

# 7818

Diag. Cht. Nos. 1114, 1260, 1261-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey ..... **HYDROGRAPHIC**

Field No. **HY-10248** ..... Office No. **H-7818**

### LOCALITY

State ..... **FLORIDA**

General locality ..... **Gulf of Mexico**

Locality ..... **South of St. Marks, Florida**

19~~4~~ 50

CHIEF OF PARTY

**George L. Anderson**

LIBRARY & ARCHIVES

DATE ..... **JAN 18 1954**

B-1870-1 (1)

8182

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.

REGISTER No. H-7818

Field No. HY-10248

State FLORIDA

General locality Gulf of Mexico

Locality South of St. Marks, Florida

Scale 1:100,000 ✓ Date of survey 5 May-7 December 1950 ✓

Instructions dated 26 September 1946; Supplemental - 9 July 1947, 6 October 1948,  
15 March 1949

Vessel HYDROGRAPHER

Chief of party George L. Anderson ✓

Surveyed by <sup>Ships</sup> Officers ~~attached during 1950~~ ✓

Soundings taken by ~~fathometer~~, graphic recorder, ~~hand lead, wire~~

Fathograms scaled by Various ship's personnel under officer supervision

Fathograms checked by Various ship's personnel under officer supervision

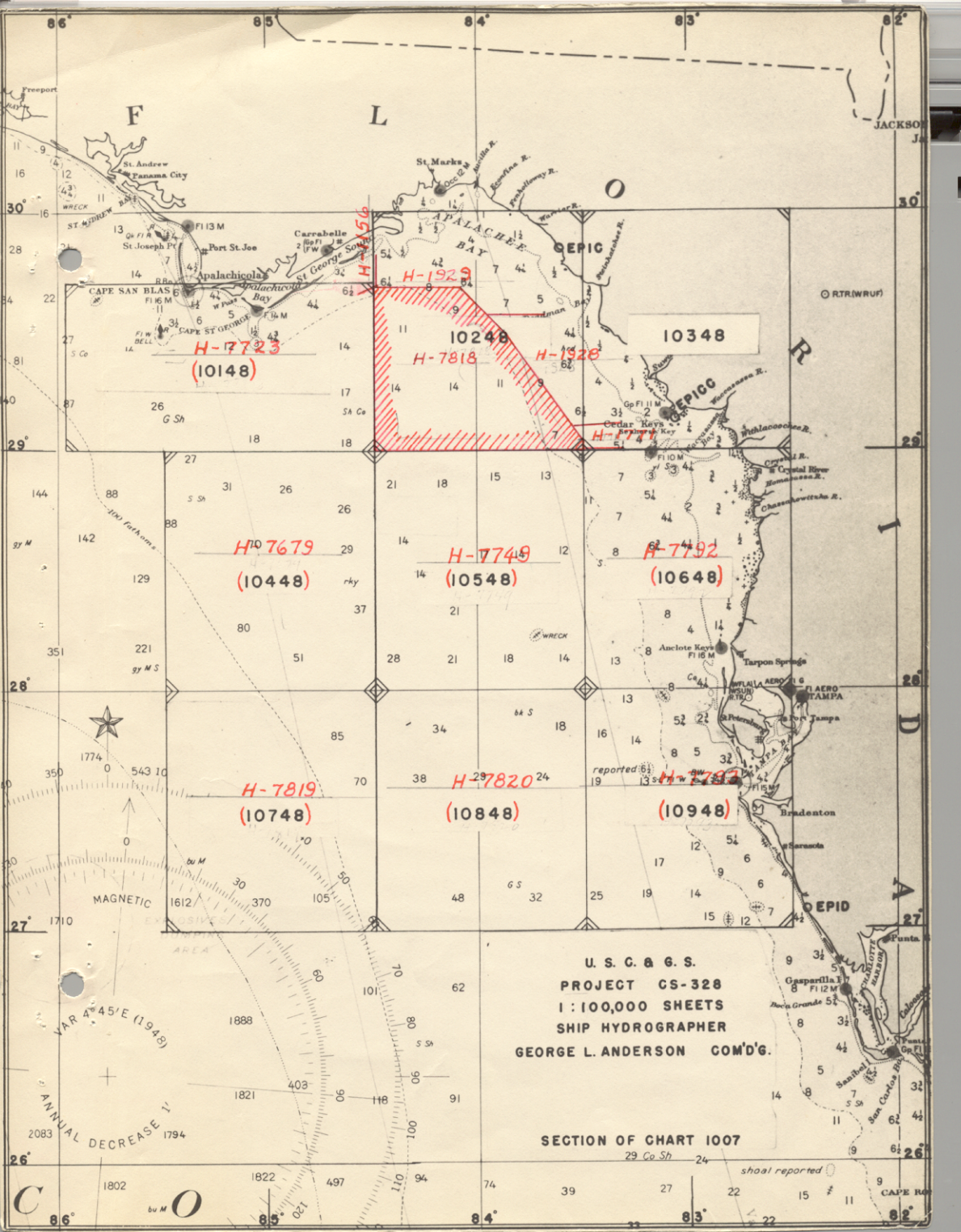
Protracted by C.A.J. Pauw

Soundings penciled by C.A.J. Pauw

Soundings in ~~fathoms~~ feet at MLW ~~MOOD~~ ✓  
and are true depths

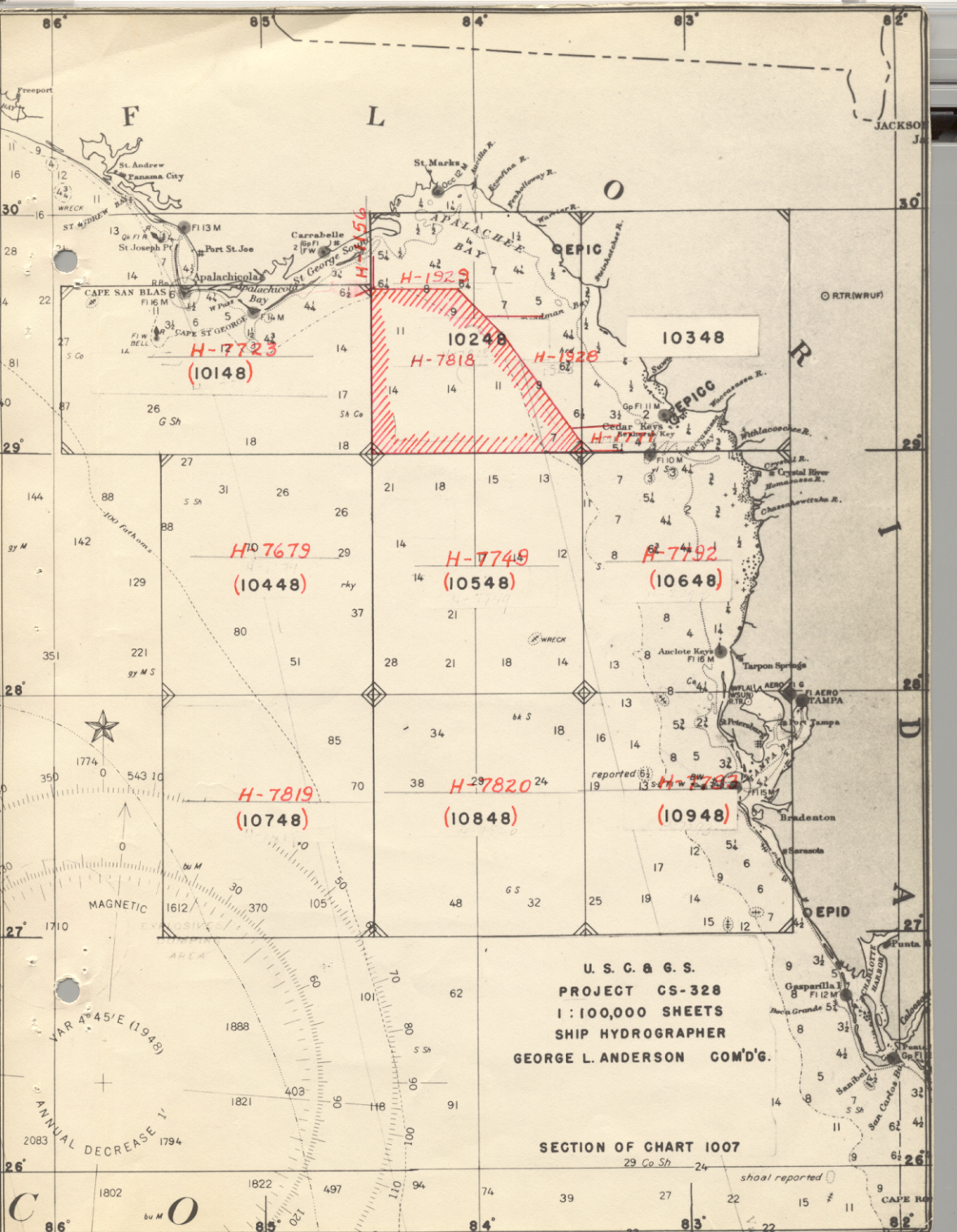
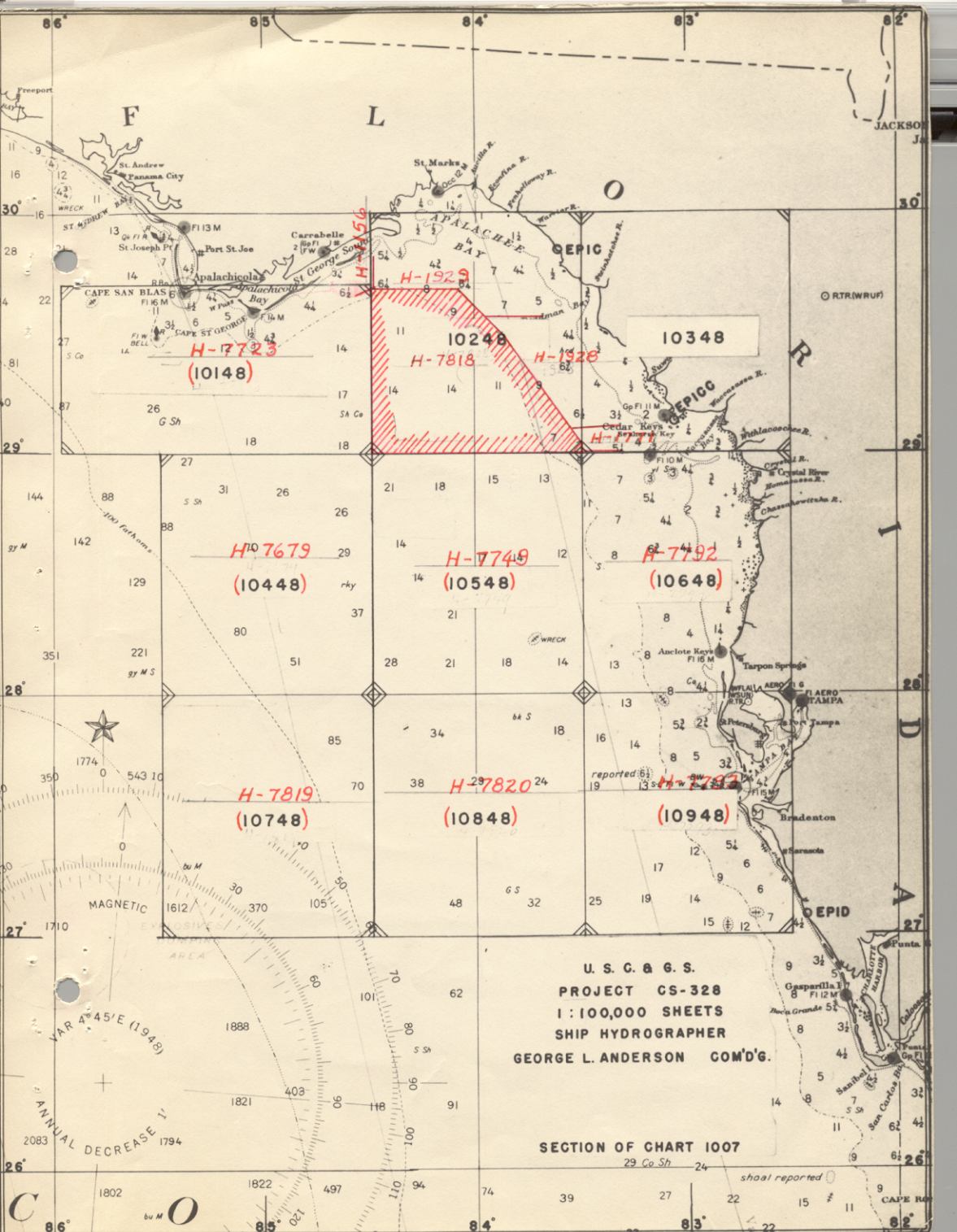
REMARKS: Off shore survey - EPI control

Plotted in Seattle Processing Office



U. S. C. & G. S.  
 PROJECT CS-328  
 1:100,000 SHEETS  
 SHIP HYDROGRAPHER  
 GEORGE L. ANDERSON COM'D'G.

SECTION OF CHART 1007



## DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SURVEY H-7818 (HY-10248)

Scale 1:100,000

Ship HYDROGRAPHER

George L. Anderson  
Chief of Party

