

7877

Diag. Cht. No. 1257-2

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. SO-2249 Office No. H-7877

LOCALITY

State FLORIDA

General locality FLORIDA WEST COAST

Locality LITTLE PASS AND VICINITY

1949 & 1950

CHIEF OF PARTY

J. D. Thurmond

LIBRARY & ARCHIVES

DATE Nov 17 - 1952

2282
7877

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-7877

Field No. SO-2249

State Florida

General locality Florida West Coast
~~West Coast of Florida~~

Locality Little Pass and Vicinity
~~Clearwater Beach Island Sand Key~~

Scale 1:20,000 Date of survey 25 Aug.-28 Nov. 1949
16 Nov.-17 Nov. 1950

Instructions dated 2 March 1949

Vessel USC&GSS SOSBEE

Chief of party James D. Thurmond

Surveyed by James D. Thurmond & Ira R. Rubottom

Soundings taken by fathometer, ~~graphic recorder~~, hand lead, ~~etc.~~

Fathograms scaled by Ship's Personnel

Fathograms checked by " "

Protracted by W.W. Feazel

Soundings penciled by W.W. Feazel

Soundings in ~~XXXXXX~~ feet at MLW ~~XXXXXX~~ and are true depths

REMARKS: This survey was smooth plotted in the Hydrographic Section of the Norfolk Processing Office.

7075

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-7877 FIELD NO. SO-2249

West Coast of Florida Clearwater Beach Island-
Sand Key

Scale 1:20,000 25 August-28 November 1949
 16 Nov. to 17 November 1950

USC&GSS SOSBEE James D. Thurmond, Commanding

A. PROJECT:

Project CS-336 with the following instructions and correspondence:

Letter dated 9 February 1949, ref. 222-MEK, S-1-SO.
Instructions dated 2 March 1949, ref. 22-MEK, S-1-SO.
Letter dated 12 March 1949, Receipt of Instructions.
Letter dated 14 April 1949, ref 223-MEK, S-1-SO.
Letter dated 23 August 1949, ref. 36-rcb.
Letter dated 12 September 1949, ref. 22/MEK, S-1-SO.
Letter dated 13 January 1950, ref, 36-rcb.

All above addressed to Commanding Officer, Ship SOSBEE.

Copy of letter to Commanding Officer Ship HYDROGRAPHER
dated 22 September 1949, Instructions Project CS-336.

B. SURVEY LIMITS AND DATES:

This survey covers the area offshore from Clearwater Beach Island and the northern part of Sand Key on the West Coast of Florida, to longitude $82^{\circ}-52'.0$ W. It is bounded on the North by sheets SO-1649 and SO-2150 in latitude $28^{\circ}-00'.0$ N., and joins sheet SO-1549 in the entrance to Little Pass.

The southern limit of the survey extends to latitude $27^{\circ}-54'.8$ N. No further surveys on this project have been extended southward at this time.

Field work commenced 25 August 1949 and was discontinued 28 November 1949.

Work was resumed 16 November 1950, and ended 17 November 1950.

C. VESSELS AND EQUIPMENT:

Hydrography was accomplished by the Ship SOSBEE and Skiff No. 735. During the season of 1949 the Ship SOSBEE sounded only two days between longitude $82^{\circ}-50'.3$ W. and $82^{\circ}-51'.2$ W. The inshore hydrography was accomplished with 25 foot skiff No. 735. The offshore hydrography was extended with the skiff from a junction with the ship work to longitude $82^{\circ}-51'.65$ W.

In November 1950 the Ship SOSBEE extended the survey to longitude $82^{\circ}-52'.0$ W., which was the offshore limit called for in the Instructions.

The soundings were recorded with 808 portable depth recorders, Nos. 117-S and 140-SP.

D. TIDE AND CURRENT STATIONS:

Tidal data obtained from portable tide gage No. H-301, established at Clearwater Harbor, Fla., were used to reduce all soundings taken during 1949.

Soundings taken during 1950 were reduced from tidal data obtained from portable gage located at Dunedin, Fla.

See Tidal Note on separate sheet following text of this report.

Current Station No. 6 in latitude $28^{\circ}-00'.5$ N., longitude $82^{\circ}-49'.5$ W. was observed for 100 Continuous hours during period 1 June to 5 June 1949, by Ship SOSBEE.

