7633

Diag'd. on Diag. Ch. No.1115

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: Hydrographic

Field No. HY-4347 Office No. H-7633

LOCALITY

State: Florida

General locality: Gulf of Mexico

Locality: South of St. Andrew Bay Entrance And Crooked Island

194 7

CHIEF OF PARTY

F.L.Peacock

LIBRARY & ARCHIVES

DATE: May 22, 1949

B-1870-1 (1)

7633

MAR 2 2 1949

H7633

Form 537
(Ed. June 1946)

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

H7633

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-7633

Field No. HY-4347

State FLORIDA

General locality GULF OF MEXICO

Locality SOUTH OF ST. ANDREW BAY ENTRANCE AND CROOKED ISLAND — Use for title on smooth sheet

Scale 1:40,000 Date of survey 21 July 1947-15 Sept. 1947

Instructions dated 26 SEPTEMBER 1946

Vessel SHIP HYDROGRAPHER

Chief of party FRED. L. PEACOCK

Surveyed by G.R. SHELTON, W.J. CHOVAN, J.D. THURMOND

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

Fathograms scaled by O. EVANS

Fathograms checked by M. FOX

Protracted by r.E. Jones

Soundings penciled by r.E. Jones

Soundings in ~~XXXXXXX~~ feet at MLW ~~XXXXXX~~

REMARKS: Because of the small area and its location, it is recommended that consideration be given to smooth plotting the work of this sheet on Field No. HY-4147. H-7631. (See Processing Office Addendum)

inked by: M. M. Rogers

Verified by M. M. Rogers

U. S. GOVERNMENT PRINTING OFFICE 693019

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY FIELD NO. HY-4347

SOUTH OF ST. ANDREWS BAY, FLA.

SCALE 1:40,000 - 1947

Fred. L. Peacock, Chief of Party Ship HYDROGRAPHER

SURVEYED BY: F.L. Peacock, E.B. Latham, G. R. Shelton, and J.D. Thurmond.

PROJECT: C.S. 328- Instructions dated 26 September 1946

SURVEY LIMITS AND DATES: This survey covers an area between the six and the twelve fathom curves Southeastward from the dredged channel entrance to St. Andrews Bay, Florida.

This Survey was started on 21 July 1947 and was completed on 15 September 1947.

SHEET JUNCTIONS: This survey joins on the ~~NW~~ north with survey No. ~~HY-4247~~ H-7179 (1947) ~~and HY-4446~~, on the south with survey No. HY-4147, H-7631 (1947) and on the west with H-6689, H-6694 ~~and HY-2147.~~ (1944-47) (1944-47) (1941) Review, par. 4

VESSEL AND EQUIPMENT: The Ship HYDROGRAPHER was used on this survey. The ships turning radius varies between 50 and 100 meters, depending on wind conditions.

Soundings were taken with type 808-J depth recorder no. 105-S. The range of depth was from ~~32~~ 30 to ~~84~~ 74 feet.

TIDE AND CURRENT STATIONS: The portable gage located at the Army Pier, Grand Lagoon, St. Andrews Bay was used for the reduction of soundings. No time or range corrections were applied to the observed tides. The location of the gage is: Latitude 30° 08'.0 and Longitude 85° 43'.9. Plane of reference is MLW and is 1.5 feet above the zero of the staff and is 11.9 feet below B.M. No. 2. Tide gage not shown on smooth sheet

No current stations were occupied.

SMOOTH SHEET: The ~~smooth~~ sheet is being sent to the Norfolk Processing Office for smooth plotting. Because of the small area involved, it is recommended that this sheet be combined with Field Sheet No. HY-4147. H-7631 (1947) See Processing Office Addendum & par 7C. of the Review

CONTROL STATIONS: Shore objects were used for control of this survey, except for the two North-South lines at the Eastern limit where survey buoys were used. The positions of shore objects are given in a list attached to this report. See Descriptive Report for Sheet HY-4147 for the positions of buoys, a tabulation is also attached to this report. these two lines plotted on H-7631 H-7631

SHORELINE AND TOPOGRAPHY: Offshore sheet. No shoreline shown. (Review, par. 1)

SOUNDINGS: Soundings were taken with 808-J type depth recorder, using the foot scale. For corrections see Descriptive Report for Field Sheet No.HY-4147. H-7631(1947)

CONTROL OF HYDROGRAPHY: Standard methods using three-point fixes on shore objects and buoys were used for control of sounding lines.

ADEQUACY OF SURVEY: This survey is considered adequate within the small area covered.