### A. PROJECT

This survey was made under Instructions from the Director to the Commanding Officer, Ship HYDROGRAPHER, for project CS-328 and are dated 26 September 1946; amended by Supplemental Instructions dated 9 July 1947, 6 October 1948 and 15 March 1949.

### B. SURVEY LIMITS AND DATES

This survey is off shore from and south of St. Marks, Florida. An index of all adjacent hydrographic sheets is attached.

This survey joins contemporary surveys, as indicated, on the south and on the west. It effects a junction with older surveys in the vicinity of the ten (10) fathom curve on the north and east.

Starting on the northwest and proceeding thru the east, south and west to the point of beginning this survey joins:

1. Survey H-1156, scale 1:20,000, surveyed during 1872.
2. Survey H-1929, scale 1:80,000, surveyed during 1889.
3. Survey H-1928, scale 1:80,000, surveyed during 1889.
4. Survey H-1771, scale 1:40,000, surveyed during 1887.
5. Survey H-7749 <sup>(1948-50)</sup> (HY-10548), scale 1:100,000, surveyed during the 1948 and 1949 field seasons.
6. Survey H-7723 <sup>(1948-50)</sup> (HY-10148), scale 1:100,000, surveyed during the 1948, 1949 and 1950 field seasons.

*Review,  
par. 4.*

In the extreme northwest corner of this sheet the survey does not effect a junction (along the west side) with Survey H-1156. The EPI work in areas, of which this is one, where Project limits are on the beach was carried approximately to the ten (10) fathom curve. Survey H-1156 falls within the limits of Project CS 328 and will be resurveyed at a later date at which time satisfactory junctions will be made with Surveys H-7818 (HY-10248) and H-7723 (HY-10148) in this area.  
(1950) (1948-50)

The work on this survey was started on 5 May 1950 and was completed on 7 December 1950.