E. SMOOTH SHEET:

Compilation of the smooth sheet ^{was} ~~will~~ be accomplished by the Norfolk, Virginia Processing Office.

F. CONTROL STATIONS:

Triangulation stations are all on North American 1927 datum.

First Order Triangulation Stations as follows:

Bak-(BAK,R.P.E.,1925-K.G.C.,1941) Geographic Position from page 204, Dunnellon to Naples, Florida.
 Dis-(DIS,R.P.E.,1925) Geographic Position from page 203, Dunnellon to Naples, Florida.
 Hit-(WHITE,R.P.E.,1925) Geographic Position from page 197, Dunnellon to Naples, Florida.
 Hot-(STACK,R.P.E.,1925) Geographic Position from page 204, Dunnellon to Naples, Florida.
 Jap-(BELL,R.P.E.,1926) Geographic Position from page 205, Dunnellon to Naples, Florida.
 Keg-(KEG,R.P.E.,1925) Geographic Position from page 205, Dunnellon to Naples, Florida.

F. (con't) CONTROL STATIONS:

First Order Triangulation Stations continued:

Pass-(LITTLE PASS,G.H.R.,1910) Geographic Position from page 107, Dunnellon to Naples, Florida.

Third Order Triangulation Stations as follows:

Cam-(CAMP,R.P.E.,1926) Geographic Position from page 763, Florida Coast, Boca Ceiga Bay to Anclote Anchorage.

Lit-(LITE,R.P.E.,1926) Geographic Position from page 763, Florida Coast, Boca Ceiga Bay to Anclote Anchorage.

Topographic Stations were obtained from the following:

Reg. No.	Date	Method of Location
T-5824	1939	Air Photographs
T-5823	1939	" "
SO-A-49	1949	Graphic Control
Field No T-83-79	1948	Planetable

not in Wash office 3-5-53
To be destroyed

G. SHORELINE AND TOPOGRAPHY:

The shoreline was transferred from film positives of ~~topo~~ ^{correction} graphic sheets Nos. CS-373 and CS-374⁽¹⁹⁴⁸⁾ furnished by the Washington Office. *mat-8378 & T-8379 of 1943*

H. SOUNDINGS:

Hydrography was accomplished using 808 depth recorders on the Ship SOSBEE and 25 foot skiff No. 735.

Fathometer Nos. 117-S and 140-SP with transceivers mounted in the bilges were used on the Ship SOSBEE and bar checks were used to adjust the initial so the fathometer recorded the correct depth, in accordance with section 5545 of the Hydrographic Manual.

Fathometer 117-S and 140-SP with transceivers laying inside on the flat bottom was used on skiff No. 735 and bar checks used to adjust the initial so the fathometer recorded the correct depth. Soundings in shoaler depths, usually under 3 feet, were taken with a pole graduated in feet.

Tide corrections and initial corrections only were applied to the soundings. *Settlement & squat corr. applied in S.E. District Off.*

I. CONTROL OF HYDROGRAPHY:

Hydrography was controlled by 3 point sextant fixes on signals located by triangulation, or topography with planetable, graphic, or air photographic location.

I. (con't) CONTROL OF HYDROGRAPHY:

No unusual or substandard methods were used.

J. ADEQUACY OF SURVEY:

The Survey is adequate and Complete, and should supersede all prior surveys for Charting purposes.

K. CROSSLINES:

Crosslines, totaling approx. 10% of total mileage, were run and discrepancies were not over 1.0 feet.

L. COMPARISON WITH PRIOR SURVEYS:

Comparison with H-4581, Scale 1:40,000.

The depth Curves on H-4581, if all moved approximately 140 meters to the westward, would be in excellent agreement with this survey. *See TP 56 of Review*

Comparison with H-4577, Scale 1:10,000.

The soundings show excellent agreement except in the entrance to Little Pass where the depths shift from time to time due to storm action. The entrance Channel has changed from an entering course of south to a course of east. *See TP 5 of Review*

The shoal area with least depth of 2 feet in latitude 27°-58'.3 N., longitude 82°-50'.2 W. has shifted about 150 meters to southwestward, to latitude 27°-58'.2⁰ N., longitude 82°-50'.³⁰ W. with a least depth of 3 feet.

The shoal with a least depth of 3 feet in latitude 27°-58'.05 N., longitude 82°-50'.10 W. has shifted about 100 meters to the southwestward to latitude 27°-58'.00 N., longitude 82°-50'.20 W.