CROSSLINES: The percentage of crosslines run is 6%. The crossings appear to be in satisfactory agreemant.

COMPARISONS WITH PRIOR SURVEYS AND CHARTS: To be made after smooth plot is completed. Review, par. 5 & 6

DANGERS AND SHOALS: No dangers or shoals were found in the area surveyed.

COAST PILOT INFORMATION: The ship anchored twice at the west end of the sounded area and three times in the central portion. The bottom is sandy and has good holding qualities.

No current observations were made,however,the principal current encountered was that due to wind action.

TABULATION OF APPLICABLE DATA: ~~Same as~~ Listed under Sheet No HY-4147. (H-7631, 1947)
T&S and Fathometer corrections were forwarded 20 April 1948.
↑recorded in Desc. Report of H-7631 (1947)

Respectfully Submitted

Frank G. Johnson

Frank G. Johnson, Comdr. USC&GS.

Respectfully Forwarded

George L. Anderson

George L. Anderson, Comdr. USC&GS
Chief of Party.

H-7633 (1947)

STATISTICS FOR HYDROGRAPHIC SHEET HY-4347

SHIP HYDROGRAPHER PROJECT CS-328

VOL.	DAY LETTER	DATE	SOUNDINGS	NO. OF POS.	STATUTE MILES OF SOUNDING LINE
1	A	July 21	CP	23	16.8
1	B	July 31	CP	100	61.2
1	C	Aug. 1	CP	31	16.8
2	C	Aug. 1	CP	35	15.2
2	D	Aug. 2	CP	171	80.8
3	E	Aug. 3	CP	154	80.8
4	F	Sept. 14	CP	48	31.5
4	G	Sept. 15	CP	128	66.1
5	G	SEPT. 15	CP	16	9.2
TOTALS				706	378.4

NUMBER OF SERIAL TEMPERATURES OBSERVATIONS----------1
NUMBER OF BOTTOM SAMPLES----------20
AREA, SQUARE STATUTE MILES----------64.5

H-7633(1947)

LIST OF SURVEY BUOYS USED IN SURVEY, FIELD NO. HY-4347

STATION	LATITUDE AND LONGITUDE	SECONDS IN METERS
AZO	29° 43' 85° 38'	387.3 982.0
PIX	29° 58' 85° 36'	67.1 702.7
RIO	29° 55' 85° 36'	719.9 693.6
SHE	29° 52' 85° 36'	1240.8 694.6
TOM	29° 50' 85° 36'	130.0 688.6
VEX	29° 47' 85° 36'	918.7 684.1
WAR	29° 44' 85° 36'	1590.0 677.8
YAM	29° 42' 85° 36'	607.4 688.2
ZOO	29° 39' 85° 36'	1555.8 704.1

For Method of location see "Report to Accompany Buoy Traverse Adjustments", Dated 9 October 1947. CS-328

TIDAL NOTE

H-7633 (1947)

(not shown on smooth sheet)

The portable tide gage located at the Army Pier, Grand Lagoon, St. Andrews Bay, Florida was used for the reduction of all soundings. No time or range corrections were applied to the observed tides. The location of the gage is: Lat. 30 08.0 North and Long. 85 43.9 West. The plane of Mean Low Water is 1.5 feet above the zero of the tide staff and is 11.9 ft. below B.M. No. 2.