#### C. VESSEL AND EQUIPMENT

All work on this survey was accomplished by the Ship HYDROGRAPHER. No subparties were operated from the ship on this survey.

The Ship HYDROGRAPHER has a turning radius of 80 to 120 meters depending on the wind and/or current.

All soundings were taken with 808J type Depth Recorders Nos. 131 SG and 132 SG. The sounding unit used is integral feet. The installation of these units was such that either could be used at will and both are considered regular units and neither a standby as in previous seasons.

Frequent simultaneous comparisons with wire soundings were made to obtain corrections and to assure the correct operation of the depth recorders.

The gyroscope compass was used at all times while this survey was in progress. Bearings were taken when proceeding in and out of port and sun azimuths on the working grounds to check on the operation of the compass. The error was found to be negligible.

#### D. TIDE AND CURRENT STATIONS

The observed tides at the Tampa Bay, Florida, Primary Tide Station located at St. Petersburg was used for the reduction of soundings. (See tidal note for additional information).

No tide or current stations were occupied within the limits of this survey.

Seattle

E. The Smooth Sheet is being processed by the ~~Norfolk~~ Processing Office. ✓

F. CONTROL STATIONS

The hydrography on this survey was controlled by two EPI shore stations. Station EPICC was located at Cedar Keys, Florida in Latitude  $29^{\circ} 07' 48''$ , Longitude  $83^{\circ} 03' 07''$ . Station EPID was located at Venice, Florida in Latitude  $27^{\circ} 04' 53''$ , Longitude  $82^{\circ} 26' 47''$ . (For detail description of location etc. see applicable report).

The length of base line between EPICC and EPID is approximately 144 statute miles. The least angle of intersection of the arcs on this survey is approximately 31 degrees. ✓

For the control used on the location of fixed buoys off Tampa Bay Entrance and Cape St. George, see cahier Geodetic Computations attached to the EPI report.

G. SHORELINE AND TOPOGRAPHY

This is an off shore survey and no shore line or topography is shown on this sheet. ✓

H. SOUNDINGS

Sounding corrections for velocity of sound and instrumental errors were controlled by adequate serial temperatures and salinities and by frequent simultaneous comparisons using sounding machine No. H-141 with stranded wire over calibrated sheaves.

The effective length of the stylus arm of the 808J type machines was checked. The speed of the machine was checked against the fathogram as described in paragraph 5554 of the Hydrographic Manual. Frequent additional checks were made during the season. The speed of the machine, using the middle reed and counting the number of turns of the stylus arm on the fathom scale, was checked and recorded in the sounding volumes at frequent intervals. ✓

Summaries of all applicable reducers are attached to this report.

I. CONTROL OF HYDROGRAPHY

All hydrography on this sheet is ship hydrography. This work is controlled by the EPI system using stations EPICC and EPID. Special test buoys were planted near shore and on the working grounds to obtain corrections to the EPI distances received during hydrographic operations. For the explanation of the use of these buoys and the correctors derived see the applicable reports. A list of the correctors used to reduce the distances observed on this survey is attached to this report. ✓

J. ADEQUACY OF SURVEY

This survey is complete and adequate to supersede prior surveys for charting. All junctions with contemporary adjoining surveys are satisfactory, no holidays or excessive differences exist. All depth curves can be drawn at the junctions. ✓

K. CROSSLINES

Approximately 10% of the hydrography is crosslines. No excessive discrepancies appear on the boat sheet. ✓

L. COMPARISON WITH PRIOR SURVEYS

Satisfactory junctions were obtained with the modern surveys listed in paragraph B above. This survey supersedes in part the following surveys:

1. Survey H-1156, scale 1:20,000, surveyed during 1872.
2. Survey H-1929, scale 1:80,000, surveyed during 1889.
3. Survey H-1928, scale 1:80,000, surveyed during 1889.
4. Survey H-1771, scale 1:40,000, surveyed during 1887.
5. Survey H-1354, scale 1:600,000, surveyed during 1881-82.

*Review,  
par. 5.* ✓

The soundings shown on the above surveys are in good agreement with those on the new survey. A detail analysis of the comparison between the old surveys and the new survey will be made after the smooth sheet is plotted. There are several cases where the old and the new surveys are in apparent disagreement (as outlined below). On careful analysis ✓

a very small displacement of either the old and/or the new work would bring the surveys into complete agreement. Your attention is invited to the following examples:

1. \*7 fathoms in Lat.  $29^{\circ} 03'2''$ , Long.  $83^{\circ} 37'8''$  which falls in general depths of 55-56 feet on the new survey. A sounding of 50 feet (52 feet on boat sheet) was obtained on the new survey adjacent to the old sounding. \*  $7\frac{3}{4}$  fms. (47ft) on H-1771 (1882) in agreement with 50ft. on pres. survey (84ft.)
2. 14 fathoms in Lat.  $29^{\circ} 15'5''$ , Long.  $84^{\circ} 22'5''$  and also in Lat.  $29^{\circ} 15'5''$ ; Long.  $84^{\circ} 28'5''$ . These soundings are from H-1354. This survey was an off shore survey and the lines were apparently controlled at least in part by Dead Reckoning methods. A shift of the old sounding line would bring the soundings into agreement. 91-93 ft. on  
pres. survey  
See Review,  
par. 5
3. \*9 fathoms in Lat.  $29^{\circ} 33'8''$ , Long.  $84^{\circ} 01'2''$  which falls in general depths of 61-65 feet. A shift of the sounding line on which this sounding was obtained would bring the two surveys into agreement. \* Actually  $9\frac{3}{4}$  fms. (59') on H-1929 (1889) from where it originates. Good agreement with pres. depth of 61ft. considering irregularities in bottom
4. The ten fathom curve along the northern limit of the survey is in agreement with the charted curve when the more detail delineation of the new survey is taken into account. Along the northeast and east edge of the survey there appears to be a displacement to the eastward on the new survey. The closer spacing of the lines on the new survey insures a correct delineation and the soundings used in drawing the curves on the old survey in some cases appear to be isolated shoals with the ten fathom curve falling to the eastward.

#### M. COMPARISON WITH EXISTING CHARTS

This survey has been compared with Chart 1007, print date 3 March 1950; Chart 1114, print date 15 August 1949; Chart 1259, print date 28 March 1949; Chart 1260, print date 13 February 1950; Chart 1261, print date 10 October 1949. The surveys discussed above are the source of the hydrography shown on these charts. No additional discussion is necessary.



N. DANGERS AND SHOALS

All charted dangers and shoals were found as charted or shoaler depths were found except for those listed in paragraphs L, M, N, above.

P. AIDS TO NAVIGATION

No floating or fixed aids to navigation fall within the limits of this survey.

U. MISCELLANEOUS

This survey is one of many being made from the ship based at Saint Petersburg, Florida. Due to the necessity for EPI tests at frequent intervals at known point, because of the weather, attempts to reduce the runs to and from port to a minimum, and related factors the planning of the work to be accomplished necessarily took in the entire project instead of concentrating on any one sheet. The concentration of lines around the test buoys resulted from the frequent EPI tests. Most of the hydrography on Survey H-7792 (10648) and H-7793 (10948) was accomplished on the runs to and from the outer limits of the project.

Z. TABULATION OF APPLICABLE DATA

The data listed below was forwarded to the Officer in Charge, Norfolk Processing Office as indicated:

Pkg. No.	Date	Data
--	10/26/49	1 cahier - Fixed Buoy Computations

The copies of the reports on the various phases of the work accomplished in 1950 together with the sounding volumes, fathograms, boat sheet and related material will be forwarded as they are processed.