The entrance to Little Pass is adequately marked by aids to navigation and has a controlling depth of 6 feet.

M. COMPARISON WITH CHART:

Comparisons drawn in "L" are applicable when comparison is made with Chart 1257. *See TP 6 of Review*

N. DANGERS AND SHOALS:

The reported obstruction, latitude 27°-58'.05 N., longitude 82°-50'.15 W., was not found. An investigation of the area was made in skiff No. 735 at minus tide (-0.2 ft.) 1 Dec. 1950. A general shoaling in the area has a least depth of 3 feet, which breaks at low water with a moderate swell, in latitude 27°-58'.00 N., longitude 82°-50'.20 W. (listed under "L") *See TP 6, Review*

N. (con't) DANGERS AND SHOALS:

Another shoal with least depth of 3 feet exists in latitude 27°-58'.21⁰N., longitude 82°-50'.~~26~~³⁰W. (listed under "L".)

No other dangers or shoals were covered by this survey.

O. COAST PILOT INFORMATION:

A thorough Coast Pilot investigation of the area was made in 1948 and no additions or corrections found on this survey.

P. AIDS TO NAVIGATION:

The following located by 3 point sextant fixes:

Type	No.	Depth	Pos. No.	Date of Location	Lat.	Long.
*Red nun-N-2A	-	7.4 ft.	- 142d	- 1949	- 27°-58'.07	- 82°-50'.18 ✓
Red nun-N-2	-	7.4 "	- 143d	- 1949	- 27°-58'.06	- 82°-50'.28 ✓
Lighted						
Bell	-1	-18.7 "	- 144d	- 1949	- 27°-58'.04	- 82°-50'.67 ✓

*This buoy found out of position 1 Dec. 1950 and its position re-determined on Sheet SO-1549, in latitude 27°-58'.18, longitude 82°-50'.16. *H-7875(1949)*

Z. TABULATION OF APPLICABLE DATA:

Previously forwarded:

1. Non-floating aids to navigation, Form 567.
2. Forms 567 submitted in 1948 by Ross A. Gilmore, Chief of Party.

Attached to this report:

1. Statistics.
2. Tide Note.
3. List of Signals.

Submitted by

Ira R. Rubottom
 Ira R. Rubottom
 Commander, C&GS

Approved and Forwarded:

James D. Thurmond
 James D. Thurmond,
 Commander, C&GS
 Comdg. Ship SOSBEE

TIDE NOTE

Portable tide gage No. H-301 established at Clearwater Harbor, Florida, in latitude $27^{\circ}-57'.3$ N., longitude $82^{\circ}-48'.4$ W., was used to reduce all soundings taken during 1949.

The zero of the tide staff was 1.4 feet below the plane of reference and was furnished by the Washington D. C. Office in letter dated 23 August 1949, ref. No. 36-rcb.

Time and height discrepancies were corrected each time the hourly heights were scaled from the marigrams. Extreme low tide measurements were made and recorded at half hour intervals during the time of sounding by direct measurement with a steel tape from the water to the tide staff.

All soundings taken in 1950 were reduced from data obtained from portable gage at Dunedin, Florida.

VELOCITY CORRECTIONS

No Velocity Corrections were applied. Fathometer initial was set to read true depth, by adequate bar checks.

STATISTICS FOR HYDROGRAPHIC SURVEY

H - 7877 (SO-2249 - 1949 & 1950) PROJECT CS-336

USC&GSS SOSBEE

JAMES D. THURMOND, COMMANDING

Letter Day	Volumes	Date	Number of Positions	Statute Miles Soundings
A-(Ship)	- 1	25 Aug. 1949	- 186	- 49.1
B- "	- 1 & 2	8 Sept. "	- 101	- 40.2
a-(Skiff)	- 3	25 Oct. "	- 142	- 34.9
b- "	- 3 & 4	26 Oct. "	- 130	- 30.1
c- "	- 4	27 Oct. "	- 145	- 35.0
d- "	- 5	28 Nov. "	- 144	- 30.7
b "	4(H7877)	26 Oct. "	12	-
C-(Ship)	- 2	16 Nov. 1950	- 77	- 26.1
D- "	- 2	17 Nov. "	- 68	- 21.6
Totals	8	5 -25 Aug. - 28 Nov. 1949-993 16 Nov. - 17 Nov. 1950	-	267.7

Area = 8.5 square statute miles.

