3. Sounding Line Crossings.

Agreement of cross lines is in general satisfactory. A number of soundings on line 28 to 33Q (blue) in lat. $29^{\circ}46.4'$, long. $84^{\circ}40.7'$ vary 1 to 3 feet shoaler than soundings of other lines run in the immediate vicinity. However, in view of the relatively good agreement existing in several cases, it is not considered advisable to reject any of the shoal soundings and they have been retained on the sheet. In lat. $29^{\circ}49.3'$, long. $84^{\circ}39.95'$, the 4 and 6 foot soundings of line 42 to 43f (blue) falling in depths of 10 to 11 feet cause an unnatural protrusion in the 6 foot curve and appear to be 1 fathom too shoal. However, this discrepancy will cause little or no irregularity in charting and the soundings have been retained.

4. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn including portions of the low water curve.

5. Junctions with Contemporary Surveys.

- a. The junction on the west with H-5819 (1935) will be considered in the review of that survey.
- b. The junction on the east with Field Sheet No. 9 will be considered when that sheet is received in the office.
- c. There are no contemporary surveys to the north and southward of H-5795 (1934-35).

6. Comparison with Prior Surveys.

H- 13 (1853), H-1156 (1872),
H-655 (1858), H-1390 (1878),
H-688 (1858-59), H-1509 (1882).
H-754 (1860).

In view of the lapse of time between the above sparsely developed 1 to 20,000 scale surveys and the present survey, and the fact that they contain no important shoals or soundings not adequately covered by the more detailed development on the present survey, a detailed comparison will serve no useful cartographic purpose. The old surveys should be superseded by H-5795 (1934-35) for charting purposes.

7. Comparison with Chart No. 182 (corrected to Feb. 11, 1935).

a. Hydrography.

Soundings shown on the above chart originate with surveys discussed in preceding paragraphs of this review and several U. S. Army Engineers' surveys, the more important of which are surveys of 1934 (Bps. 27912 and 27913) covering the navigable channels. Soundings are generally in close agreement with those of the present survey altho a few areas vary 1 to 2 feet deeper than depths on H-5795 (1934-35). The present survey should supersede previous chartings from the above blueprints.

b. Aids to Navigation.

Buoys and beacons shown on the present survey are in practically the same positions as charted and correctly mark the features intended except as follows:

- (1) Black buoy C "9" in lat. 29°46.7', long. 84°40.5' is shown about 110 m. northwest of its charted position. This buoy would better mark the channel if moved about 75 meters to the eastward of its position as located by the present survey.

c. Controlling Depth in Channels.

The charted controlling depth of 10 feet as of August, 1934, in the dredged channel to the east and southeastward of Timber Island is generally borne out by the present survey if one has local knowledge in entering the river. Nine feet would be a much safer depth to chart insofar as the present survey is concerned.

8. Field Plotting.

Field protracting and plotting are accurate and conform to the requirements of the Hydrographic Manual except that a number of soundings obtained on turning lines were not plotted. Those omitted were plotted in the office.

9. Additional Field Work Recommended.

This survey is complete and no additional field work is required.

10. Superseding Previous Surveys.

Within the area covered, H-5795 (1934-35) supersedes the following surveys for charting purposes:

H- 13 (1853)	in part.
H- 655 (1858)	" "
H- 688 (1858-59)	" "
H- 734 (1860)	" "
H-1156 (1872)	" "
H-1390 (1878)	" "
H-1509 (1882)	" "

11. Reviewed by - Harold W. Murray, August 27, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

F. B. Borden
Chief, Section of Field Work.

L. O. Pollock
Chief, Division of Charts.

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

Applied to Chart Cor. 1114 June 13, 1939. H.E. MacSwen
Critical sds in general were only ever applied to Chart Correct. 182
No sds. in channels were used. July 1939

Applied to Chart 1262 - June 1940 - J.S.S.
applied to chart 1261 - Sep. 1943 S.H.E.
Applied to hkt 865 6/8/46 W.A.B.