

6694

Diag'd. on Diag. Ch. No. 1263& 1264

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. H-2147 Office No. H-6694

LOCALITY

State Florida

General locality Gulf of Mexico

Locality St. Andrew Bay to Grayton Beach

1941-1947

CHIEF OF PARTY

W.M.Scaife and F.L.Peacock

LIBRARY & ARCHIVES

DATE

6694

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 2441

H6694

REGISTER NO. H-6694

State FLORIDA

General locality Gulf of Mexico - Florida Coast

Locality St. Andrews Bay to Grayton Beach

Scale 1:20,000 Date of survey Aug.-Sept., 1941

Vessel Launches FARIS & HIGGINS

Chief of Party Wm. Scaife

Surveyed by Ship's Officers

Protracted by L. J. Walter

Soundings penciled by L. J. Walter

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated June 24 and October 13, 1939, 19

Remarks: This sheet was processed at the Norfolk Processing Office.

REG. NO. **H6694** (1941)

H6694

DESCRIPTIVE REPORT

to accompany
SHEET NO. H-6694

This report covers only the
1941 work. See back part of
Desc. Report for report covering
the 1947 work

This is one of a series of hydrographic sheets which were sent to this office by the Pensacola Processing Office for processing. Since no descriptive report was written by the field party or the Pensacola Processing Office, the following report is written in lieu of same.

INSTRUCTIONS:

This survey was executed under authority of the Director's Instructions for Project HT-236, dated June 24, 1939, and Supplemental Instructions, dated October 13, 1939.

LOCALITY:

This is an inshore survey along the coast of Florida and lies approximately ^{between} from a point south of St. Andrews Bay and Grayton Beach. It extends approximately 1/2 to 1 1/2 miles offshore, and lies between Longitude 85° 41' and Longitude 86° 11'.

CONTROL & SIGNALS:

Triangulation previously established furnished the primary control. The secondary control consisted of topographic signals which were gotten from a tracing furnished this office by the Pensacola Processing Office. (from T-6857-2-b (1941))

SURVEY METHODS:

The usual visual method of three-point fixes was used throughout this survey. The soundings were obtained by the 808 type Submarine Signal Corporation Fathometer.

SMOOTH PLOTTING:

The sounding records show no entries for barchecks or initial settings. No barcheck corrections were therefore made in the sounding records. The initial setting shown on the fathometer at the beginning of each day was taken to be correct, and corrections were made for any variation from the original setting. Corrections to soundings were also made for fathometer speed variations.

Insufficient bar
checks made
Review,
par. 7c.

(sandridges)

Attention is directed to shoals appearing near the shoreline.

No bottom characteristics are shown on this sheet, as none were recorded in the sounding records.

DISCREPANCIES:

The crossings in some portions of this survey show discrepancies of 2 to 3 feet, which ~~may be~~^{were} due to the fact that no barcheck ~~applied from~~^{corrections} corrections were made, ~~or slight displacement of sounding lines.~~ 1947 work

DANGERS:

No dangers or wrecks appear on this survey.


CHANNELS:

The channel to St. Andrews Bay which runs across the peninsula south of Alligator Point was developed on this survey. It has an effective depth of 2₆ ft. | Review, par. 6 B.

JUNCTIONS WITH CONTEMPORARY SURVEYS:

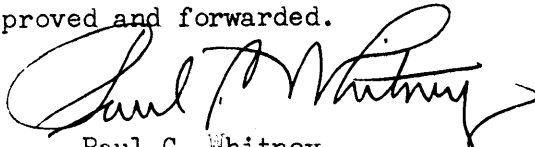
This survey joins H-6693^{1941-47 work} on the west and H-6689 on the south.

Respectfully submitted,


Isadore M. Zeskind
Associate Cartographic Engr.

January 13, 1943
Norfolk Processing Office

Approved and forwarded.