LIST OF SIGNALS
H-78Q7

TRIANGULATION STATIONS

BAK CLEARWATER, SILVER MUNICIPAL TANK, (BAK, 1925-34)
CAM CAMP, 1926-41
DIS DUNEDIN, SILVER MUNICIPAL WATER TANK, (DIS, 1925-34)
HIT WHITE, 1925-34
HOT CLEAR WATER, BELLEVIEW HOTEL, WHITE BRICK STACK, (STACK, 1925-52)
JAP BELLEAIR, SILVER MUNICIPAL TANK, 1934
KEG CLEARWATER, SILVER MUNICIPAL TANK, (KEG, 1925-34)
LIT LITE, 1926-41
PASS LITTLE PASS, 1910-52

MARKED TOPOGRAPHIC STATIONS

BOOM BOOM (U.S.E.) 1941-49 T-5823
RED RADIO TOWER, 1948-49 (d) T-8379
TOE RADIO MAST, 1948-52 (d) So-C-51 Revised 1952

TOPOGRAPHIC STATIONS

Bel (BAA 43) T-8379
Dot So-A-50 Revised 1952
Dun (Y 195 FMP) T-8379
Duo So-A-49
Hut So-A-49 Revised 1952
Ken So-A-49
Pie So-A-49 Revised 1952
Pei So-A-49 Revised 1952
Try So-A-49

PHOTOGRAMMETRIC FEATURES

End T-8378
Far T-8379
Lag "
Lid "
Mel "
Non "
Sty "
Tile "
Tip T-8378
Tom T-8379
Win "

FLOATING AIDS TO NAVIGATION
H-7877

LIGHT LIST-INTERCOASTAL WATERWAYS

<u>NAME</u>	<u>LAT</u>	<u>METERS</u>	<u>LONG.</u>	<u>METERS</u>	<u>DEPTH</u>	<u>POS</u>	<u>DATE</u>
LITTLE PASS LIGHTED BELL BUOY 1	27-58	85	82-50	1112	18	144d	11/28/49
LITTLE PASS BUOY 2	27-58	100	82-50	487	7	143d	"
LITTLE PASS BUOY 2A	27-58	152	82-50	265	7	142d	"

P. O. Box 428, Ship SOSBEE
St. Petersburg, Fla.

9 July 1951

To: Supervisor, Southeastern District
U. S. Coast & Geodetic Survey
418 P. O. Building
Norfolk 10, Virginia

Subject: Settlement & Squat Corrections,
Ship SOSBEE.

There is enclosed herewith copy of "Special Report",
Settlement & Squat Tests for Ship SOSBEE.

It is requested that the Corrections be entered in
the sounding volumes for soundings taken by the Ship SOSBEE
on sheets SO-1649 and SO-2249 which were forwarded to you on
5 January 1951. *H-7877*

The normal sounding speed for the Ship was at 1500
R.P.M., and when "Reduced Speed" is noted in the volumes the
speed was at 1000 R.P.M.

H-7877
It is believed that practically all ship soundings
on sheet SO-2249 were at 1500 R.P.M. The short day of ship
sounding on sheet SO-1649, was at 1000 R.P.M.

There are also enclosed 2 lists of "Settlement &
Squat" Corrections which should be pasted in the fronts of
the first volumes of ship sounding on these two sheets.

It is believed that when these Corrections are ap-
plied, better agreement will be had between the ship and
skiff soundings where they join or overlap.

James D. Thurmond
Commander, C&GS
Comdg. Ship SOSBEE

SETTLING & SQUAT TESTS

Ship SOSEEE

28 - 29 May 1951

Table of Corrections

<u>1500 R.P.M.</u>	<u>1000 R.P.M.</u>
+0.2 - 17.9 ft. & above	0.0 - 17.2 ft. & above
+0.4 - 17.8 ft. to 15.0 ft.	+0.2 - 17.0 " to 13.3 ft.
+0.6 - 14.8 " " 13.1 "	+0.4 - 13.2 " " 10.4 "
+0.8 - 13.0 " " 11.6 "	+0.6 - 10.2 " " 7.7 "
+1.0 - 11.4 " " 10.3 "	+0.8 - 7.6 " & below
+1.2 - 10.2 " " 9.0 "	
+1.4 - 8.8 " " 7.7 "	
+1.6 - 7.6 " " 6.5 "	
+1.8 - 6.4 " & below	

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR ~~LANDMARKS~~ FOR CHARTS

TO BE CHARTED
TO BE ~~DELETED~~ STRIKE OUT ONE

St. Petersburg, Florida

30 Nov. 19 50

I recommend that the following objects which have (*have not*) been inspected from seaward to determine their value as landmarks be charted on ~~the charts~~ the charts indicated.