The data listed below was forwarded direct to the Washington Office:

Date	Data
3/18/49	Location data for Station EPICC
5/18/50	Report on Calibration of Registering Sheaves <i>in Library</i>
11/1/50	Report of Settlement and Squat

Z. (Cont.)

1/9/51

Season's Report for 1950

1/15/51


EPI Correctors for 1950

1/17/51

Report on Velocity Corrections for 1950 H-7871

1/18/51

Report on Initial and Instrumental  
Corrections for 1950

  
J. E. Waugh  
LCdr., USC&GS

## APPROVAL SHEET

The field work accomplished on this survey was under my immediate supervision. Daily inspection of the records, fathograms and boat sheet was made as the survey progressed.

The records, reports and boat sheet as submitted to the Norfolk Processing Office have been reviewed by me and are approved. The survey is considered complete and adequate and no additional field work is recommended.



George L. Anderson  
Commander, USC&GS  
Commanding Officer  
Ship HYDROGRAPHER

7818

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
USC&GS HYDROGRAPHER, BOX 1259  
ST. PETERSBURG 1, FLORIDA

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

29 January 1951

To: The Supervisor, Southeastern District  
U. S. Coast & Geodetic Survey  
Room 418, Post Office Building  
Norfolk 10, Virginia

Subject: Status of Processing of Records on  
Survey H-7818

The boat sheet, sounding volumes, descriptive report and related records, for Survey H-7818 (HY-10248) are being forwarded to you under separate cover. This survey has been completed.

Personnel aboard the Ship HYDROGRAPHER have completed the processing of the records as indicated.

1. All fathograms scanned and check scanned under officer supervision.
2. All sounding correctors entered and checked.  
The soundings have been reduced but (not) checked.
3. All EPI correctors entered and checked.  
The corrected distances have been computed and checked.

Volume No. 19 (the last volume) is being held aboard pending receipt of the tide reducers for December. It will be forwarded when completed.

*George L. Anderson*  
George L. Anderson  
Commander, USC&GS  
Commanding Ship HYDROGRAPHER

cc: Director

CONTROL

PROJECTION

SHEET NO.

Pictured ; Checked  
 Tri. \_\_\_\_\_  
 Topo \_\_\_\_\_  
 + Hydro \_\_\_\_\_  
 Shoreline \_\_\_\_\_ : Inked: \_\_\_\_\_

Computed \_\_\_\_\_  
 Checked \_\_\_\_\_  
 Drawn \_\_\_\_\_  
 Checked \_\_\_\_\_

Depth Curves by \_\_\_\_\_  
 Desc. Rpt. by \_\_\_\_\_  
 Field Hy-10248  
 Reg. H- 7818

**7818**

Vol. No.	RECORDS				SMOOTH SHEETS		DATA RECEIVED	REMARKS
	Sounding				Pos. Protr'td	Sndgs Penciled		
	Tide reducers		Soundings					
Ent.	Ck'd	Reduced	Ck'd					
1	Field	Field	Field					
2	..	..	..					
3	..	..	..					
4	..	..	..					
5	..	..	..					
6	..	1..	..					
7	..	..	..					
8	..	..	..					
9	..	..	..					
10	..	..	..					
11	..	..	..					
12	..	..	..					
13	..	..	..					
14	..	..	..					
+	..	..	..					
16	..	..	..					
17	..	..	..					
18	..	..	..					
19	..	..	..					



CONTROL

PROJECTION

SHEET NO.

Plotted ; Checked \_\_\_\_\_ Computed \_\_\_\_\_ Depth Curves by \_\_\_\_\_ Field Hy-10248  
 Tri. \_\_\_\_\_ : \_\_\_\_\_ Checked \_\_\_\_\_ Desc. Rpt. by \_\_\_\_\_ Reg. H-7818  
 Topo \_\_\_\_\_ : \_\_\_\_\_ Drawn \_\_\_\_\_  
 + Hydro \_\_\_\_\_ : \_\_\_\_\_ Checked \_\_\_\_\_  
 Shoreline \_\_\_\_\_ : Inked: \_\_\_\_\_

**7818**

Vol. No.	RECORDS				SMOOTH SHEETS		DATA RECEIVED	REMARKS
	Sounding				Pos. Protr'td	Sndgs Penciled		
	Tide reducers		Soundings					
Ent.	Ck'd	Reduced	Ck'd					
	Recd- 1-29-51							
	✓ 1 - Boat sheet.							
	✓ 18 - Sounding vols.							
	✓ 2 - Descar. Reports -							
	✓ 1 - cahier - E.P.I. plotting abstracts -							
	Recd - 1-31-51							
	✓ 29 - Envelopes of Fathograms (1A thru 28FA)							
	Recd - 3-5-51							
	✓ 1 - Sdg. Vol. #19							
	✓ 1 Smooth Sheet							

Received 1-29-51 Locality S. of St. Marks, Florida SHEET NO. \_\_\_\_\_ Scale: 1:100,000  
 Completed \_\_\_\_\_ Ship Hydrographer Field Hy-10248  
 To Washington \_\_\_\_\_ Ch. of Party Geo. L. Anderson Reg. H- 7818  
 RAR, VISUAL, WD E.P.I. Inst. Dated \_\_\_\_\_ Proj. No. CS- 328  
 Triangulation Data \_\_\_\_\_ Topo Sheets Required \_\_\_\_\_  
 Comp. \_\_\_\_\_ Checked \_\_\_\_\_

RECORDS

Vol. No.	Bomb		Soundings						Final Vel
	Ck'd with Abstract	Ck'd with Sndg.	<del>Vel. S &amp; D</del> Corr.		I & S		Fathograms		
			Ent.	Ck'd	Ent.	Ck'd	Scaled	Rescaled	
1			Field	Field	Field	Field	Field	Field	
2			"	"	"	"	"	"	
3			"	"	"	"	"	"	
4			"	"	"	"	"	"	
5			"	"	"	"	"	"	
6			"	"	"	"	"	"	
7			"	"	"	"	"	"	
8			"	"	"	"	"	"	
9			"	"	"	"	"	"	
10			"	"	"	"	"	"	
11			"	"	"	"	"	"	
12			"	"	"	"	"	"	
13			"	"	"	"	"	"	
14			"	"	"	"	"	"	
15			"	"	"	"	"	"	
16			"	"	"	"	"	"	
17			"	"	"	"	"	"	
18			"	"	"	"	"	"	
19-			Not received from field Rec'd - 3-5-51						



H 7818(1950)

HY 10248

Gulf of Mexico  
South of St. Marks, Florida.

Processing Office Notes.

Smooth sheet.

The projection and EPI arcs and the revised arcs were made by the Washington Office.

Survey Buoys.

These buoys were used by the field party for determining and checking EPI corrections. Sounding lines were not tied to the buoys and were not adjusted to them. The buoys were plotted from a photostat copy of the list of distances to Cedar Keys ( CC ) and Venice ( D ), 1950 work, sent from the Washington Office. EPI Sta. Deckle Beach was not used for control on this sheet.

Sounding lines.

Many adjustments were made in the sounding lines to make the positions consistent with time, course and crossings. These adjustments were noted in the sounding records.

Soundings near Buoy 28.

In this locality the scale of the survey was enlarged to 1/ 50 000 by projecting the positions on tracing paper. Soundings were plotted on the tracing from which selected soundings were transferred to the smooth sheet. Tracing attached hereto.