Paul C. Whitney
Supervisor, Southeastern District

STATISTICS

SHEET H-6694

Date	Day Letter	Vol. No.	Positions	Stat. Miles	
Aug. 14,	41	A-Red	1	24	13.5
" 26,	"	B- #	1	75	38.3
" 27,	"	C- "	1	66	32.5
" 28,	"	D- "	1	58	28.8
" 29,	"	E- "	1	70	35.2
Sept. 6,	41	F- "	1	25	18.1
" 7,	"	G- "	1 & 2	73	36.0
" 9,	"	H- "	2	56	26.6
" 10,	"	J- "	2	45	21.6
Aug. 12,	"	a-(Green)	3	43	17.8
" 21,	"	b- "	3	49	18.0
" 12,	"	A'-Red	4	18	8.0
" 14,	"	B'- "	4	26	13.9
" 22,	"	C'- "	4	31	8.6
" 23,	"	D'- "	4	110	39.7
" 24,	"	E'- "	4	48	12.6
" 25,	"	F'- "	4	44	9.2
" 26,	"	G'- "	4	63	25.6
" 27,	"	H'- "	4 & 5	50	21.4
" 28,	"	J'- "	5	109	40.0
" 29,	"	K'- "	5	22	12.2
" 30,	"	L'- "	5	40	8.3
Sept. 6,	"	M'- "	5	44	26.1
" 7,	"	N'- "	5	47	20.1
" 8,	"	P'- "	5 & 6	115	56.7
" 9,	"	Q'- "	6	51	25.6
Aug. 21,	"	a'-(Green)	7	49	13.5
" 24,	"	b'- "	7	82	18.8
Total				1533	646.7

LIST OF SIGNALSTriangulationTopographic

<u>Bob</u> , 1935	Pat (3)
<u>Grand</u> , 1935	Pav
<u>Landsend 2</u> , 1935	Pex
<u>Long</u> , 1935	Ply
<u>Philips Inlet Tank</u> , 1935	Pot
<u>Ridge</u> , 1935	Pup (2)
<u>Salt</u> , 1935	Rat
<u>Sand</u> , 1935	Ret
<u>Tom</u> , 1935	Rig
<u>Weiley 2</u> , 1934	Row
<u>Wye</u> , 1935	Rub (3)
<u>Rod</u> , 1935)	Rut
(Low))	San
	Sig
<u>Topographic</u>	Sil (2)
	So
Ack Ike	Sol
Amy Ill	Sot
Ant It	Sta
Art Jon	Sty
Big Joy	Su
Bot Kit (2)	Sum
Boy Lag (3)	Tag
Cap Las (2)	Tan
Coo Led	Tar
Cot Lig	Tim
Dan Lok	Tin
Eat Low (2)	Ton (2)
Eel Lot	Top
Egg Ma	Tow
End Man (2)	Up
Fan Mas	Use (2)
Fie Mig	Vet (2)
Fix Mic	Vit
Fry Mul	War
Gab Nak	Wat
Gal Nat	Win
Get Ned	Wit
Gus Net	Yan
Hen New	Yon
Het No (2)	
Her Not	
Him Oil (2)	
Hog Old	
How Out	
Hum Owl	

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6694**

Records accompanying survey:

Boat sheets **2**...; sounding vols. **7**..; wire drag vols. **9**...;
 bomb vols. ...**0**; graphic recorder rolls **4 & 9**, add vol. which contain
 special reports, etc.~~work for both 6694 & 6693~~.....

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

Number of positions on sheet	.....
Number of positions checked	.....
Number of positions revised	.....
Number of soundings recorded	.....
Number of soundings revised (refers to depth only)	.....
Number of soundings erroneously spaced	.....
Number of signals erroneously plotted or transferred	.....
Topographic details	Time	<i>See sheet for</i>
Junctions	Time	<i>1947 work</i>
Verification of soundings from graphic record	Time	
Verification by.....	Total time	Date
Review by	Time	Date

RCC
HCC

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography:~~

✓ Division of Charts: Attention: Mr. H. R. Edmonston.

Tide Reducers are approved in
7 volumes of sounding records for

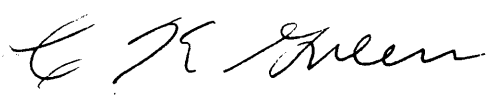
HYDROGRAPHIC SHEET 6694

Locality St. Andrew Bay to Grayton Beach, Gulf of Mexico

Chief of Party: Wm. Scaife in 1941
Plane of reference is mean low water reading
3.7 ft. on tide staff at St. Andrew Bay Entrance, Staff No. 2
5.9 ft. below B.M. 1

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

Condition of records satisfactory except as noted below:


Chief, Division of Tides and Currents.

FORM M-238

MEMORANDUM IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

No. H
No. T

H6694

received Jan. 19, 1943
registered Jan. 19, 1943
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83	Pg 1	<i>JK</i>	<i>No land correction required.</i>
88			
90			

RETURN TO

82	R. W. Knox
----	-------------------

✓ RWC

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. HY-2147

REGISTER NO.