The positions given have been checked after listing by I. R. Rubottom

James D. Thurmond, Comdr., C&GS

Chief of Party.

STATE Florida			POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION 1949-50	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE		LONGITUDE								DATUM
			° ' "	D. M. METERS	° ' "	D. P. METERS							
Bn. 6	St. Joseph Sound daybeacon Red pointer on pile. Red refl.	- -	27-59	500	82-48	1331	N.A. Sextant 1927 30-1549	Dec. 49	X	X	1257		
Bn. 9	St. Joseph Sound daybeacon. Blk. pointer + green refl.	- -	27-59	904	82-48	1141	" " " "	" "	X	X	"		
Bn. 19	Dunedin Channel daybeacon Guano platform 20 x 20 feet on piling-12 feet above MLW	- -	28-00	1135	82-47	1400	Sextant 30-1649	" "	X	X	"		
Bird Rack	Piling of former birdrack Guano platform is gone	Jon	28-06	297	82-50	333	Topo 30-A-50	Sept. 50	X	X	"		
Bird Rack	Guano platform 20 x 20 feet on piling-12 feet above MLW	Ned	28-06	1058	82-47	1440	" "	" "	X	X	"		
Bird Rack	Same as above	Mar	28-06	962	82-48	855	" "	" "	X	X	"		
Bird Rack	" " "	Set	28-04	1745	82-50	1134	" "	" "	X	X	"		
Bird Rack	" " "	Mag	28-03	732	82-47	1185	" "	" "	X	X	"		
Bird Rack	" " "	Mat	28-05	1058	82-47	1530	" "	" "	X	X	"		
Bn. 36	St. Joseph Sound daybeacon, red triangular daymark & pointer-	Len	28-07	430	82-48	457	" "	" "	X	X	"		
Tank	Water Tank on S. end/ON pile of the Southerly Caldesi Is.	Hun	28-06	1377	82-49	11	" "	" "	X	X	"		
Bn. 37	Clearwater Harbor daybeacon Blk. pointer-green refl.	- -	28-03	1216	82-49	1146	Topo 30-A-49	Aug. 49	X	X	"		
Bn. 38	Clearwater Harbor daybeacon Red pointer-red reflector	- -	27-55	1060	82-49	1484	" "	" "	X	X	"		
			27-55	1404	82-50	55	" "	" "	X	X	"		

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR ~~MARKERS~~ FOR CHARTS

TO BE CHARTED
TO BE ~~REMOVED~~

STRIKE OUT ONE

St. Petersburg, Florida

30 Nov. 1950

I recommend that the following objects which have (*have not*) been inspected from seaward to determine their value as landmarks be charted on ~~charts~~ the charts indicated.

The positions given have been checked after listing by I. R. Rubottom

James D. Thurmond, Comdr., ~~C&GS~~
Chief of Party.

STATE	Florida	DESCRIPTION	SIGNAL NAME	POSITION			METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE	LONGITUDE	DATUM						
CHARTING NAME				° ' D.M. METERS	° ' D.P. METERS		1949-50					
Bn. 40		Clearwater Harbor daybeacon Red pointer-red reflector	- -	27-55 1680	82-49 1370	N.A. 1927	Topo 30-A-49	Aug. 49	X	X		1257
Bn. 42		Same as Bn. 40 above.	- -	27-56 80	82-49 1187	"	"	" "	X	X		"
Bn. 14		Little Pass daybeacon red pointer-red reflector	- -	27-57 1288	82-49 946	"	Sextant 30-2249	Nov."	X	X		"
Bn. 13		Little Pass daybeacon black pointer-green reflector	- -	27-57 1479 ⁶³	82-49 964 ⁵⁸⁰	"	"	" "	X	X		"
Bn. 12		Little Pass daybeacon-lighted red pointer-red reflector	- -	27-57 1470	82-49 1028	"	"	" "	X	X		"
Bn. 10		Little Pass daybeacon red pointer-red reflector	- -	27-57 1644	82-49 1120	"	"	" "	X	X		"
Bn. 8		Same as Bn. 12 above.	- -	27-57 1744	82-49 1228	"	"	" "	X	X		"
Bn. 6		Same as Bn. 10 above.	- -	27-57 1680 ¹⁷⁹⁵	82-49 1296 ¹³⁰⁵	"	"	" "	X	X		"
Bn. 2		Same as Bn. 6 above	- -	27-58 160 ²²	82-49 1460 ⁵	"	"	" "	X	X		"
Bn. 3		Little Pass lighted beacon green-blk. pointer-green refl.	- -	27-58 256 ²⁴²	82-49 1534	"	"	" "	X	X		"

