7749

Diag. Cht. No. 1114

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey OFFSHORE HYDROGRAPHIC

Field No. HY-10548 *Office No.* H-7749

LOCALITY

State FLORIDA

General locality GULF OF MEXICO

Locality NORTHWEST OF TAMPA BAY

1948-1949-1950

CHIEF OF PARTY

C. L. Anderson

LIBRARY & ARCHIVES

DATE MARCH 28, 1951

B-1870-1 (1)

7749

Form 537
(Ed. June 1946)

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-7749

Field No. HY-10548

State Florida ✓

General locality Gulf of Mexico ✓

Locality Northwest of Tampa Bay, ~~Florida~~ ✓

Scale 1:100,000 ✓ Date of survey 1948-1949-1950 ✓

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

Vessel Ship HYDROGRAPHER

Chief of party George L. Anderson ✓

Surveyed by G.L. Anderson, C.I. Aslakson, F.G. Johnson, R.C. Rowse, J.D. Thurmond, G.C. Mast, W.N. Martin, F.J. Bryant, N.E. Taylor, L.S. Baker, H.F. Dunbrook, W.R. Kachel ✓

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

Fathograms scaled by Ships Personnel & O.V. Cederstrom (1949 Work)

Fathograms checked by " " & D. Moscopulos (1949 Work)

Protracted by Andrew Anninos

Soundings penciled by Andrew Anninos

Soundings in fathoms ~~feet~~ at MLW ~~MLLW~~ (and are true depths) ✓

REMARKS: Positioning by EPI system

U. S. GOVERNMENT PRINTING OFFICE 693019

DESCRIPTIVE REPORT

TO ACCOMPANY OFFSHORE HYDROGRAPHIC SURVEY H-7749 (FIELD NO. HY-10548)

Scale 1:100,000

Ship HYDROGRAPHER George L. Anderson, Commanding

A. PROJECT

This Survey is part of Project No. CS-328. Original instructions are dated 26 September 1946. Supplemental instructions are dated 9 July 1947, 6 October 1948, and 15 March 1949.

B. SURVEY LIMITS AND DATES

The general locality of this survey is offshore northwest of Tampa Bay, Florida.

The survey limits are from latitude 28° 00' N. to 29° 00' N. and from longitude 83° 30' W. to 84° 30' W.

H-7679(48-49)

It joins with Survey HY-10448 on the west, with future Survey H-7818 HY-10248 on the north, with unfinished Survey HY-10648 H-7792 on the east and with future Survey HY-10848 on the south. Review, par. 4.

(H-7820-50)

The field work on this survey began on 9 October 1948 and ended 22 December 1948 for the 1948 season. Work was resumed on 12 June 1949 and the survey completed on 25 September 1949.

C. VESSEL AND EQUIPMENT

All hydrography on this survey was accomplished from the Ship HYDROGRAPHER. The majority of soundings were recorded by 808-J type Fathometers Nos. 131-SG and 132-SG. Some soundings were taken in 1948 and early 1949 using the NMC-1 No. 206 during breakdowns or while paper rolls were being changed on the 808. On 8 July 1949, a second 808-J type depth recorder was installed in the pilot house for a standby recorder and the NMC-1 was not used after this date.

Positioning control was entirely by the EPI system.

The normal turning radius of the ship HYDROGRAPHER is from 80 meters to 120 meters depending on the direction and strength of the wind and current

D. TIDE AND CURRENT STATIONS

The Tampa Bay Primary Tide Station at St. Petersburg, Florida was used for the reduction of all soundings. A time correction of minus 2 hours and a range factor of 0.0 feet was used in accordance with Office letters dated 13 January 1949 and 4 October 1949.

Current stations were observed at Buoys 6, 8, and 12 on this sheet. Tidal readings using an 808-J type depth recorder were observed at the same times at Buoy 12. The station at buoy 12 was observed for 46½ hours on 8 and 9 June 1949, the station at buoy 8 for 10½ hours on 12 and 13 June 1949 and the station near buoy 6 for 9 hours on 13 and 14 June 1949.

E. SMOOTH SHEET

The smooth sheet projection with 50 micro-second circles for Stations EPIC and EPID was prepared at the Washington Office in 1948. Additional circles for new station EPICC were drawn on the sheets in April 1949. At this time, errors were found in the original EPIC and EPID circles and these were corrected by orange and green lines respectively.

F. CONTROL STATIONS

The hydrography on this survey was controlled by three EPI shore stations. In 1948, station EPIC was located at Dekle Beach, Florida, latitude 29° 50' 50".8 longitude 83° 37' 01".2. Station EPID was located at Venice, Florida, latitude 27° 04' 53".4 longitude 82° 26' 47".7. In the spring of 1949, station EPIC was dismantled and the equipment moved to station EPICC at Cedar Keys, Florida, latitude 29° 07' 48".0 longitude 83° 03' 07".7 while station EPID at Venice continued in operation during the 1949 Season. The stations were located by inspection and short traverse from planimetric maps of the areas. Station EPIC and EPID were located by Ensign H.F. Dunbrook and Station EPICC by Lt. Comdr. F.J. Bryant.

The length of baseline between EPIC and EPID was approximately 201 statute miles and between EPICC and EPID approximately 144 statute miles. The least angle of intersection on the sheet is 55 degrees.

For control used for location of fixed buoys of Tampa Bay Entrance and Cape St. George, see cahier Geodetic Computations for fixed EPI positions, 1948, transmitted 6 May 1949 and cahier Computation of Fixed Buoys, 1949, transmitted 26 October 1949.

H. SOUNDINGS

Sounding corrections for velocity of sound and instrumental errors were controlled by adequate salinity and temperature serials and by frequent vertical cast comparisons using sounding machine No. H-141 with stranded wire over calibrated sheaves Nos. 403, 389, and 377.