State Florida

General locality Gulf Coast

Locality Saint Andrew Bay East Entrance, Westward

Scale 1:20,000 Date of survey 11 March-April, 1947

Vessel Ship HYDROGRAPHER

Chief of Party Fred. L. Peacock

Surveyed by E.B. Latham, G.R. Shelton and W.J. Chovan

Protracted by R.C. Richard

Soundings penciled by R.C. Richard

Soundings in fathoms feet Feet

Plane of reference MLW

Subdivision of wire dragged areas by _____

Inked by G.S. Hilliard

Verified by G.S. Hilliard

Instructions dated 26 September, 1946

Remarks: _____

REG. NO.

6694

~~ADDITIONAL WORK~~
(1947)

DESCRIPTIVE REPORT TO ACCOMPANY

SURVEY H-6694 ADDITIONAL WORK 1947.FIELD NO. HY-2147

St. Andrew Bay East Entrance, Westward.

Fred. L. Peacock, Chief of Party-----Ship HYDROGRAPHER

Surveyed by : E. B. Latham
 G. R. Shelton
 W. J. Chovan

Scale 1 : 20,000

PROJECT:

C.S. 328, dated 26 September 1946.

SURVEY LIMITS AND DATES:

The limits of this survey correspond to the limits of survey H-6694, scale 1:20,000, 1947 with cross lines overlapping survey H-6689, scale 1:40,000, 1947. This survey began on 11 March and ended on 25 April 1947.

VESSELS AND EQUIPMENT:

The Ship HYDROGRAPHER'S launches, CS-115 and CS-117 were used on this survey. The launches operated from the ship. Soundings were taken with 808 depth recorders Nos. 101-S and 105-S with the fish mounted alongside the keel of each launch. The range of depth was from 6 to 65 feet.

TIDE STATIONS:

Data from the tide station at Beacon Beach, Saint Andrew Bay, were used for reducing sounding taken on 11 March. For the remainder of the survey tide station at Army Pier, Grand Lagoon, St. Andrew Bay was used.

CONTROL STATIONS:

The basic control was an arc of second order triangulation executed by G. L. Anderson, Chief of Party, in 1935. Supplemental points

were located by graphic control executed on aluminum sheets, ^{T-7055, 7057 & 7069 (1947)} scale
1:20,000. Control stations YEL and FAR were located by tape trav-

erse and sextant angles from a near-by triangulation station. SAND, 1935. The
traverse records have not been found; signals located from boat sheet positions.
SHORELINE AND TOPOGRAPHY: FAR & YEL are about 200 m. and 435 m., respectively, from Δ SAND.

The shoreline and topographic details of the area of this sur-
^{T-5524, T-5525 & T-5526}
vey were located by Survey Nos. T-5520, T-5521 and T-5523, which were
made from air photographs flown in 1934. Tide Gage at Army pier located
from Air Photo. Correction Sheet No. 328

SOUNDINGS:

The soundings were taken with 808 depth recorders on the foot
scale. Bar checks were taken at 10-foot intervals throughout the
depth range of this survey. Two to three bar checks were taken each
day of sounding. These bar checks were used to determine the combin-
ed instrumental and velocity corrections to be applied to the sound-
ings. Settlement and squat corrections were determined by the "First
Method" as described in the Hydrographic Manual, paragraph 553 page
514.

CONTROL OF HYDROGRAPHY:

The Hydrography executed during this survey was controlled by
three-point fixes on shore objects.

COMPARISON WITH ~~PRIOR SURVEYS~~: the 1941 work of the present survey.

This survey was made to determine, if possible, corrections to
be applied to the 1942 launch survey in the area covered by Survey
H-6694. Numerous lines were run crossing the 1942 lines at an angle
of about 45 degrees. These lines were extended into the area of the
1942 ship hydrography, Survey H-6689, scale 1:40,000. The soundings
were corrected for tide, velocity and instrumental corrections, and

settlement and squat. These corrected soundings were plotted on a red line print of the smooth sheet of the 1942 survey. The 1942 ship soundings were transferred to this print. Comparison between the 1947 launch soundings and the 1942 ship soundings indicate that the ship soundings are correct and need no further corrections. The 1942 and 1947 depths at each crossing were listed, starting at the west end of this survey and extending to the east end. The 1942 depths were subtracted from the 1947 depths and the resulting differences were plotted on cross-section paper, using the differences as abscissas and the 1942 depths as ordinates. A study of the resulting graph indicates the following corrections should be applied to the 1942 launch soundings to bring them into agreement with the 1942 ship sounding on Survey H-6689 and the 1947 launch soundings:

Graph revised in Wash. Office See note below

- Zero correction to 12 feet,
- Plus 1 foot to 35 feet,
- Plus 2 feet to 38 feet,
- Plus 3 feet to 60 feet.