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-7877 (Field No. So-2249)

CONTROL

This survey was plotted and most of the soundings penciled before the decision was made to revise the graphic control sheets in this area. As a result of the revision of SO-C-51, station TOE was moved to the eastward 32 meters. This correction was made on the smooth sheet and all ship positions using TOE were replotted. The revision of So-A-49 moved stations Poi, Hut & Pie WNW about 15 meters. Their positions were corrected on the smooth sheet but it was considered un-necessary to re-plot the ship positions as the displacement was considered negligible in this flat area.

Stations Try, Ken and Duo were not recoverable in 1952. Their displacement is probably proportional to that of Poi, Hut and Pie, however, no adjustment in position was made.

SOUNDINGS

The 14 ft. indication on fathogram between 15 & 16C (skiff) was not plotted. Believed to be governor trouble.

Lat. 27-59.3' Long. 82-50.8' Crossing discrepancy of 1 to 1½'. Pos. 140 to 142c (skiff) } *Plotted*
Lat. 27-57.67 Long. 82-51.0 Crossing discrepancy of 1 to 1½'. Pos. 89 to 91c (skiff) } *sdgs in*
agree-
ment.

The following crossing discrepancies were noted on d-day (skiff)
28 to 31d - 1-ft. deeper than adjacent hydro. } *deeper sdgs. from*
34 to 41d - 1 to 2 ft. deeper than adjacent hydro. } *skiff were not plotted*
43 to 48d - 1 ft. deeper than adjacent hydro. }
62 to 67d - 1-ft. " " " " }

Respectfully submitted,

Hugh L. Proffitt
Hugh L. Proffitt
Cartographer.

Norfolk, Va.
8 Dec. 1952

Approved & Forwarded;

Earle A. Deily
Earle A. Deily
Supervisor, SE Dist.

GEOGRAPHIC NAMES

Survey No. H-7877

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>Florida</u>										B&N	1
<u>Sand Key</u>											2
<u>Little Pass</u>											3
<u>Clearwater Beach II.</u>											4
<u>Big Pass</u>											5
<u>Clearwater</u>										B&N	6
											7
											8
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names underlined in red are approved.
12-19-52
L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7877.....

Records accompanying survey:

Boat sheets ..1..; sounding vols. ..⁵...; wire drag vols.;
 bomb vols.; graphic recorder rolls ..⁶ Env.
 special reports, etc. 1. Descriptive Report; 1 Smooth Sheet;

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

Number of positions on sheet	.....	993
Number of positions checked	.....	34
Number of positions revised	.....	1
Number of soundings revised (refers to depth only)	.....	4
Number of soundings erroneously spaced	.....	0
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	..3..
Junctions	Time	..16..
Verification of soundings from graphic record	Time	..1...

Verification by *J. P. Saulsbury*..... Total time *98*... Date *2-3-53*.

Reviewed by *Am Jeske*..... Time *24*... Date *3-3-53*

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7877

FIELD NO. SO-2249

Florida, Florida West Coast, Little Pass and Vicinity

Project No. CS-336

Surveyed - Aug.-Nov., 1949 and Nov., 1950

Scale 1:20,000

Soundings:

Control:

808 Fathometer

Sextant fixes on shore signals

Chief of Party - J. D. Thurmond
Surveyed by - J. D. Thurmond and I. R. Rubottom
Protracted by - W. W. Feazel
Soundings plotted by - W. W. Feazel
Verified and inked by - F. P. Saulsbury
Reviewed by - I. M. Zeskind, 3 March 1953
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with correction proofs CS-373 and CS-374 of 1946 and air photographic surveys T-8378 and T-8379 of 1943.