TRIANGULATION AND TOPOGRAPHIC STATIONS USED

NAME	LATITUDE	DM	LONGITUDE	DP	FROM
HUR	30-04	1507.5 (340.0)	85-39	333.0 (1273.0)	T-7069 Topographic Sheet HY-D-1947 (Descriptive Report HY-2447)
ARM	30-06	1346.0 (501.5)	85-43	311.0 (1295.2)	T-7057 Topographic Sheet Field No. HY-C-1947 (Descriptive Report HY-2447)
SAM	30-03	1806.4 (41.1)	85-35	320.4 (1286.9)	& C.S. 325 Topographic Sheet Registry No. T-5517$_A$ (Descriptive Report HY-2447)
TAN	30-04	636.1 (1211.4)	85-35	1461.1 (145.9)	& C.S. 325 Topographic Sheet Registry No. T-5517$_A$ (Descriptive Report HY-2447)
POT	30-04	1049.5 (798.0)	85-37	638.1 (969.0)	Established 1930 by R.D. Horne "Rear Bar Range", #335, Page 15 (Descriptive Report HY-1146)
JOE	29-49	302.2 (1545.2)	85-18	1204.0 (406.0)	Air Photo Compilation No. T-5596 (Stack at St. Joe Paper Mill)
ROOK	29-58	1600.0 (247.5)	85-31	130.7 (1478.0)	Scaled from Topographic Sheet Field No. E-1947 (T-7011a, 1947)
SIL	30-10	158.8 (1688.7)	85-41	939.2 (666.2)	Geographic Positions Revised 11/5/42 Page 99 St. Andrews, Municipal Tank 1934 (n.d.)
TALL	30-08	989.2 (858.3)	85-37	443.9 (1162.1)	Geographic Positions Revised 11/5/42 Page 100 Millville, Taller Concrete Stack 1934 (n.d.)
(Hydro) ANY	30-02	216.2 (1631.3)	85-34	720.2 (887.4)	Geographic Positions Revised 11/5/42 Page 634 (recorded on pgs. 21, 34, 39, Vol. 2) Andy, 1935 (d.m.) A Andy not used, object nearby cut in from ship
EAR	29-52	466.9 (1380.5)	85-23	871.7 (738.6)	Geographic Positions, Revised 11/5/42 Page 634 ~~St. Joseph Point 3 1934 (d.m.)~~ St. Joseph Point, Rear Range Beacon, 1935
JAB	29-59	1212.5 (635.0)	85-32	478.5 (1129.9)	Geographic Positions, Revised 11/5/42 Page 634 Jed, 1935 (d.m.) (Cats recorded in Vol. 2, Pgs. 35 & 57)

APPROVAL SHEET

H-7633(1947)

FIELD SHEET NO. HY-4347

This survey was made in 1947 under the supervision of Fred. L. Peacock Chief of Party. After due consideration, it is recommended that the work on this sheet be added to the smooth sheet covering field survey No. HY-4147. H-7631(1947)
(See Processing Office Addendum)

The boat sheet and sounding records have been examined and are approved.

George L. Anderson

George L. Anderson, Comdr. USC&GS.
Chief of Party. 3 December 1948.

20 Apr. '48.

Memo. to Lt. Comdr. Anderson:

The attached instrumental corrections sheets for the 1055 should be used instead of the ones attached to Vols. I, Surveys H-7631 (H-7631) & H-7632 (H-4247). Additional information came to light after the original instrumental corrections were entered.

In addition, the 1035 correction for 30 May should be -2.5 ft. for the 'C' scale & -7.5 ft. for the 'D' scale.

H. H. Martin

HY-4147
HY-4247
A-Day HY-20147
Vols. 1-5 HY-4347

Instrumental Corrections
808J # 1055
Foot Scales

A-Scale Depth	A-Scale Corr.	B-Scale Depth	B-Scale Corr.	C-Scale Depth	C-Scale Corr.	D-Scale Depth	D-Scale Corr.
		19 Feb.		to 21 Mar., 1947.			
		35-50	-1.0	70-83	+1.5		
		50.1-65	-0.5	83.1-98	+2.0		
		65.1-81	0.0	98.1-114	+2.5		
		81.1-90	+0.5	114.1-125	+3.0		
		29 May		to 17 June, 1947			
				70-74	-1.0	105-122	+2.0
				74.1-90	-0.5	122.1-138	+2.5
				90.1-105	0.0	138.1-153	+3.0
				105.1-122	+0.5	153.1-160	+3.5
		18 June		to 4 Aug., 1947			
23-38	-0.5	35-47	-1.0	70-83	0.0	105-118	+0.5
38.1-53	0.0	47.1-63	-0.5	83.1-100	+0.5	118.1-134	+1.0
53.1-60	+0.5	63.1-78	0.0	100.1-115	+1.0	134.1-150	+1.5
		78.1-90	+0.5	115.1-125	+1.5	150.1-160	+2.0
				14 to 15 Sept., 1947			
32-47	+1.0	35-48	0.0				
47.1-55	+1.5	48.1-64	+0.5				
		64.1-80	+1.0				

From Figs. 5, 6, 7, & 8 - Report on 808J Fathometer Errors, Foot scales - 20 Apr., 1948.