These corrections not used. Corrections applied are from a graph which furnishes separate corrections for each sounding day. Graph is filed with the sounding records of H-6693(1941-47). An abstract of the corrections applied appears on the following

Respectfully submitted,

page (11a).

George R. Shelton
 George R. Shelton, Lieut. Commander,
 C. & G. Survey

Respectfully forwarded:

Fred. L. Peacock
 Fred. L. Peacock, Captain, C. & G.S.,
 Chief of Party.

CROSSING CORRECTIONS(FEET)
(applied to 1941 soundings from the 1947 soundings)

Sounding Days	Dates	Correction	Range of Depths
A'	8/12/41	0	0 - 30
B'	8/14/41	1	30 - 50
		2	50 - deepest
C'	8/22/41	0	0 - 35
		1	35 - 50
		2	50 - deepest
D'	8/23/41	0	0 - 20
		1	20 - 45
		2	45 - deepest
E'	8/24/41	0	0 - 25
F'	8/25/41	1	25 - 50
G'	8/26/41	2	50 - deepest
H'	8/27/41	0	0 - 24
		1	24 - 32
		2	32 - deepest
J'	8/28/41	0	0 - 20
		1	20 - 29
		2	29 - deepest
K'	8/29/41	0	0 - 20
		1	20 - 37
		2	37 - deepest
M'	9/6/41	0	0 - 20
		1	20 - 26
		2	26 - deepest
N'	9/7/41	0	0 - 20
		1	20 - 55
		2	55 - deepest
P'	9/8/41	0	0 - 32
		1	32 - 43
		2	43 - 55
		3	55 - deepest
G	9/9/41	0	0 - 33
H		1	33 - 44
Q		2	44 - 51
		3	51 - deepest

TIDE NOTE

Tide data from the auto-portable tide gage at Beacon Beach, Saint Andrew Bay, Latitude $30^{\circ}06'.2$ N, Longitude $85^{\circ}40'.2$ W., were used for reducing the soundings taken on 11 March 1947. Mean low water on the staff was 1.75 feet above zero of the staff. ✓

Tide data from the auto-portable gage at Army Pier, Grand Lagoon, Saint Andrew Bay, Latitude $30^{\circ}08'.0$ N. Longitude $85^{\circ}43'.9$ W. were used in reducing the sounding on the remainder of this survey. A value of 1.7 feet was used for mean low water on the staff. ✓

-5-

STATISTICS TO ACCOMPANY
HYDROGRAPHIC SURVEY H - 6694

ADDITIONAL WORK 1947

FIELD NO. HY-2147

VESSEL	DATE	DAY	VOL	POS	STATUTE MILES SOUNDING LINE	
CS-115	11 March	a	1	77	16.8	
CS-115	10 April	b	1	75	18.9	
CS-115	12 April	c	1&3	175	40.3	
CS-115	25 April	d	3&4	161	44.0	
CS-117	10 April	a	2	49	14.1	
CS-117	25 April	b	2	106	23.8	
TOTALS-----					643	157.9