The effective length of stylus arms for 808-J depth recorders was checked at frequent intervals, and the stylus speed was checked approximately once each watch using the revolution count method.

As the northeast corner of the survey covers part of the area of chart 1259 which is printed in feet, the soundings on this portion of the survey were sounded and recorded in feet.

Summaries of the velocity, instrumental and settlement and squat corrections are attached to this report.

I. CONTROL OF HYDROGRAPHY

All hydrography on this survey is controlled by the EPI system using stations EPIC and EPID in 1948 and EPICC and EPID in 1949. Special test buoys were planted near shore and on the working grounds to obtain corrections to the EPI distances received during hydrography. For the explanation of the use of these buoys, see Special Report on EPI Corrections, 1949 sent 26 October 1949.

J. ADEQUACY OF SURVEY

The survey coverage of this offshore area is complete and no excessive gaps or holidays at the junctions with other surveys appear.

Sufficient EPI tests were made at the test buoys to adequately control the sounding lines.

Sufficient development was done in the broken Middle Ground area in the central western portion of the survey to adequately delineate the depth curves. A system of lines along the ridges of these shoals was run with the purpose of further developing these areas and finding the least depths. The least depth found on these shoals was 13 fathoms.

Junctions with Surveys H-7679 (1948-49) HY-10448 on the west and HY-10648 on the east are excellent. Review, par. 4.

M. COMPARISON WITH CHART 1114

The E-W line of soundings on Chart 1114 at latitude 28° 08'.4 N. differs from this survey by 6 fathoms at the western end decreasing to 2 fathoms at the eastern end. This same line of soundings extends westward to Survey H-7679 HY-10448 and there were larger discrepancies on that survey, increasing with the depth. A discrepancy of 6 fathoms exists at latitude 28° 23' N., longitude 84° 20' W. Soundings over the remainder of the flat Review, par. 5.

areas of the chart agree within 3 fathoms but show evidence of position displacement. The shoal soundings in the broken Middle Ground area sometimes show a displacement discrepancy up to two miles.

Review, par. 5.

As the positioning and sounding methods are much superior to that used heretofore, it is recommended that this survey entirely supersede the soundings shown on Chart 1114.

N. DANGERS AND SHOALS

Wreck No. 626 shown at latitude 28° 12'.7 N. longitude 83° 42'.8 W. was searched for in 1948 and again in 1949. In 1948, a temporary buoy was dropped at the charted location and a system of closely spaced sounding lines was run over the area to a distance of approximately one mile from the buoy. In 1949, a temporary buoy was again dropped and a clover-leaf system was run over the area for approximately 3½ hours but it was not found. A local snapper fisherman said he had found the wreck but it only projected about 6 feet from the bottom and because his fishing lines became fouled on the remains of the wreck, he had not made efforts to return to the spot. Because of these* reasons, it is recommended that the wreck be deleted from the chart.

see PJ of 7820 (1950).

See p. 7 Desc. Report and Review, par. 5.

* and those given on pg. 7

Deleted from Chart (Drawing) 1114 7/16/52 L.S.S.

During the survey of the Middle Ground area, light shoal peak soundings would sometimes appear on the fathograms, especially at the edges of subteranean cliffs. Although the true bottom could usually be seen at the base of these peaks, three of them were investigated. The most successful was on 6 August 1949. A temporary buoy was dropped at the EPI location and a clove-leaf system run around the buoy. The peak was again found as shown on the fathogram, but a wire sounding showed the full bottom depth and a grappling hook brought up nothing. It is believed that these peak soundings are caused by some light form of marine growth, or possibly in some instances by schools of fish.

R. GEOGRAPHIC NAMES. 854-2*

The broken shoal area in the west central portion of the sheet has been referred to previously in this report as the Middle Ground. It has been called this by commercial fishermen throughout this area for a number of years. The Captain of the Diane of St. Petersburg said he had been fishing in these waters for 38 years and it had always been called the Middle Ground (not Middle Ground Shoal). Another commercial fisherman from Pensacola said Middle Ground had been the accepted name for this area for 30 years to his knowledge. Commander Goddard, Commanding Officer of the Ship American Mariner, USMS said that he had also heard the area referred to as the Middle Ground. For these reasons, it is recommended that this shoal area be named Middle Ground.

According to these fishermen, at one time the Middle Ground was a very productive area for red snapper and grouper, but the results at present are only fair.

Add'l wk. 1950

ADDENDA TO

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SURVEY H-7749 — Field No. HY-10548

Ship HYDROGRAPHER — George L. Anderson, Chief of Party

L. & M. COMPARISON WITH PREVIOUS SURVEYS

Additional work was accomplished in the vicinity of wreck No. 626 on 25 August 1950. This wreck was searched for by using the sonar while running a system of closely spaced sounding lines extending at least 1½ miles from the charted position of the wreck. A total of 2 hours was spent in this vicinity. No indication of the wreck was found. Review, par. 5

Your attention is invited to:

1. The Commanding Officer's letter to the Director on 9/1/50
   Subject: Investigation of wrecks, Project CS 328

2. The Director's letter dated 9/13/50, reference 22-JR C.L. 685 (1950)

The work accomplished in 1950 has been plotted on the boat sheet for Survey H-7820 (HY-10848) and the tracing accompanying this report was prepared from this work. Review, par. 7c.

J. E. Waugh
LCdr, USC&GS

Approved & forwarded:
George L. Anderson
George L. Anderson
Commander, USC&GS
Chief of Party

STATISTICS

Vol. No.	Day Letter	Date 1950	No. of Positions	Statute Miles of Soundings
50	CC	25 August	27	48.8

Z. TABULATION OF APPLICABLE DATA

FOR USE WITH 1948 SEASON

1. 1 Cahier - Tidal Data - From October to December 1948 - Sent 8 April 1949.

2. 1 Cahier - EPI Correction Data "C" and "D" October to December 1948 Sent 8 April 1949.