Comp. [illegible]

HY-4147
HY-4247
A-Day - HY-20147
Vols. 1-5 - HY-4347

Instrumental Corrections
808J # 1055
Foot Scales

A-Scale Depth	A-Scale Corr.	B-Scale Depth	B-Scale Corr.	C-Scale Depth	C-Scale Corr.	D-Scale Depth	D-Scale Corr.
		19 Feb. to 21 Mar., 1947					
		35-50	-1.0	70-83	+1.5		
		50.1-65	-0.5	83.1-98	+2.0		
		65.1-81	0.0	98.1-114	+2.5		
		81.1-90	+0.5	114.1-125	+3.0		
		29 May to 17 June, 1947					
				70-74	-1.0	105-122	+2.0
				74.1-90	-0.5	122.1-138	+2.5
				90.1-105	0.0	138.1-153	+3.0
				105.1-122	+0.5	153.1-160	+3.5
		18 June to 4 Aug., 1947					
23-38	-0.5	35-47	-1.0	70-83	0.0	105-118	+0.5
38.1-53	0.0	47.1-63	-0.5	83.1-100	+0.5	118.1-134	+1.0
53.1-60	+0.5	63.1-78	0.0	100.1-115	+1.0	134.1-150	+1.5
		78.1-90	+0.5	115.1-125	+1.5	150.1-160	+2.0
		14 to 15 Sept., 1947					
32-47	+1.0	35-48	0.0				
47.1-55	+1.5	48.1-64	+0.5				
		64.1-80	+1.0				

From Figs. 5, 6, 7, & 8 - Report on 808J Fathometer Errors, Foot Scales - 20 Apr., 1948.

Comp. MMM
Ck'd CWM

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY REGISTRY NO. H-7633

FIELD NO. HY-4347

Florida, Gulf of Mexico, South of St. Andrew Bay
Surveyed in July - Sept., 1947 Scale 1:40,000
Project No. CS-328

Soundings:

808 Fathometer

Control:

Sextant fixes on shore signals and buoy signals

Chief of Party - F. L. Peacock
Surveyed by - G. R. Shelton, W. J. Chovan, J. D. Thurmond
Protracted by - P. E. Jones
Soundings plotted by - P. E. Jones
Verified and inked by - M. M. Rogers
Reviewed by - T. A. Dinsmore, July 21, 1949
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with air photographic surveys T-5516, T-5517 and T-5520 (1935), supplemented by revisions to these sheets shown on Bps. 41519, 41647 and 41643 (1946).

The origin of the signals is adequately covered 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 bottom is relatively smooth and of moderate slope. Depths range from 30 to 74 feet.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with the following surveys:

H-7631 (1947) on the south
H-6689 (1941) on the west
H-6694 (1941-47) on the northwest
H-7173 (1946-47) on the north

Project surveys on the northeast and southeast are not yet accomplished.

5. Comparison with Prior Surveys

H-514 (1855) 1:20,000
H-518 (1856) 1:20,000
H-1265a (1875) 1:20,000
H-1373b (1877) 1:40,000
H-1375 (1877) 1:20,000
H-1511b (1881-82) 1:40,000

These prior surveys cover the area of the present survey. Several bottom changes have taken place during the 65-90 years intervening between the prior and present surveys. In the vicinity of lat. 30° 03.25', long. 85° 40.60', prior depths of 67 and 69 feet (chart 489) are now superseded by depths of 60 feet. The shoaling here has moved the 60-ft. depth curve about 400 meters seaward.

Major shoaling is indicated in the vicinity of lat. 30° 02.05', long. 85° 38.05', where a well-supported least depth of 36 feet on the present survey falls between depths of 50-60 feet on the prior surveys.

The 34-ft. sounding (Chart 1263) in lat. 29° 54.77', long. 85° 31.35', originating with H-1265a, falls in present depths of 44 feet. In this vicinity, other prior soundings of 37-39 feet fall in present depths of 42-43 feet. Close development on the present survey clearly indicates that this area has deepened from 3 to 10 feet since the prior survey of 1875. The prior soundings therefore should be disregarded.

Except for the bottom changes described above no other important differences were noted between prior and present depths.

A few bottom characteristics have been carried forward from the prior surveys. With these additions, the present survey supersedes the prior surveys.

6. Comparison with Chart 489 (Latest print date 6/9/47)
Chart 1263 (Latest print date 9/13/48)

A. Hydrography

Charted hydrography is sparse and originates with the previously discussed surveys which need no fur-

ther consideration. The charted soundings are superseded by the present survey.

B. Aids to Navigation

There are no charted aids to navigation 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.

b. The smooth plotting was well done.

c. Two lines of soundings (1-20a and 5-17c, green) which originate with the present survey are plotted along the eastern limits of H-7631(1947).

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is a basic survey and no additional field work is required.