DATA TO ACCOMPANY

SURVEY H-6694 ADDITIONAL WORK 1947.FIELD NO. HY-2147

Depth at Crossings in Feet

1942'	1947	Dif.	*1942'	1947	Dif.	1942'	1947	Dif.	
59	63	4	49	52	3	46	50	4	
59	62	3	46	47	1	47	53	6	
56	62	6	42	42	0	52	56	4	
54	58	4	35	35	0	52	57	5	
52	56	4	26	28	2	51	55	4	
53	56	3	13	24	11	50	50	0	
54	57	3	25	30	5	43	47	4	
56	60	4	33	36	3	50	54	4	
57	60	3	46	49	3	53	56	3	
58	61	3	39	45	6	52	55	3	
59	62	3	45	48	3	50	54	4	
60	63	3	51	53	2	49	53	4	
52	56	4	53	53	0	50	55	5	
49	54	5	53	53	0	50	55	5	
51	53	2	53	53	0	51	54	3	
8	16	8	55	56	1	47	50	3	
14	23	9	46	51	5	48	51	3	
22	26	4	50	54	4	48	51	3	
30	33	3	53	56	3	48	51	3	
37	41	4	56	60	4	47	51	4	
46	47	1	51	54	3	45	49	4	
51	53	2	49	53	4	46	49	3	
57	57	0	44	50	6	46	49	3	
58	61	3	53	54	1	45	48	3	
60	63	3	57	58	1	45	48	3	
59	64	5	51	53	2	43	47	4	
60	65	5	40	44	4	46	48	2	
55	61	6	40	44	4	46	50	4	
58	61	3	41	44	3	52	53	1	
59	63	4	41	44	3	53	59	6	
58	62	4	39	44	5	48	51	3	
53	55	2	41	43	2	47	49	2	
52	56	4	24	24	0	42	44	2	
50	53	2	18	18	0	46	47	1	
52	57	5	12	12	0	42	45	3	
52	56	4	30	31	1	42	45	3	
54	58	4	38	39	1	45	48	3	
53	58	5	40	40	0	47	50	3	
54	58	3	41	42	1	48	51	3	
48	52	4	41	43	2	49	55	6	
55	57	2	44	45	1	48	53	5	
54	57	3	45	48	3	51	53	2	
57	57	0	46	51	5	53	56	3	
59	60	1	45	51	6	53	56	3	
57	62	5	50	52	2	52	56	4	
56	61	5	50	51	1	52	57	5	
55	58	3	46	48	2	55	59	4	

DATA TO ACCOMPANY

SURVEY H-6694 ADDITIONAL WORK 1947.FIELD NO. HY-2147

Depth at Crossings in Feet

1942	1947	Dif.	1942	1947	Dif.	1942	1947	Dif.
52	57	5	48	50	2	52	56	4
49	54	5	50	52	2	54	59	4
49	53	4	50	53	3	55	59	4
44	47	3	51	54	3	56	59	3
43	46	3	53	55	2	56	59	3
43	46	3	53	55	2	56	59	3
46	50	4	46	49	3	56	59	3
45	48	3	48	51	3	51	55	4
47	49	2	48	53	5	52	57	5
50	51	1	51	54	3	55	58	3
50	51	1	53	57	4	51	53	2
53	55	2	50	52	2	50	54	4
57	60	3	50	52	2	47	50	3
52	61	9	51	52	1	44	48	4
52	54	2	48	51	3	46	49	3
52	53	1	52	54	2	48	49	1
47	50	3	51	55	4	50	54	4
46	54	8	54	56	2	50	54	4
43	47	4	46	47	1	50	54	4
45	47	2	48	49	1	51	55	4
45	48	3	48	50	2	53	56	3
46	50	4	52	53	1	54	56	2
47	51	4	51	55	4	55	58	3
49	51	2	49	53	4	57	58	1
48	50	2	51	54	3	54	57	2
52	56	4	48	50	2	52	56	4
45	48	3	48	49	1	53	54	1
53	58	5	48	51	3	53	54	1
56	59	3	51	53	2	50	54	4
55	57	2	51	53	2	53	54	1
53	55	2	51	55	4	50	54	4
51	53	2	55	58	3	49	52	3
46	49	3	55	59	4	47	50	3
46	49	3	49	53	4	47	49	2
46	50	4	50	53	3	45	47	2
50	51	1	50	54	4	32	34	2
52	54	2	50	54	4	40	42	2
48	51	3	51	54	3	41	44	3
48	51	3	51	54	3	43	45	2
48	51	3	53	55	2	45	47	2
47	52 51	4	50	55	5	45	49	4
49	52	3	54	58	4	48	50	2
48	49	1	55	59	4	48	51	3
49	51	2	54	58	4	48	40	1
51	53	2	54	59	5	45	48	3
52	55	3	55	59	4	50	51	1
53	56	3	50	53	3	52	55	3