3. 1 Cahier - Geodetic Computations for Fixed EPI Positions 6 October to 21 December 1948 - Sent 6 May 1949.

4. Report on Calibration of Registering Sheaves Nos. H-403 and H-405 made 17 June 1948 - Sent 17 May 1949.

5. 1 Cahier - Records of Temperatures and Salinities, 1948. Sent 27 May 1949.

6. 1 Cahier - Fathometer Corrections 1948 - Sent 27 May, 1949.

2.(cont) TABULATION OF APPLICABLE DATA

FOR USE WITH 1949 SEASON

1. Report on Calibration of Registering Sheave No. 403 - Sent 5 May 1949.

2. Report on Calibration of Registering Sheaves Nos. 377 and 389 - Sent 26 May 1949.

3. Report of Settlement and Squat Test, 10 June 1949 - Sent 17 August 1949.

4. 1 Cahier - Special Report on EPI Corrections, 1949 Sent 26 October 1949.

5. 1 Cahier - Computation of Fixed Buoys, 1949 - Sent 26 October 1949.

6. 1 Cahier - Records of Temperatures and Salinities, 1949 - To be forwarded later.

7. 1 Cahier - Fathometer Corrections, 1949 - To be forwarded later.

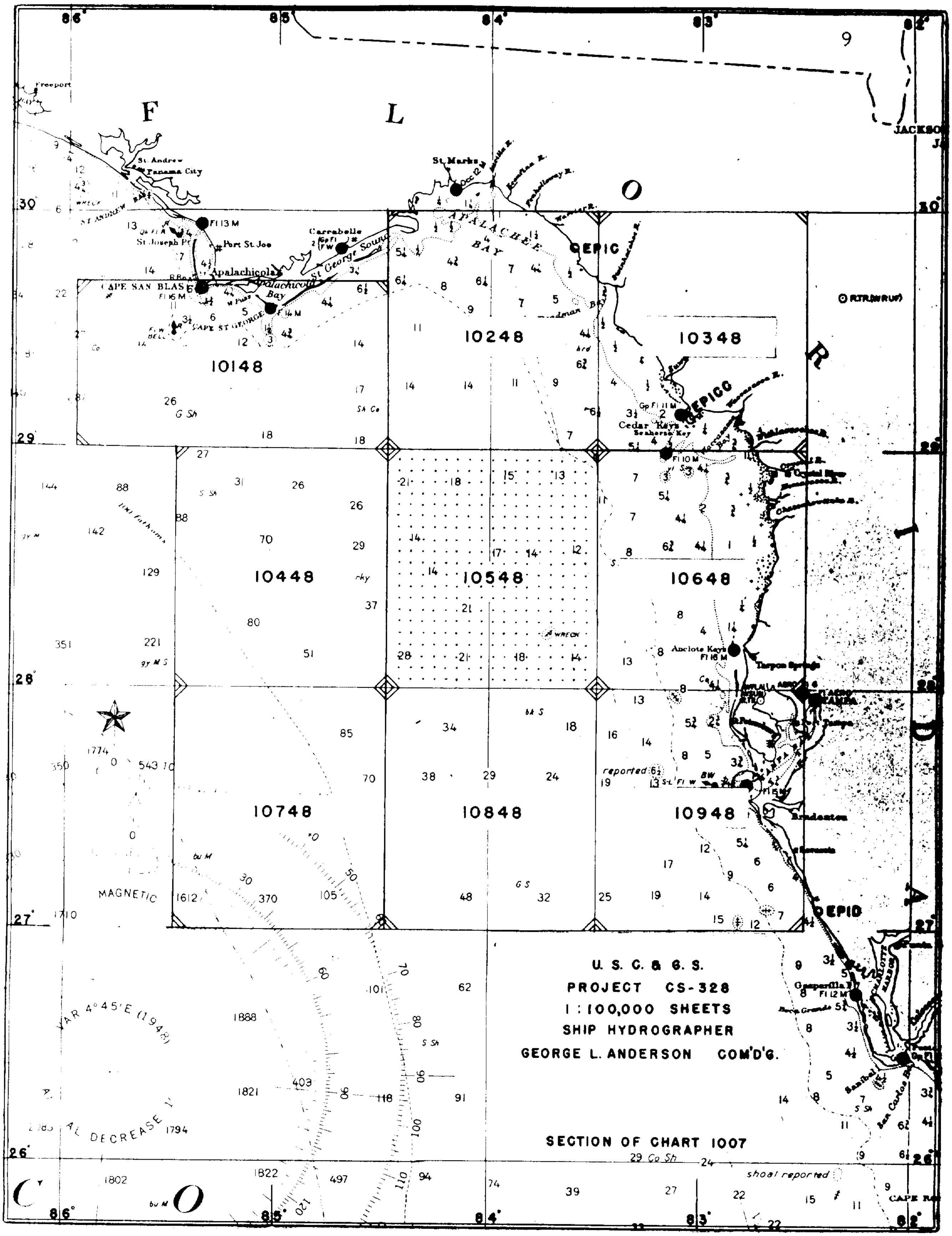
8. 1 Cahier - Tidal Observations and Computations at Buoy 8.
   1 Cahier - Tidal Observations and Computations at Buoy 12.
   1 Volume - Record of Current Observations at Buoys 8 and 12
   All transmitted 16 June 1949.

9. 1 Volume - Record of Current Observations from 11 to 15 June at Buoys 13, 8, 6, and 5. Transmitted 15 July 1949.