Bottom.

There are small irregularities in depth, up to 4 or 5 feet, thruout the area of the survey, as is characteristic of other sheets of this project in corresponding depths. In the report for H 7792, Page 6 it is said that " numerous sand shoals which are unstable in character appear over the entire area" of H 7792. It is evident that the same is true of H 7818.(1950)

Neglecting these small irregularities the depths increase gradually as you proceed offshore. The shoalest water 39 and 41<sup>40</sup> feet are at the northwest and northeast corners of the sounded area and the deepest water 114 feet at the southwest corner.

  
Edgar E. Smith  
Cart Engr.

12/31/53

VELOCITY CORRECTIONS

For Type 808 J Depth Recorder - Velocity of sound 820 Fathoms per second

NOTE: ALL corrections additive unless otherwise indicated

SURVEYS: H-7723 (10148); H-7818 (10248); H-7792 (10648);  
H-7820 (10848); H-7793 (10948).

PERIOD: 2 May through 13 May 1950.

FEET			FATHOMS		
From	Depth To	Corrn.	From	To	Corrn. (0.1)
00.0	25.0	0.0	00.0	4.6	0.0
25.1	54.5	0.5	04.7	10.6	0.1
54.6	88.5	1.0	10.7	20.8	0.2
88.6	196.0	1.5	20.9	33.3	0.3
196.1	200.0	2.0			

PERIOD: 18 May through 27 May 1950.

FEET			FATHOMS		
From	Depth To	Corrn.	From	To	Corrn. (0.1)
00.0	22.0	0.0	00.0	04.1	0.0
22.1	45.9	0.5	04.2	09.0	0.1
46.0	72.2	1.0	09.1	16.3	0.2
72.3	100.1	1.5	16.4	20.4	0.3
100.2	131.5	2.0	20.5	22.0	0.4

PERIOD: 5 June through 29 July 1950.

FEET			FATHOMS		
From	Depth To	Corrn.	From	To	Corrn. (0.1)
20.9	40.0	0.5	4.5	7.5	0.1
40.1	59.5	1.0	7.6	12.0	0.2
59.6	79.0	1.5	12.1	15.5	0.3
79.1	102.0	2.0	15.6	20.5	0.4
102.1	130.0	2.5	20.6	26.5	0.5
130.1	157.5	3.0	26.6	32.0	0.6
157.6	160.0	3.5	32.1	38.5	0.7
			38.6	45.5	0.8
			45.6	57.0	0.9
			57.1	67.0	1.0

VELOCITY CORRECTIONS

For Type 808 J Depth Recorder - Velocity of sound 320 fathoms per second

NOTE: ALL corrections additive unless otherwise indicated

SURVEYS: H-7723 (10148); H-7818 (10248); H-7792 (10548);  
H-7820 (10848); H-7793 (10948); H-7321 (20149); Chart 1007.

PERIOD: 6 December through 15 December 1950

FEET			FATHOMS		
From	Depth To	Corrn.	From	Depth To	Corrn. (0.1)
00.0	27.5	0.0	7.0	11.5	0.1
28.0	59.0	0.5	11.6	17.5	0.2
59.5	90.0	1.0	17.6	23.5	0.3
90.5	121.5	1.5	23.6	29.0	0.4
122.0	150.5	2.0	29.1	34.8	0.5
151.0	162.0	2.5	34.9	40.4	0.6
			40.5	46.2	0.7
			46.3	52.2	0.8
			52.3	59.0	0.9
			59.1	67.5	1.0
			67.6	77.0	1.1
			77.1	88.0	1.2
			88.1	131.5	1.3
			131.6	151.0	1.2
			151.1	160.0	1.1

FATHOMS			FATHOMS		
From	Depth To	Corrn. (0.2)	From	Depth To	Corrn. (0.5)
0.0	11.5	0.0	0.0	25.0	0.0
11.6	23.5	0.2	25.1	54.0	0.5
23.6	34.8	0.4	54.1	160.0	1.0
34.9	46.2	0.6			
46.3	59.0	0.8			
59.1	77.0	1.0			
77.1	151.0	1.2			
151.1	160.0	1.0			

INSTRUMENTAL CORRECTIONS

1950

Abstract of Instrumental Corrections including the correction for Settlement and Squat.

Surveys: Chart 1007; H-6548; H-7723 (10148); H-7749 (10548);  
 H-7792 (10648); H-7793 (10948); H-7818 (10248);  
 H-7819 (10748); H-7820 (10848); H-7821 (20149);  
 H-7871 (10150); H-7872 (20150); H-7873 (20250).

FOOT SCALES

Fath. No.	Date	Scales:	A	B	C	D
131 SG	2 - 27 May	Speed:	120 RPM and over			
		Corrn:	- 0.5	- 0.5	+ 2.0	+ 4.0
		Speed:	106 RPM to 119 RPM incl.			
		Corrn:	- 1.0	- 1.0	+ 1.5	+ 3.5
		Speed:	105 RPM and under			
		Corrn:	- 1.5	- 1.5	+ 1.0	+ 3.0
<hr/>						
	5 June -	Speed:	120 RPM and over			
	15 December	Corrn:	0.0	+ 0.5	+ 2.5	+ 4.5
		Speed:	106 RPM to 119 RPM incl.			
		Corrn:	- 0.5	0.0	+ 2.0	+ 4.0
		Speed:	105 RPM and under			
		Corrn:	- 1.0	- 0.5	+ 1.5	+ 3.5

FATHOM SCALES

131 SG	2 - 27 May	CORRECTORS TO 0.1 FATHOM				
		Speed:	108 RPM and over			
		Corrn:	- 0.1	- 0.7	+ 1.9	+ 4.0
		Speed:	107 RPM and under			
		Corrn:	- 0.2	- 0.8	+ 1.8	+ 3.9
		CORRECTORS TO 0.2 FATHOM				
		Speed:	All speeds			
		Corrn:	- 0.2	- 0.8	+ 1.8	+ 3.8

Comp: JEW  
 CR: BSK  
 WRK

FATHOM SCALES

Fath. No.	Date	Scales:	A	B	C	D
131 SG	2 - 27 May	Speed:	CORRECTORS TO 0.5 FATHOM			
		Corrn:	- 0.5	- 1.0	+ 2.0	+ 3.5
	5 June 15 December	Speed:	CORRECTORS TO 0.1 FATHOM			
		Corrn:	- 0.1	+ 0.4	+ 2.4	+ 4.3
		Speed:	107 RPM and under.			
		Corrn:	- 0.2	+ 0.3	+ 2.3	+ 4.2
		Speed:	CORRECTORS TO 0.2 FATHOM			
		Corrn:	- 0.2	+ 0.2	+ 2.2	+ 4.2
		Speed:	CORRECTORS TO 0.5 FATHOM			
		Corrn:	- 0.5	0.0	+ 2.0	+ 4.0

FOOT SCALES

132 SG	2 May - 0231 19 May	Speed:	120 RPM and over			
		Corrn:	- 0.5	- 1.5	0.0	+ 1.5
		Speed:	106 RPM to 119 RPM incl.			
		Corrn:	- 1.0	- 2.0	- 0.5	+ 1.0
		Speed:	105 RPM and under			
		Corrn:	- 1.5	- 2.5	- 1.0	+ 0.5
0232 0952	19 May - 19 May	Speed:	120 RPM and over			
		Corrn:	+ 1.0	+ 8.0		
		Speed:	106 RPM to 119 RPM incl.			
		Corrn:	+ 0.5	+ 7.5		
		Speed:	105 RPM and under			
		Corrn:	0.0	+ 7.0		