DATA TO ACCOMPANY

SURVEY H-6694 ADDITIONAL WORK 1947.FIELD NO. HY-2147

Depths at Crossings in Feet

1942	1947	Dif.	1942	1947	Dif.	1942	1947	Dif.
52	57	5	37	39	2	29	30	1
54	57	3	37	38	1	32	34	2
40	41	1	38	39	1	33	34	1
43	45	2	40	42	2	31	32	1
43	48	5	39	41	2	31	33	2
41	43	2	42	44	2	32	34	2
46	49	3	39	41	2	32	33	1
42	43	1	41	44	3	34	35	1
44	44	0	47	48	1	37	40	3
38	43	5	45	49	4	6	6	0
47	48	1	48	52	4	10	16	5
48	52	4	50	54	4	15	18	3
52	54	2	50	55	5	22	25	3
52	56	4	56	58	2	25	28	3
53	58	5	53	55	2	28	29	1
55	58	3	48	54	6	28	29	1
55	59	4	48	54	6	30	31	1
56	58	2	49	51	2	30	32	2
53	57	4	48	50	2	32	32	0
52	56	4	43	48	5	33	33	0
49	53	4	41	44	3	34	36	2
41	49	8	40	41	1	38	40	2
39	46	7	41	42	1	40	42	2
41	43	2	42	43	1	45	49	4
52	55	3	39	39	0	34	36	2
49	54	5	36	38	0	35	37	2
37	40	3	41	45	4	47	50	3
38	41	3	46	49	3	49	50	1
37	39	2	48	53	5	48	50	2
36	38	2	52	55	3	49	51	2
38	39	1	42	44	2	47	47	0
21	21	0	50	54	4	48	51	3
28	29	1	49	52	3	48	52	4
36	38	2	42	44	2	47	47	0
41	43	2	45	49	4	44	45	1
39	43	4	46	50	4	47	49	2
36	38	2	38	40	2	40	40	0
39	41	2	33	34	1	38	40	2
43	44	1	34	34	0	15	18	3
42	43	1	33	33	0	6	6	0
43	46	3	34	35	1	19	20	1
44	47	3	36	36	0	24	25	1
42	45	3	37	38	1	26	28	2
42	44	2	37	39	2	29	30	1
40	42	2	37	41	4	29	30	1

DATA TO ACCOMPANY

SURVEY H-6694 ADDITIONAL WORK 1947.FIELD NO. HY-2147

Depth at Crossings in Feet

1942	1947	Dif.	1942	1947	Dif.
39	42	3	31	32	1
40	41	1	32	34	2
38	40	2	37	37	0
21	21	0	37	38	1
28	29	1	38	41	3
27	28	1	42	44	2
30	32	2	41	46	5
30	30	2	38	41	3
31	32	1	37	39	2
32	33	1	36	38	2
34	34	0	36	38	2
35	36	1	38	39	1
36	37	1	38	40	2
34	35	1	39	42	3
33	34	1	41	46	5
32	33	1	41	46	5
30	31	1	39	42	3
29	31	2	38	40	2
31	33	2	38	40	2
32	35	3	38	41	3
36	37	1	40	43	3
38	40	2	42	46	4
42	46	4	40	43	3
41	45	4	39	42	3
37	39	2	38	41	3
38	39	1	38	41	3
36	37	1	39	42	3
34	35	1	41	44	3
32	33	1	43	47	4
30	31	1	44	47	3
28	29	1	42	45	3
25	26	1	42	46	4
20	23	3	45	50	5
20	20	0			
17	18	1			
12	13	1			
8	12	4			
12	14	2			
13	14	1			
12	13	1			
13	15	2			
16	18	2			
21	21	0			
23	24	1			
25	27	2			
27	28	1			

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-6694. Ad. Wk. 1947

Records accompanying survey:

Boat sheets .2....; sounding vols. 4....; wire drag vols. .0...;
 bomb vols. .0....; graphic recorder rolls .6...;
 special reports, etc. 2 Red line prints of Survey H-6694. Ad. Wk. in two parts

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

Number of positions on sheet	2176
Number of positions checked	337
Number of positions revised	24
Number of soundings revised (refers to depth only)	49
Number of soundings erroneously spaced	667
Number of signals erroneously plotted or transferred	0
Topographic details	Time 16 hrs.
Junctions	Time 50 "
Verification of soundings from graphic record	Time 33 hrs. hrs.
Verification by <i>R. E. Ekins</i> <i>R. C. Richard</i> G. S. HILLIARD	Total time 400 hrs
	Date JAN. 3, '49
Reviewed by <i>J. A. Dinmore</i>	Time 47 hrs. Date 1/27/49