23 November 1949 Submitted

William N. Martin

William N. Martin
Lieut. Commander, C&GS


86°
85°
84°
83°
82°
30°
29°
28°
27°
26°
F L O R I D A
C O
Freeport
St. Andrew
Panama City
ST. ANDREW BAY
St. Joseph Pt
Port St. Joe
Apalachicola
Apalachicola Bay
CAPE SAN BLAS
CAPE ST. GEORGE
Carrabelle
St. George Sound
St. Marks
APALACHEE BAY
CEPIC
CEPICO
Cedar Keys
Seahorse Key
Anclote Keys
Tarpon Springs
TAMPA
Bradenton
Sarasota
CEPID
Gasparilla I.
CHARLOTTE HARBOR
Boca Grande
Sanibel
San Carlos Bay
CAPE RO
JACKSO
10148
10248
10348
10448
10548
10648
10748
10848
10948
100 fathoms
MAGNETIC
VAR 4°45'E (1948)
ANNUAL DECREASE 1'
shoal reported
reported
WRECK
U. S. C. & G. S.
PROJECT CS-328
1:100,000 SHEETS
SHIP HYDROGRAPHER
GEORGE L. ANDERSON COM'D'G.
SECTION OF CHART 1007

STATISTICS FOR HYDROGRAPHIC SURVEY H-_____(HY-10548, 1948 & 1949)

Ship HYDROGRAPHER Project CS-328

Vol. No.	Letter Day	Date 1948	Sim. Comp.	T&S	No. of Positions	Statute Miles of Sounding Lines
1 & 2	A	9 Oct.			76	126.6
2 & 3	B	10 Oct.			132	213.8
3 & 4	C	11 Oct.			112	184.3
4 & 5	D	12 Oct.			76	123.3
5	E	20 Oct.			41	65.8
5	F	21 Oct.			12	14.5
5 & 6	G	22 Oct.			69	100.0
6	H	24 Oct.			75	122.5
7	J	25 Oct.			6	8.8
7	K	28 Oct.			37	63.3
7	L	29 Oct.			62	66.0
7 & 8	M	10 Nov.			89	149.0
8	N	11 Nov.			4	5.2
8 & 9	P	12 Nov.			109	169.2
9 & 10	Q	17 Nov.			63	104.4
10 & 11	R	18 Nov.			123	195.6
11	S	19 Nov.			22	33.6
11	T	20 Nov.			16	24.7
11 & 12	U	21 Nov.			135	222.8
12 & 13	V	22 Nov.			138	178.4
13	W	23 Nov.			123	136.3
14 & 15	X	24 Nov.			122	152.6
15 & 16	Y	25 Nov.			125	156.9
16	Z	4 Dec.			11	15.0
17	AA	5 Dec.			30	54.7
17	BA	8 Dec.			34	53.9
17 & 18	CA	9 Dec.			77	141.0
18	DA	10 Dec.			21	32.9
18	EA	16 Dec.			27	39.4
18 & 19	FA	17 Dec.			118	194.7
19 & 20	GA	18 Dec.			134	203.1
20 & 21	HA	19 Dec.	(29-1948)	(14-1948)	114	165.2
21	JA	21 Dec.	(Season)	(Season)	16	27.0
21 & 22	KA	22 Dec.			30	48.1

STATISTICS Page 2

Vol. No.	Letter Day	Date	Sim. Comp.	T&S	No. of Positions	Statute Miles of Sounding Lines
		1949				
23	LA	12 June			35	55.1
23	MA	13 June			54	85.3
23 & 24	NA	29 June	1	1	70	109.0
24	PA	7 July			55	86.0
24 & 25	QA	12 July	1		99	150.2
25 & 26	RA	13 July			134	217.2
26 & 27	SA	14 July		1	121	178.8
27	TA	15 July			23	40.3
27 & 28	UA	21 July			89	125.1
28 & 29	VA	22 July	1	1	132	205.9
29 & 30	WA	23 July	1		139	194.1
30	XA	24 July			45	73.0
31	YA	25 July	2	1	47	68.8
31 & 32	ZA	26 July	2	1	109	157.7
32 & 33	AB	27 July			133	213.9
33 & 34	BB	28 July	1	1	118	187.1
34	CB	29 July	1		19	32.2
34	DB	5 Aug.	2	1	79	119.1
35 & 36	EB	6 Aug.	1		118	183.8
36	FB	7 Aug.	2		115	178.1
37 & 38	GB	8 Aug.	2		136	210.3
38 & 39	HB	9 Aug.			140	215.6
39	JB	10 Aug.			50	73.0
39 & 40	KB	11 Aug.			65	82.0
40	LB	19 Aug.		1	123	166.0
41 & 42	MB	20 Aug.			139	208.0
42 & 43	NB	21 Aug.	1		135	186.5
43 & 44	PB	22 Aug.	2		125	179.5
44	QB	23 Aug.			32	47.7
44 & 45	RB	24 Aug.	1	1	114	180.5
45	SB	25 Aug.			6	8.8
45	TB	3 Sept.			21	31.1
45 & 46	UB	4 Sept.			70	75.5
46	VB	5 Sept.	1	1	103	150.2
47	WB	6 Sept.			21	30.8
47	XB	10 Sept.			41	54.2
47	YB	11 Sept.			14	18.0
48	ZB	21 Sept.			40	62.1
48	AC	24 Sept.	1	1	40	46.3
48 & 49	BC	25 Sept.			52	49.6
50	CC	25 Aug. 1950			27	48.8
TOTALS	~~49~~50 74		52	25	~~5580~~ 5607	~~8329.0~~ 8377.8

Total Square Statute Miles ----- 4217.

TIDE NOTE

Tide Station -- Tampa Bay Primary (St. Petersburg)
Latitude -- 27° 46'
Longitude - 82° 38'
Height of tide staff at MLW - 3.3 feet.
*Time Correction ---- Minus 2 hours
*Height Correction -- 0.0 feet
Hourly heights furnished by Washington Office

*See letters from Washington Office dated 13 January and 4 October 1949.

FATHOMETER VELOCITY CORRECTIONS, 1948

SURVEY NOS. HY-10146, HY-10448, HY-10548 FATHOM SCALES

SCR-J CORRECTIONS, 820 Fms. per Sec.