Comp: JEW  
 Cks: NET  
 WRK

FOOT SCALES

Fath. No.	Date	Scales:	A	B	C	D
132 SG	1210 19 May- 20 September	Speed:	120 RPM and over			
		Corrn:	+ 0.5	- 0.5	+ 0.5	+ 2.5
		Speed:	106 RPM to 119 RPM incl.			
		Corrn:	0.0	- 1.0	0.0	+ 2.0
		Speed:	105 RPM and under			
		Corrn:	- 0.5	- 1.5	- 0.5	+ 1.5
<hr/>						
23 September 15 December		Speed:	120 RPM and over			
		Corrn:	0.0	- 0.5	0.0	+ 2.0
		Speed:	106 RPM to 119 RPM incl.			
		Corrn:	- 0.5	- 1.0	- 0.5	+ 1.5
		Speed:	105 RPM and under			
		Corrn:	- 1.0	- 1.5	- 1.0	+ 1.0

FATHOM SCALE

2 May - 0231 19 May		CORRECTORS TO 0.1 FATHOM				
		Speed:	108 RPM and over			
		Corrn:	0.0	- 1.0	0.0	+ 1.8
		Speed:	107 RPM and under			
		Corrn:	- 0.1	- 1.1	- 0.1	+ 1.7
<hr/>						
1210 19 May - 20 September		CORRECTORS TO 0.1 FATHOM				
		Speed:	108 RPM and over			
		Corrn:	0.0	- 0.7	+ 0.2	+ 1.7
		Speed:	107 RPM and under			
		Corrn:	- 0.1	- 0.8	+ 0.1	+ 1.6
		CORRECTORS TO 0.2 FATHOM				
		Speed:	All Speeds			
		Corrn:	- 0.2	- 0.8	0.0	+ 1.6
		CORRECTORS TO 0.5 FATHOM				
		Speed:	All speeds			
		Corrn:	0.0	- 1.0	0.0	+ 1.5

Comp: JEW  
Ck: NET  
WRK

FATHOM SCALE

Fath. No.	Date	Scales:	A	B	C	D
132 SG	23 September 15 December	Speed:	CORRECTORS TO 0.1 FATHOM			
		Corrn:	108 RPM and over			
		Speed:	+ 0.1	- 0.3	+ 1.3	+ 3.1
		Corrn:				
		Speed:	CORRECTORS TO 0.2 FATHOM			
		Corrn:	107 RPM and under			
		Speed:	0.0	- 0.4	+ 1.4 <sup>2</sup>	+ 3.2 <sup>0</sup>
		Corrn:				
		Speed:	CORRECTORS TO 0.5 FATHOM			
		Corrn:	All speeds			
		Speed:	0.0	- 0.4	+ 1.2	+ 3.0
		Corrn:				
205 (RMC-1) Visual & Chart	2 May - 15 December	Speed:	CORRECTORS TO 0.5 FATHOM			
		Corrn:	All Speeds			
		Speed:	All Scales: 0.0			
		Corrn:				

Comp: JEW  
Ck: WRK

EPI FINAL CORRECTIONS

(Sheet No. 1)

BRISON 1950

SHIP HYDROGRAPHER

G.L. ANDERSON, COMMANDING

From	To	Corr. CC	Remarks	From	To	Corr. D	Remarks
1950	1950			1950	1950		
May 2 2100	May 3 1300	-3.0		May 2 2100	May 3 1300	-3.0	
May 3 1301	May 3 1600	-1.8	Eqpt. Adjust.	May 3 1301	May 3 1430	-0.8	Eqpt. Adjust.
May 3 1601	May 3 2300	-2.0		May 3 1431	May 3 2000	-1.0	
May 3 2301	May 4 0500	-2.2		May 3 2001	May 4 0100	-1.2	
May 4 0601	May 4 1200	-2.4		May 4 0101	May 4 0700	-1.4	
May 4 1201	May 4 1900	-2.6		May 4 0701	May 4 1200	-1.6	
May 4 1901	May 5 0100	-2.8		May 4 1201	May 4 2000	-1.8	
May 5 0101	May 5 0800	-3.0		May 4 2001	May 5 1500	-2.0	
May 5 0801	May 5 1400	-3.2		May 5 1501	May 8 0300	-2.2	
May 5 1401	May 5 2100	-3.4		May 8 0301	May 11 1800	-2.4	
May 5 2101	May 6 0300	-3.6		May 11 1801	May 12 1200	-2.2	
May 6 0301	May 6 1000	-3.8					
May 6 1001	May 6 2000	-4.0					
May 6 2001	May 7 1600	-3.8					
May 7 1601	May 8 0900	-3.6					
May 8 0901	May 9 0400	-3.4					
May 9 0401	May 10 0400	-3.2					
May 10 0401	May 11 2300	-3.0					
May 11 2301	May 12 1200	-2.8					



NET FINAL CORRECTIONS

(Sheet No. 2)

SEASON 1950

SHIP HYDROGRAPHER

G.L. ANDERSON, COMMANDING

From	To	Corr. CC	Remarks	From	To	Corr. D	Remarks
1950 May 18 1400	1950 May 27 1400	-1.2		1950 May 18 1400	1950 May 19 2200	-1.0	
				May 19 2200	May 27 1400	-1.2	
June 5 1000	June 14 1300	-1.0		June 5 1000	June 14 1300	-1.4	
June 20 1200	June 20 2400	-2.0		June 20 1200	June 24 1600	-1.2	
June 21 0001	June 24 2400	-1.8		June 24 1601	June 26 2400	-1.4	
June 25 0001	June 29 1300	-1.0	Egpt. Changed	June 27 0001	June 29 0200	-1.6	
				June 29 0201	June 29 1300	-1.8	
July 6 2000	July 9 1300	-1.2	Ship Ret. to St. Petersburg during trip	July 6 2000	July 8 0500	-1.6	
July 10 1700	July 15 1300	-0.8		July 8 0501	July 8 2400	-2.0	
				July 9 0001	July 9 1300	-2.2	Ship Returned to St. Peters- burg during tri
				July 10 1700	July 15 1300	-1.4	
July 20 1300	July 21 1400	-1.0		July 20 1300	July 20 1800	-2.0	
July 21 1401	July 23 2000	-1.2		July 20 1801	July 25 0000	-1.8	
July 23 2001	July 26 0600	-1.4		July 25 0001	July 26 0600	-2.0	

Comp: JFL  
CHK: RAD

NPI FINAL CORRECTIONS

(Sheet No. 3)

SEASON 1950

SHIP HEDINGERMASTER

G.L. ANDERSON, COMMANDING

From	To	Corr. CC	Remarks	From	To	Corr. D	Remarks
July 26 0601	July 26 1800	-1.2		July 26 0601	July 27 1000	-2.2	
July 26 1801	July 27 0800	-1.0		July 27 1001	July 28 0300	-2.0	
July 27 0801	July 27 2200	-0.8		July 28 0301	July 28 2100	-1.8	
July 27 2201	July 28 1400	-0.6		July 28 2101	July 29 1300	-1.6	
July 28 1401	July 29 0600	-0.4					
July 29 0601	July 29 1300	-0.2					
Aug. 9 1300	Aug. 10 0400	-1.2		Aug. 9 1300	Aug. 10 1700	-2.0	
Aug. 10 0401	Aug. 11 0000	-1.0		Aug. 10 1701	Aug. 11 1700	-1.8	
Aug. 11 0001	Aug. 11 1700	-0.8		Aug. 11 1701	Aug. 13 2000	-1.6	
Aug. 11 1701	Aug. 17 1200	-1.0		Aug. 13 2001	Aug. 15 2200	-1.8	
				Aug. 15 2201	Aug. 16 1000	-2.0	
				Aug. 16 1001	Aug. 16 1800	-2.2	
				Aug. 16 1801	Aug. 17 0200	-2.0	
				Aug. 17 0201	Aug. 17 0800	-1.8	
				Aug. 17 0801	Aug. 17 1200	-1.6	
Aug. 23 1300	Aug. 26 2400	-0.8	Ship Ret. to port due to Hurricane	Aug. 23 1300	Aug. 26 2400	-2.1	