GEOGRAPHIC NAMES

Survey No. H-6694

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
Florida			(for title)						USCB	1	
<u>Gulf of Mexico</u>			"	"						2	
										3	
			(location of one tide staff)								4
<u>Beacon Beach</u>										5	
<u>St. Andrew Bay</u>									USCB	6	
<u>Hurricane Island</u>										7	
<u>Panama City Beach</u>										8	
<u>Long Beach</u>										9	
<u>Florida Beach</u>										10	
<u>Betty Lou Beach</u>										11	
<u>Gulf Resort Beach</u>										12	
<u>Laguna Beach</u>										13	
<u>Sunnyside</u>										14	
<u>Grayton Beach</u>										15	
										16	
										17	
										18	
			(location of one tide staff)								19
<u>Army Pier, Grand Lagoon</u>										20	
										21	
										22	
										23	
										24	
										25	
										26	
										27	

Names underlined in red are approved. 2/15/49.

HWM.

83

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Bureau of Hydrography and Topography~~

November 12, 1947

Division of Charts: H. W. MURRAY

Plane of reference approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 6694 (Additional work)

Locality - St. Andrew Bay, Gulf Coast, Florida

Chief of Party: F. L. Peacock in 1947
Plane of reference is mean low water, reading
1.6 ft. on tide staff at Beacon Beach
17.5 ft. below B. M. 3 (1930)
1.5 ft. on tide staff at Army Pier, Grand Lagoon
4.0 ft. below B. M. 1 (1947)

Height of mean high water above plane of reference is 0.9 foot.

Condition of records satisfactory except as noted below:

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

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-6694

FIELD NO. 2241 & HY-2147

Florida, Gulf of Mexico, St. Andrew Bay to Grayton Beach
Surveyed in August-September 1941, Scale 1:20,000
March-April 1947
Project Nos. HT-236 & CS-328

Soundings:

Control:

808 Fathometer

Sextant fixes on shore signals

Chief of Party - W. M. Scaife, F. L. Peacock
Surveyed by - J. C. Tribble, W. B. Page, E. B. Latham,
- G. R. Shelton, and W. J. Chovan
Protracted by - L. J. Walter, R. C. Richard
Soundings plotted by - L. J. Walter, R. C. Richard
Verified and inked by G. S. Hilliard
Reviewed by - T. A. Dinsmore - January 27, 1949
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with air photographic surveys T-5520, T-5521, T-5523, T-5524, T-5525 and T-5526(1934-35).

The signals are from graphic control surveys T-6857 a & b (1941), T-7055, T-7057 and T-7069 (1947). The fixes for hydrographic signal UM are recorded in the sounding records of the present survey.

2. Sounding Line Crossings

Depths at crossings are generally in good agreement. Differences of 2-3 feet in depths of 50-60 feet occur in a few places. Such differences are attributed to slight inaccuracies in the corrections applied to the soundings of the 1941 work. The method of determining these corrections is explained fully on pages 10 and 11 of the Descriptive Report and the range of the corrections is included therein.

3. Depth Curves and Bottom Configuration

Except for delineation of the low-water line, the depth curves are complete. It was impracticable for the hydrographer to determine the low-water line because of its proximity to the shoreline and the low range of tide (1.3 ft.)

Sand ridges and troughs occur throughout most of the in-shore area. Except for the undulations caused by these features, the bottom is smooth and slopes rather abruptly from the high-water line to depths of 30 feet. Minor bottom irregularities are noted in depths of 60 feet.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-5783 (1935) in the entrance to St. Andrew Bay and with offshore survey H-6689 (1941) on the south.

The junctions with H-6693 (1941-47) on the northwest and H-7173 (1947) on the southeast will be considered in the reviews of those surveys.

5. Comparison with Prior Surveysa. H-514(1855) 1:20,000 H-1373a & b (1877) 1:40,000

These early reconnaissance surveys show sounding lines spaced about one and one-half miles apart, running normal to the shoreline and terminating in inshore depths of about 16 feet. The meager comparison afforded between the prior and present soundings shows no appreciable change of bottom in offshore depths. Several inshore changes, however are noted, the most important of which results from the dredged channel in lat. 30°07', long. 85°44', which did not exist at the time of the prior surveys.

b. H-5024(1930) 1:10,000 H-5783(1935) 1:10,000

H-5024 overlaps a small portion of the present survey at the extreme southeast. The most noticeable differences between prior and present depths occur in lat. 30°05.35', long. 85°41.33', and lat. 30°05.12', long. 85°40.81', where prior depths of 14 feet and 11 feet, respectively, are now superseded by depths of 11 feet and 7 feet.