6 to 30 October

Corr. Fms.	To Depth Fms.
0.1	9.0
0.2	13.5
0.3	18.5
0.4	22.0
0.5	25.5
0.6	30.0
0.7	35.0
0.8	41.5
1.0	51.0
1.2	61.5
1.4	65.0

9 November to 22 December

Corr. Fms.	To Depth Fms.
0.1	9.5
0.2	16.0
0.3	19.5
0.4	24.5
0.5	29.5
0.6	39.5
0.8	50.0
1.0	65.0

NAC-1 CORRECTIONS, 800 Fms. per Sec.

6 to 30 October

Corr. FMS.	To Depth Fms.
0.2	7.5
0.3	9.5
0.4	11.5
0.5	14.0
0.6	16.0
0.7	18.0
0.8	20.5
0.9	22.0
1.0	23.5
1.1	25.5
1.2	27.5
1.3	29.5
1.4	32.5
1.6	37.0
1.8	42.0
2.0	46.5
2.2	49.5
2.4	54.0
2.6	58.5
2.8	63.0
3.0	65.0

9 November to 22 December

Corr. Fms.	To Depth Fms.
0.3	10.0
0.4	12.0
0.5	14.0
0.6	16.0
0.7	19.0
0.8	21.0
0.9	23.0
1.0	25.0
1.1	27.5
1.2	29.5
1.3	31.0
1.4	33.0
1.6	40.5
1.8	45.0
2.0	47.5
2.2	54.5
2.4	59.5
2.6	65.0

FATHOMETER - INSTRUMENTAL CORRECTIONS, 1948

Abstract of Instrumental Corrections and Settlement and Squat, Fathometers SOSJ No. 1315G & 1325G; NMC-1 No. 206

FATHOM SCALES
SURVEYS HY-10148, HY-10448, and HY-10548

Fath. No.	Dates 1948	Scale	Corrn. Fms	To Depth Fms
NMC1-206	1 Sept, 6 Oct. - 22 Dec.		-0.5	31.0
			-0.6	Over 31.0
SOSJ-1315G	6 Oct. - 13 Nov.	A	+0.1	31.0
		A	0.0	55.0
		B	+1.2	90.0
SOSJ-1325G	14 Nov. - 22 Dec.	A	+0.1	31.0
		A	0.0	55.0
		B	-1.0	90.0

FOOT SCALES
SURVEYS HY-10148, HY-10648 and HY-10948

Fath. No.	Dates 1948	Scale	Corrn Ft.	To Depth Ft.
SOSJ-1315G	6 Oct. - 13 Nov.	A	+0.5	55
		B	+1.0	90
		C	+2.0	125
		D	+2.0	160
SOSJ-1325G	1 Sept., 14 Nov. - 22 Dec.	A	+0.5	55
		B	-1.0	90
		C	-1.5	125
		D	-0.5	160

Comp: FJB
Checked: FGJ

803 FATHOMETER VELOCITY CORRECTIONS
CORRECTIONS IN FATHOMS
To be used between 1 July and 11 Sept. 1949
For depths to 40 Fathoms
SURVEY NOS: HY10148; HY10448; HY10548

Corrn Fms	To Depth Fms		
0.1	7.5		
0.2	11.5		
0.3	15.5		
0.4	20.5		
0.5	25.5		
0.6	36.5	Comp:	FJB
0.8	40.0	Checked:	MRK

808 FATHOMETER VELOCITY CORRECTIONS
CORRECTIONS IN FATHOMS
To be used between 20 and 26 Sept. 1949
For depths to 40 Fathoms
SURVEY NOS: HY10148; HY10548

0.1	7.5		
0.2	11.5		
0.3	15.5		
0.4	19.5		
0.5	23.5		
0.6	33.5	Comp:	FJB
0.8	40.0	Checked:	MRK

808 FATHOMETER VELOCITY CORRECTIONS
CORRECTIONS IN FATHOMS
To be used between 7 and 30 June 1949
For depths to 106 Fathoms
SURVEY NOS: HY10148; HY10448; HY10548

0.1	8.0		
0.2	13.0		
0.3	17.5		
0.4	22.5		
0.5	28.5		
0.6	41.5		
0.8	60.0		
1.0	88.5		
1.2	101.0	Comp:	FJB
1.0	110.0	Checked:	FGJ

MRC-1 FATHOMETER VELOCITY CORRECTIONS
CORRECTIONS IN FATHOMS
To be used between 7 and 30 June 1949
For depths to 106 Fms
SURVEY NOS. HY10448; HY10543; HY10644; HY10945

Corrn Fms	To Depth Fms
0.2	7.0
0.3	9.0
0.4	11.0
0.5	13.0
0.6	15.5
0.7	17.5
0.8	20.0
0.9	22.0
1.0	24.0
1.1	26.5
1.2	29.0
1.3	31.0
1.4	36.5
1.6	41.5
1.8	47.0
2.0	52.0
2.2	57.5
2.4	63.0
2.6	68.5
2.8	74.5
3.0	80.5
3.2	86.5
3.4	92.5
3.6	98.5
3.8	101.0
3.5	102.5
4.0	110.0

Comp: FJS
Checked: RWJ

SC8 FATHOMETER VELOCITY CORRECTIONS
CORRECTIONS IN FEET
To be used between 7 and 20 June 1949
For depths to 160 feet
SURVEY NOS. HY10148; HY10648; HY10948

Corrn Ft	To Depth Ft	
0.0	21.5	
0.5	42.0	
1.0	65.0	
1.5	88.5	
2.0	111.5	
2.5	137.5	Comp: FJB
3.0	160.0	Checked: FGJ

SC8 FATHOMETER VELOCITY CORRECTIONS
CORRECTIONS IN FEET
To be used between 1 July and 11 Sept. 1949
For depths to 160 feet
SURVEY NOS. HY10148; HY10548;HY10648; HY10948