Comp: JPL

Chk: EAD

NPI FINAL OBSERVATIONS

(Sheet No. 6)

SEASON 1950

SHIP HYDROGRAPHER

G.L. ANDERSON, COMMANDING

From	To	Corr. C	Remarks	From	To	Corr. D	Remarks
Nov. 24 1200	Nov. 25 1200	-1.4		Nov. 24 1200	Nov. 25 0600	-2.0	
Nov. 25 1201	Nov. 25 1200	-1.6		Nov. 25 0601	Nov. 27 0200	-1.8	
Nov. 28 1201	Nov. 29 0600	-1.4		Nov. 27 0201	Nov. 30 1300	-1.6	
Nov. 29 0501	Nov. 30 0000	-1.2					
Nov. 30 0001	Nov. 30 1200	-1.0					
Dec. 6 1200	Dec. 6 1600	-0.4		Dec. 6 1200	Dec. 6 2000	-2.2	
Dec. 6 1601	Dec. 6 2100	-0.6		Dec. 6 2001	Dec. 7 0200	-2.0	
Dec. 6 2101	Dec. 7 0300	-0.8		Dec. 7 0201	Dec. 7 1800	-1.8	
Dec. 7 0301	Dec. 7 0800	-1.0		Dec. 7 1801	Dec. 14 1300	-1.6	
Dec. 7 0801	Dec. 7 1400	-1.2					
Dec. 7 1401	Dec. 7 1900	-1.4					
Dec. 7 1901	Dec. 8 0100	-1.6					
Dec. 8 0101	Dec. 8 0600	-1.8					
Dec. 8 0601	Dec. 8 1400	-2.0					
Dec. 8 1401	Dec. 9 0500	-1.8					
Dec. 9 0501	Dec. 9 2100	-1.6					
Dec. 9 2101	Dec. 10 1100	-1.4					
Dec. 10 1101	Dec. 11 0300	-1.2					
Dec. 11 0301	Dec. 11 1800	-1.0					
Dec. 11 1801	Dec. 12 1000	-0.8					

Comp: JPL  
Chk: 978

NET FINAL CORRECTIONS

(Sheet No. 7)

SEASON 1950

SHIP HYDROGRAPHER

G.L. ANDERSON, COMMANDING

From	To	Corr. OO	Remarks
Dec. 12 1001	Dec. 13 0200	-0.6	
Dec. 13 0201	Dec. 13 2100	-0.4	
Dec. 13 2101	Dec. 14 1800	-0.6	

Comps JPL  
CRK: GCM

STATISTICS FOR HYDROGRAPHIC SURVEY H-7818 (1950)

Ship HYDROGRAPHER

Project CS 328

Volume Number	Day Letter	Date 1950	Number of Positions	Statute Miles of Soundings
1	A	5 May	26	51.9
1	B	6 May	5	8.8
1	C	11 May	37	69.5
1 & 2	D	19 May	61	113.7
2	E	26 May	19	38.3
2	F	27 May	14	28.8
2	G	6 June	84	162.1
3	H	8 June	15	25.1
3 & 4	J	9 June	105	195.9
4	K	13 June	79	152.6
4 & 5	L	21 June	118	211.6
5 & 6	M	22 June	170	243.4
6 & 7	N	23 June	147	273.3
7 & 8	P	24 June	139	272.5
8 & 9	Q	25 June	166	271.2
9 & 10	R	26 June	151	273.4
11 & 12	S	27 June	142	267.6
12 & 13	T	28 June	130	236.1
13	U	29 June	7	16.1
13	V	7 July	103	191.0
13 & 14	W	8 July	100	166.6
14 & 15	X	11 July	99	187.3
15 & 16	Y	12 July	134	249.3
16 & 17	Z	13 July	141	269.0
17 & 18	AA	14 July	139	258.6
18	BA	15 July	15	29.9
19	CA	21 July	77	147.2
19	DA	22 July	9	16.1
19	EA	6 Dec.	7	11.3
19	FA	7 Dec.	28	49.4
TOTAL:			2,467	4,487.6

TOTAL NUMBER OF SIMULTANEOUS COMPARISONS 18

TOTAL NUMBER OF TEMPERATURE AND SALINITY OBSERVATIONS 7

TOTAL AREA SURVEYED 2,099 Square Statute Miles

7818

TIDE NOTE

Tide Station: Tampa Bay Florida Primary (St. Petersburg, Florida) ✓

Latitude: 27° 46'

Longitude: 82° 38'

Plane of reference: MLW

Time correction: Minus one hour

Height correction: None

Hourly heights and highs and lows were furnished by the Washington Office.

Time and height corrections applied in the field as indicated in the

Director's Letters of 13 January 1949, reference 36-tmo and 19 June 1950,

reference 36-tmo.

GEOGRAPHIC NAMES

Survey No. H-7818

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K
<u>Florida</u>									BGN. 1
<u>Gulf of Mexico</u>									2
<u>St. Marks</u>									3
									4
<u>Apalachee Bay</u>									5
									6
									7
									8
									9
									10
									11
									12
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									23
									24
									25
									26
									27

} for title

Names approved  
1-28-54 L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7818...

records accompanying survey:

Boat sheets ..1...; sounding vols. ..19...; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls 29 Env;  
 special reports, etc. 1. Smooth Sheet; 1 Descriptive Report; 1 Cahier EPI  
 Plotting Abstracts; .....

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

Number of positions on sheet	2467
Number of positions checked	17
Number of positions revised	.....
Number of soundings revised (refers to depth only)	<i>add/shoal sdgs. scanned from fgms. at uneven time intervals</i> → 417
Number of soundings erroneously spaced	30
Number of signals erroneously plotted or transferred	.....
Topographic details	Time .....
Junctions	Time 28
Verification of soundings from graphic record	Time 30

Verification by *Chester F. Dupie*..... Total time 201... Date Feb 14, 1955

Reviewed by *J. Adinamore*..... Time 24... Date 18 Mar. 1955



DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7818

FIELD NO.-HY-10248

Florida, Gulf of Mexico, South of St. Marks, Florida

Project - CS-328

Surveyed - May and Dec. 1950

Scale 1:100,000

Soundings:

Control:

808 Fathometer

E. P. I.

Chief of Party - G. L. Anderson  
Surveyed by Ships Officers  
Protracted by - C. A. J. Pauw  
Soundings plotted by - C. A. J. Pauw  
Verified and inked by C. F. Kupiec  
Reviewed by - T. A. Dinsmore 18 March 1955  
Inspected by - R. H. Carstens

1. Shoreline and Control

There is no shoreline within the limits of this offshore survey.

The survey was controlled by Electronic Position Indicator stations established on the west coast of the Florida Peninsula. The control is described in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. The non-standard brown curve has been added in selected localities to emphasize minor irregularities in the bottom.