H-5783 covers the approaches and entrance to St. Andrew dredged channel. A comparison of prior and present depths reveals some bottom changes. The 30-ft. depth curve delineating the ridges which flank the channel entrance now protrudes about 400 meters farther offshore. In the vicinity of the two entrance buoys, prior depths of 37 feet are now superseded by depths of 30 feet. Considerable shoaling has occurred over the area southward and south-eastward of the channel entrance where prior depths of 30 to 39 feet are now superseded by depths of 28 to 33 feet. Only minor differences of 1 - 2 ft. are noted between prior and present depths northwestward of the channel.

Except for bottom characteristics which have been carried forward, the present survey is adequate to supersede the prior surveys within the common area.

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

869	(	"	"	"	9/8/47)
1263	(	"	"	"	9/13/48)
1264	(	"	"	"	9/15/47)

A. Hydrography

Charted hydrography originates principally with the present survey prior to verification and review. Most of the smooth sheet soundings have been revised during verification and therefore supersede the charted depths.

A few soundings are charted in the vicinity of St. Andrew dredged channel from Corps of Engineers blueprints 43124-27(1947). These soundings are subsequent to and supersede present survey depths within the common area.

B. Dredged Channels

Present survey depths in the St. Andrew dredged channel are slightly deeper than the charted controlling depth of 24 feet (Chart Letter 807, 1948). The charted controlling depth is subsequent to and supersedes present survey depths.

C. Aids to Navigation

The aids to navigation appearing on the present survey were located in 1941. As most of these aids have been subsequently changed in character or position, a comparison with the present chart would serve no useful purpose. The charted positions of aids adequately mark the features intended.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete.
- b. The verifiers report indicates that little attention was given to the proper spacing of soundings during the smooth plotting of the 1941 work. More than 600 soundings, many of which occurred at uneven time intervals were replotted because of erroneous spacing.
- c. Sufficient bar checks were not made during 1941 to adequately provide corrections for the reduction of soundings of that season's work. The purpose of the additional work of 1947 was to determine corrections for the 1941 work.
- d. No bottom characteristics were obtained on this in-shore survey.


8. Compliance with Project Instructions


The survey adequately complies with the Project Instructions except as noted under paragraph 7 d.


9. Additional Field Work


With the bottom characteristics retained from the prior surveys, this survey is considered basic and no additional field work is recommended.

Examined and approved:


H. R. Edmonston
Chief, Nautical Chart Branch


Casper M. Durgin
Chief, Division of Charts


K. G. Crosby
Chief, Section of Hydrography


C. K. Green
Chief, Division of Coastal Surveys

~ WORK OF 1941 ~

Applied to chart 1264 before review 1-27-43 H.F.S.
 " " " 1263 " " 2-15-43 K.R.
 " " " 489 " " 3-4-43 G.H.S.

NAUTICAL CHARTS BRANCH

(1941-47)
 SURVEY NO. **H6694** ~~ADDITIONAL WORK~~

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
12/12/47	489	J.A. McGowan	Before After Verification and Review <i>Partially</i> (Three soundings at entrance channel)
9-9-49	1263	H.C. McGlasson	Before After Verification and Review <i>Critical</i>
10-31-49	489	M. McGlasson	Before After Verification and Review <i>Completely Appld.</i>
2-21-50	1115	M. McGlasson	Before After Verification and Review <i>No critical Cor.</i>
3-3-50	869	M. McGlasson	Before After Verification and Review <i>Completely Appld.</i>
4-3-50	868	M. McGlasson	Before After Verification and Review <i>Completely Appld.</i>
11-9-53	1115	E. M. [unclear]	Before After Verification and Review <i>Completely Appld.</i>
12/27/54	1263	E. M. [unclear]	Before After Verification and Review <i>Fully applied these Chart 869</i>
5/23/68	1263-64	D.F. Lundberg	Before After Verification and Review <i>Brought overlap into agreement</i>
9/23/68	1264	D.F. Lundberg	Before After Verification and Review <i>Completely Appld.</i>
9/23/68	1115	D.F. Lundberg	<i>Brought overlap of 1115 into agreement with 1264</i>

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.