0.0	21.5	
0.5	40.5	
1.0	59.5	
1.5	79.5	
2.0	100.5	
2.5	122.5	
3.0	146.5	Comp: FJB
3.5	160.0	Checked: WRK

SC8 FATHOMETER VELOCITY CORRECTIONS
CORRECTIONS IN FEET
To be used between 20 and 26 Sept. 1949
For depths to 160 feet
SURVEY NOS. HY10148; HY10548; HY10648; HY10948

0.0	21.5	
0.5	40.5	
1.0	59.0	
1.5	78.0	
2.0	97.5	
2.5	118.0	
3.0	139.0	Comp: FJB
3.5	160.0	Checked: WRK

FATHOMETER - INSTRUMENTAL CORRECTIONS, 1949

Abstract of Instrumental Corrections and Settlement and Squat, Fathometers 808J No. 1318G and No. 1328G

FATHOM SCALES

SURVEYS HY-10048, HY-10448, and HY-10548

808J Fath. No.	Dates	Scale	Corrn. Fms	To Fms
1328G	26 May - 20 June 1949	All scales	+0.2	
1328G	21 June - 26 Sept. 1949	A	+0.1	31
		A	0.0	55
		B	0.0	90
1318G	21 June - 26 Sept. 1949	A	0.0	55
		B	-0.2	90

FEET SCALES

SURVEYS HY-10048, 10548, 10648 and 10948

808J Fath. No.	Dates	Scale	Corrn Ft.
1328G	26 May - 20 June 1949	A	0.0
		B	-1.0
		C	-1.5
		D	0.0
1328G	21 June - 26 Sept. 1949	A	+0.5
		B	+0.5
		C	+1.0
		D	+1.5
1318G	21 June - 26 Sept. 1949	A	0.0
		B	+0.5
		C	+0.5
		D	+1.5

Comp: FJB
Checked: HCR

VELOCITY CORRECTIONS

For Type 808 J Depth Recorders - Velocity of sound 820 fathoms per second

NOTE: ALL corrections additive unless otherwise indicated.

SURVEYS: H-7749 (10546); H-7792 (10648); H-7819 (10748); H-7820 (10848); H-7793 (10948); H-7821 (20149).

PERIOD: 9 August through 27 August 1950.

FEET

Depth From	Depth To	Corrn.
	21.5	0.0
22.0	39.0	0.5
39.5	56.5	1.0
57.0	75.0	1.5
75.5	94.0	2.0
94.5	114.5	2.5
115.0	136.0	3.0
136.5	159.0	3.5
159.5		4.0

FATHOMS

Depth From	Depth To	Corrn. (0.2)
7.1	15.0	0.2
15.1	23.5	0.4
23.6	33.0	0.6
33.1	43.5	0.8
43.6	54.0	1.0
54.1	65.1	1.2
65.2	80.0	1.4
80.1	99.0	1.6
99.1	160.0	1.8

FATHOMS

Depth From	Depth To	Corrn. (0.1)
7.1	11.0	0.2
11.1	15.0	0.3
15.1	19.1	0.4
19.2	23.5	0.5
23.6	28.0	0.6
28.1	33.0	0.7
33.1	38.2	0.8
38.3	43.5	0.9
43.6	48.5	1.0
48.6	54.0	1.1
54.1	59.5	1.2
59.6	65.1	1.3
65.2	71.5	1.4
71.6	80.0	1.5
80.1	87.5	1.6
87.6	99.0	1.7
99.1	114.5	1.8
114.6	160.0	1.9

FATHOMS

Depth From	Depth To	Corrn. (0.5)
	11.0	0.0
11.1	33.0	0.5
33.1	59.5	1.0
59.6	99.0	1.5
99.1	160.0	2.0

BT FINAL CORRECTIONS (Sheet No. 3)

SEASON 1950

SHIP HYDROGRAPHER G.L. ANDERSON, COMMANDING

From	To	Corr. CC	Remarks	From	To	Corr. D	Remarks
July 26 0600	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 0100	-2.0	
				Aug. 17 0101	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

INSTRUMENTAL CORRECTIONS

1950

Abstract of Instrumental Corrections including the correction for Settlement and Squat. - All surveys made in 1950.

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
	28 May - 20 September	Speed:	120 RPM and over			
		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

	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 Fathoms				
		Speed:	All speeds			
		Corrn:	-0.2	-0.8	+1.8	+3.8
		Correctors to 0.5 Fathoms				
		Speed:	All speeds			
		Corrn:	-0.5	-1.0	+2.0	+3.5
	28 May - 20 September	Correctors to 0.1 Fathom				
		Speed:	108 RPM and over			
		Corrn:	-0.1	+0.4	+2.4	+4.2
		Speed:	107 RPM and under			
		Corrn:	-0.2	+0.3	+2.3	+4.1

Fath No.	Date	Scales	A	B	C	D
131 SG	28 May - 20 September	Correctors to 0.2 Fathoms				
		Speed:	All speeds			
		Corrn:	-0.2	+0.2	+2.2	+4.0
		Correctors to 0.5 Fathoms				
		Speed:	All speeds			
		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 19 May - 0952 19 May	Speed:	120 RMP 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	-	-
	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

FATHOM SCALE

Fath. No.	Date	Scale	A	B	C	D
132 SG	2 May -	Correctors to 0.1 Fathom				
	0231 19 May	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
132 SG	1210 19 May	Correctors to 0.1 Fathom				
	20 September	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

Approval Sheet

Hydrographic Sheet HY 10548

Hydrographic Sheet No. HY 10548, the sounding records and reports have been examined and are approved.

Attention is invited to the extensive shoal area in the western part of this sheet. In depths of 20 to 22 fathoms, the tops of shoals rise to depths of 13 to 17 fathoms. On a typical sounding line run across the shoal, a series of small peaks will be crossed each of which rise to nearly the same elevation. Occasionally there are indications of some growth extending upward from a peak. Several attempts were made to examine these indications with the lead and grapnel without success.