The bottom is characterized by numerous sand ridges and troughs differing from 1 to 8 ft. with the surrounding terrain. Depths on the evenly sloping bottom range from 40 to 113 ft.

4. Junctions with Contemporary Surveys

An adequate junction was effected with H-7749 (1948-50) on the south. The junction with H-7723 (1948-50) on the west will be considered in the review of that survey. No contemporary surveys are registered on the north and east. At these limits, however, present survey and charted depths are in harmony.

5. Comparison with Prior Surveys

H-1354 (1881-82), 1:600,000	H-1928 (1889), 1:80,000
<u>H-1771 (1887), 1:40,000</u>	<u>H-1929 (1889), 1:80,000</u>

The area covered by the present survey was for the most part previously unsurveyed. Only a few soundings from the above early reconnaissance surveys fall within the present survey area. A comparison of the prior and present depths reveals only a few minor differences of 3-9 ft. in depths of 50-90 ft. These differences are attributed to the irregularities in the bottom in some instances and in others to errors in position of the prior dead-reckoning sounding lines.

The present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 1114 (Drawing No. 10, March, 1955)A. Hydrography

Charted hydrography originates entirely with the present survey subsequent to verification. No discrepancies are noted between the charted and smooth-sheet depths.

B. Aids to Navigation

No aids to navigation are charted in this offshore area. No dangers to navigation are revealed by the survey.

7. Condition of Survey

a. The sounding records are complete; the Descriptive Report covers all matters of importance.

b. The smooth plotting was accurately and neatly done.

c. Portions of several day's fathograms were rescanned during verification in order to include numerous shoal soundings which occurred at uneven time intervals. The additional soundings ranging from 3-5-ft. shoaler than plotted depths were recorded in the sounding volumes and added to the smooth sheet by the verifier.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is an excellent basic survey and no further field work is required.

Examined and Approved:



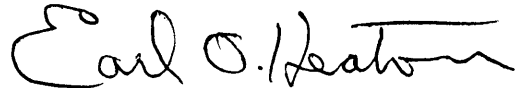
H. R. Edmonston  
Chief, Nautical Chart Branch



E. R. McCarthy  
Acting Chief, Chart Division



J. C. Bull  
Chief, Hydrography Branch



Earl O. Heaton  
Chief, Division of Coastal Surveys

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~

3 February 1954

Division of Charts: R. H. Carstens

Plane of reference approved in  
19 volumes of sounding records for

HYDROGRAPHIC SHEET

7818

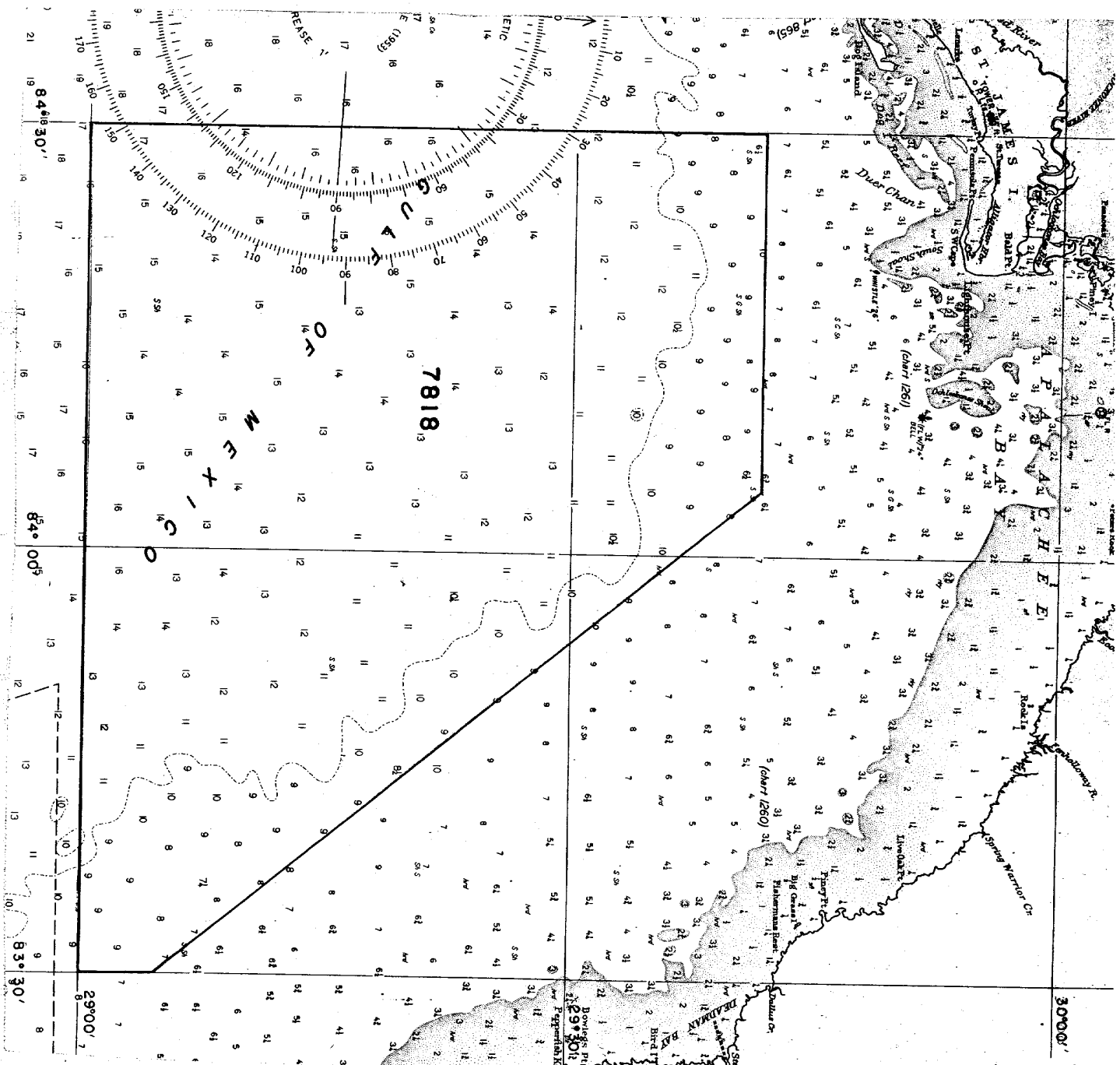
Locality West Coast of Florida

Chief of Party: G. L. Anderson in 1950  
Plane of reference is mean low water, reading  
3.3 ft. on tide staff at St. Petersburg, Fla.  
5.5 ft. below B. M. 4 (1925)

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

Condition of records satisfactory except as noted below:

*E. C. McKay*  
Section of Tides  
Chief, Division of Tides and Currents.



# NAUTICAL CHARTS BRANCH

SURVEY NO. H-7818

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
3/26/54	1261	H. Burgoyne	Before <del>After</del> Verification and Review
2-23-55	1114	J. Eaton	<sup>Comp. app'd.</sup> Before <del>After</del> Verification and Review
4/28/55	1003	H. MacSween	<del>Before</del> After Verification and Review <i>Thru chrt 1114</i>
1-21-59	1007	R. K. DeLander	<del>Before</del> After Verification and Review <i>Thru chrt 1003</i>
6-3-59	1261	M. Rogers	<sup>Completely applied</sup> <del>Before</del> After Verification and Review. ✓ RND
21 Apr 60	1259	T. Nichols	<del>Before</del> After Verification and Review <i>Full.</i>
6/17/63	1260	J. McMillan	<del>Before</del> After Verification and Review <i>Serial 607/Amc</i> <i>applied soundings full application</i>
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.