Examined and approved:

H. R. Edmonston
Chief, Nautical Chart Branch

Casper M. Durgin
Chief, Division of Charts

K. G. Crosby
Chief, Section of Hydrography

W. M. Scaife
Chief, Division of Coastal Surveys

LIST OF SIGNALS
for
HYDROGRAPHIC SURVEY H-7633 (1947)
Field No. Hy-4347

TRIANGULATION STATIONS

SIL - St. Andrews Municipal Tank, 1934
TALL - Millville Southern Craft Corp. Talle Concrete Stack, 1934
POT - Rear Bar Range, 1930-35
JAB - Jed, 1935 (*Two cuts recorded in Sdg. Vol. 2, Pgs. 35 & 57*)
EAR - St. Joseph Point, Rear Range Beacon, 1935

TOPOGRAPHIC STATIONS Source: Scaled positions in Descriptive Report.

HUR	SAM	JOE
ARM	TAN	ROOK

HYDROGRAPHIC STATIONS

ANY - Cuts indexed in sounding vols. (*Vol. 2, pgs. 21, 34 & 39*)

SURVEY BUOYS Source: Report to accompany buoy traverse adjustments.

AZO	RIO	TOM	WAR	ZOO
PIX	SHE	VEX	YAM	

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-7633 (Field No. Hy-4347)

The recommendation of the Officer-in-Charge to plot this work on H-7631 was not followed as some of the hydrography and most of the control fell off the limits of that sheet.

Control

Contrary to the Descriptive Report, signal ANY was not triangulation station Andy, 1935. This signal was plotted from cuts found in the sounding vols. (Vol. 2, pgs. 21, 34 & 39)

Comparison with Chart

There is a general agreement with charted soundings with the following exceptions:

Chart 489 -

Lat. 30°-03.2' Long. 85°-40.45' - Charted 67' sounding falls in 60' soundings.

Lat. 30°-03.3' Long. 85°-40.7' - Charted 69' sounding falls in 60' sounding.

Lat. 30°-02.0' Long. 85°-38.0' - Attention is directed to an area shoaling to 36' falling in a charted depth of over 50'.

Chart 1263 -

Lat. 29°-54.7' Long. 85°-31.4' - Development in this area failed to show a charted 34' sounding falling in 44' of water.

Review, par. 5

Respectfully submitted,

Hugh L. Proffitt
Cartographer

Norfolk, Virginia
March 9, 1949

Approved and forwarded.

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

GEOGRAPHIC NAMES

Survey No. H7633

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									USGB	1
Gulf of Mexico										2
St. Andrew Bay									USGB	3
Hurricane Island		(not Crooked Island: see ch. 489)								4
										5
										6
			Names underlined in red are approved. 4/7/49 L Heck							7
										8
										9
										10
Grand Lagoon		(location of tide staff)								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-7633

Records accompenying survey:

Boat sheets ..1..; sounding vols. ..5...; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls ..4 ozyel.

special reports, etc. Report on 808 Fath. (feet scale)
Computations of Vertical Casts, Fixes from shore objects, Phasing differences
Buoy Traverse Folders #s 1, 2, 3 & 4

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

Number of positions on sheet		706
Number of positions checked		70
Number of positions revised		16
Number of soundings revised (refers to depth only)		* 150
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	8
Junctions	Time	3.2
Verification of soundings from graphic record	Time	3.5

Verification by M. M. Rogers ....Total time 16.4. Date June 21, 1949

Reviewed by J. A. Dinsmore ..... Time ..... 19 hrs. Date July 21, 1949

* Most of the revised depths resulted from revising the by a few tenths the scaled values from the fathograms in order to attain more adequate agreement of depths at crossings.

M-2232-1

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

12 April 1949

~~Division of Hydrography and Topography:~~

Division of Charts: R. H. Carstens

Plane of reference approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 7633

Locality St. Andrews Bay, Florida

Chief of Party: F. L. Peacock in 1947
Plane of reference is mean low water, reading
1.5 ft. on tide staff at Army Pier, Grand Lagoon, St. Andrew Bay
11.9 ft. below B. M. 2 (1947)

Height of mean high water above plane of reference is 1.3 feet.

Condition of records satisfactory except as noted below:

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

U. S. GOVERNMENT PRINTING OFFICE 756675

NAUTICAL CHARTS BRANCH

SURVEY NO. H 7633

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
9-9-49	1263	M cGlasson	Before After Verification and Review Completely Appd Graticule
10-31-49			
10-31-49	489	M cGlasson	~~Before~~ After Verification and Review Completely Appd.
~~2-21-50~~	~~1115~~	~~M cGlasson~~	~~Before~~ After Verification and Review ~~Part Appd.~~
3-2-50	868	M cGlasson	~~Before~~ After Verification and Review Completely Appd.
11-3-53	1115	Eva M Bragg	~~Before~~ After Verification and Review Completely appd NOV 9 1953
			Before After Verification and Review
			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.