George L. Anderson

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

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-7749 (Field No. Hy-10548)

GENERAL

see following page

Lat. 28-13 Long. 83-43

Positions 7 thru 20CC are being submitted on an overlay. This overlay shows additional investigation in the vicinity of wreck no. 62 & 6. Review, par. 7c.

DISCREPANCIES

Lat. 28-30 Long. 83-30

Soundings between positions 1 and 6J appear to be deep by about one fathom. (recanned fgms., diffs. partially eliminated) remaining discrepancies unimportant

Respectfully submitted,

Hugh L. Proffitt
Cartographer

Norfolk, Va.
23 March 1951

Approved & Forwarded:

Earl O. Heaton
Supervisor, S.E. District.

GEOGRAPHIC NAMES

Survey No. H-7749

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Florida			(for title)							1
Gulf of Mexico			"	"						2
Tampa Bay			"	"						3
										4
										5
Middle Ground			(see p. 6)							6
										7
										8
										9
										10
				Names underlined in red are approved. 4-10-51. L. Heck						11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H.7749....

Records accompanying survey:

Boat sheets ..1..; sounding vols. .50...; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls ..30 env.

special reports, etc. ..3 Cahiers, EPI plotting abstracts .....

..11 Sketchbooks, EPI distances; 1 Overlay tracing; 1 Smooth Sheet .....

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

Number of positions on sheet		5607
Number of positions checked		73
Number of positions revised		3
Number of soundings revised (refers to depth only)		21*
Number of soundings erroneously spaced		—
Number of signals erroneously plotted or transferred		NONE
Topographic details	Time	No Topo
Junctions	Time	12 hrs
Verification of soundings from graphic record	Time	66

Verification by E. Thomas .....Total time 472.. Date 10-10-53 ~~9-23-53~~

Reviewed by J.A. Dinsmore ..... Time 40..... Date 3 Nov. 1953

* Minor changes

Smooth - 9 hrs

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7749 FIELD NO. HY-10548

Florida, Gulf of Mexico, Northwest of Tampa Bay

Project No. CS-328

Surveyed - 1948, 1949 & 1950 Scale 1:100,000

Soundings: Control:

808 Fathometer
NMC-1 Fathometer E.P.I.

Chief of Party - G.L. Anderson
Surveyed by - G.L. Anderson, C.I. Aslakson, F.G. Johnson R.C. Rowse, J.D. Thurmond, G.C. Mast, W.N. Martin, F.J. Bryant, N.E. Taylor, L.S. Baker, H.F. Dunbrook and W.R. Kachel
Protracted by - A. Anninos
Soundings plotted by - A. Anninos
Verified and inked by - E. Thomas
Reviewed by - T.A. Dinsmore 3 November 1953
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 very good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. The 15-fm. curve has been added to emphasize the configuration of Middle Ground shoal.

An extensive shoal area is revealed in the western part of the surveyed area. Known as Middle Ground, numerous small peaks and ridges rise from depths of 20-22 fms. to within 13-15 fms. of the surface. Except for the irregularities in Middle Ground shoal, the bottom is relatively smooth and featureless. Depths within the limits of the surveyed area range from 9 to 43 fms.

4. Junctions with Contemporary Surveys

The present survey junctions adequately with H-7820 (1950) on the south and H-7679 (1948-49) on the west. The transfer of junctional soundings on the south is deferred pending the complete verification of H-7820. Project surveys on the north and east have not yet been received in this office.

5. Comparison with Prior Surveys

H-1354 (1875) 1:600,000
H-1771 (1887) 1:40,000
H-2920c (1882-84) 1:200,000
H-3670 (1914) 1:200,000

Soundings on these reconnaissance surveys are from dead-reckoning lines. Differences with present depths are as much as 7 fms. such as the 23-fm. sounding on H-1354 in lat. 28° 08.5', long. 84°18.0', which falls in depths of 30 fms. on the present survey. Differences between prior and present depths are attributed to errors in position of the prior dead-reckoning sounding lines.

The sunken wreck in lat. 28°13', long. 83°43', on H-3670 (1914) has been the subject of intensive searching in 1948, 1949 and 1950 with negative results in all instances. Upon the recommendation of the hydrographer (par. N., Desc. Report), the wreck symbol has been deleted from the charts. The reviewer concurs in the action taken.

6. Comparison with Chart 1114 (Latest print date 10/6/52)

A. Hydrography

The charted hydrography originates entirely with the present survey prior to verification and review. No important differences are noted between the charted and smooth-sheet depths. An uncharted 21-fm. shoal is noted in lat. 28°22.2, long. 84°22.5'.

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 and Descriptive Report are complete and comprehensive.
b. The smooth sheet was accurately and neatly plotted.
c. The additional work on August 25, 1950 in the vicinity of the previously charted wreck in lat. 28°13', long. 83°43', is shown on an overlay tracing enclosed in the Descriptive Report. Soundings between positions 1-7cc and 20-27 cc have been plotted on the smooth sheet. The intervening soundings were not plotted as they fell in an area previously well-developed.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is an excellent basic survey of the area covered and no further field work is required.

Examined and approved

H.R. Edmonston
Chief, Nautical Chart Branch

H. Arnold Karo
Chief, Division of Charts

G.R. Fish
Chief, Section of Hydrography

Earl O. Heaton
Chief, Division of Coastal Surveys

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~ 13 April 1951

Division of Charts: R. H. Carstens

Plane of reference approved in 50 volumes of sounding records for

HYDROGRAPHIC SHEET 7749

Locality N.W. of Tampa Bay, Gulf of Mexico

Chief of Party: G. L. Anderson in 1948-1950
Plane of reference is mean low water, reading
3.3 ft. on tide staff at St. Petersburg
5.5 ft. below B. M. 4 (1925)

Height of mean high water above plane of reference is 1.5 feet.

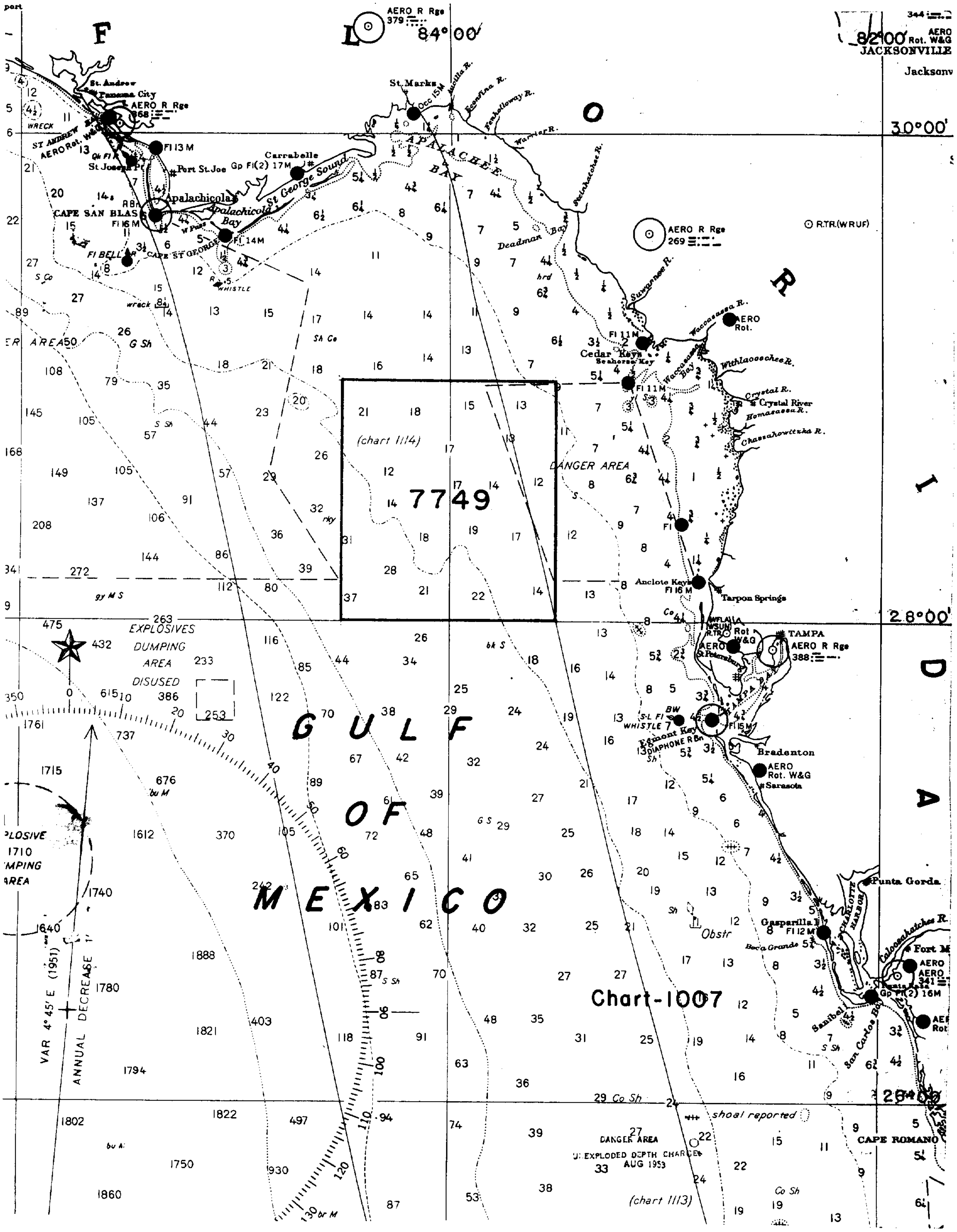
NOTE: Tide reducers were verified by using a time correction of -2:00 hours at the working grounds.

Condition of records satisfactory except as noted below:

E. C. McKay

Chief, ~~Division~~ Section of Tides ~~and Currents~~.

U. S. GOVERNMENT PRINTING OFFICE 756675



F L O R I D A
84°00'
82°00'
30°00'
28°00'
JACKSONVILLE
Jacksonv
St. Andrew
Panama City
St. Marks
Apalachicola
CAPE SAN BLAS
Port St. Joe
Carrabelle
St George Sound
Apalachicola Bay
APALACHEE BAY
Deadman Bay
Suwannee R.
Cedar Keys
Crystal River
Anclote Keys
Tarpon Springs
TAMPA
Egmont Key
Bradenton
Sarasota
Punta Gorda
Gasparilla I.
Boca Grande
Caloosahatchee R.
Sanibel
CAPE ROMANO
(chart 1114)
7749
DANGER AREA
EXPLOSIVES
DUMPING
AREA
DISUSED
GULF
OF
MEXICO
Chart-1007
shoal reported
DANGER AREA
UNEXPLODED DEPTH CHARGES
AUG 1953
(chart 1113)
VAR 4°45' E (1951)
ANNUAL DECREASE 1'
AERO R Rge

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7749

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
7-23-54	1003	E. M. Brogan	Before ~~After~~ Verification and Review appd thru cht 1114
7-16-52	1114	[illegible]	Before ~~After~~ Verification and Review
2-14-55	1114	J. H. Eaton	added depth curves. ~~Before~~ After Verification and Review
6/28/55	1003	H. E. MacEwen	[redacted] After Verification and Review Thru cht. 1114
1-21-59	1007	R. K. DeLander	~~Before~~ After Verification and Review thru cht 1003
21 Apr 60	1259	Nichols	~~Before~~ After Verification and Review Full
			Before After Verification and Review
			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.