The source of the control is given in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Bottom Configuration and Depth Curves

The usual depth curves were adequately delineated.

The bottom is generally smooth, except for the shoals and channels in the vicinity of Little Pass.

4. Junctions with Contemporary Surveys

An adequate junction was effected with H-7875 (1949-50) in Little Pass. The junctions with H-7876 (1949-50) and H-7905 (1950) on the north will be considered in the reviews of those surveys. No contemporary surveys are available on the west and south. Present survey depths are in harmony with charted depths in these areas.

5. Comparison with Prior Surveysa. H-1557a (1883) 1:40,000

A comparison between the prior and present surveys reveals changes in bottom configuration and shoreline. These changes occur principally in Little Pass and vicinity. Little Pass has enlarged from a prior width of 160 m. to the present width of 460 meters. Here the south shore has shifted about 350 meters in a southeasterly direction and the spit on the north side of the pass has accreted about 250 meters in an easterly direction. The present channel has shifted about 80 meters north of its prior location which has resulted in the eroding of the northern shore. The shift in the position of the channel has been accompanied by other changes in bottom configuration, such as the shoaling in lat. $27^{\circ} 58.42'$, long. $82^{\circ} 50.08'$, where a prior depth of 13 ft. has shoaled to present depths of 3 ft. Elsewhere in the area a general shoaling of 1-3 ft. is noted. Because of the slight gradient of the bottom, this shoaling has caused a seaward shift in the position of the depth curves as for example, in the vicinity of lat. $27^{\circ} 58.8'$, long. $82^{\circ} 51.2'$, where the present 18-ft. curve falls westward about $\frac{1}{2}$ mile from its prior location. These changes in bottom configuration and shoreline are attributed to storms and the action of the current on the bottom.

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

b. H-4572 (1926) 1:10,000
 H-4577 (1926) 1:10,000
H-4581 (1925,26,28) 1:40,000

These prior surveys cover the area of the present survey. A comparison between the prior and present surveys reveals the greatest changes in bottom configuration and shoreline has occurred in Little Pass and vicinity. Here the shoreline on the north has accreted as much as 100 meters whereas on the south it has eroded as much as 350 meters. The entrance at Little Pass has increased in width about 450 meters. The best approach to the Pass has changed from the north where the prior controlling depth was 7 ft., to the west where the present controlling depth is 6 ft. Present depths thru the Pass are, in general, 2-4 ft. shoaler than prior depths. An example of the change in bottom configuration in the vicinity of the Pass occurs in lat. $27^{\circ} 58.40'$, long. $82^{\circ} 50.08'$, where a prior depth of 9 ft. has shoaled to 3 ft. depths. Elsewhere a general shoaling of 2-4 ft. is noted with a resultant shift to seaward of the depth curves. The great-

est change in depth curves occurs in the vicinity of lat. $27^{\circ} 56.8'$, long. $82^{\circ} 51.3'$, where the present 18 ft. curve falls westward about $2/3$ mile from its prior location.

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

6. Comparison with Chart 1257 (CP dated 2/18/53)

A. Hydrography

The charted hydrography originates with the previously discussed surveys supplemented by soundings from the present survey prior to verification and review. Only minor differences of 1-2 ft. between the charted and present depths were noted.

No obstruction other than a 3-ft. ridge was found in the vicinity of lat. $27^{\circ} 58.1'$, long. $82^{\circ} 50.2'$ where the obstruction reported note is charted from H.O.N. to M. 16, 1948.

The present survey is adequate to supersede the charted hydrography within the common area.

B. Aids to Navigation

The present survey positions of aids to navigation are in substantial agreement with the charted positions and adequately mark the features intended.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was accurately done.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work Recommended

This is an excellent basic survey and no additional field work is recommended.


H. R. Edmonston

Chief, Nautical Chart Branch

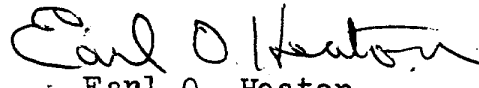

G. R. Fish

Chief, Section of Hydrography

Examined and approved:


H. Arnold Karo

Chief, Division of Charts


Earl O. Heaton

Chief, Division of Coastal Surveys

Vault *RHC*
TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Darksound, Coxsack, Spawville:~~

23 Dec. 1952

Division of Charts: R. H. Carstens

Plane of reference approved in 5
volumes of sounding records for

HYDROGRAPHIC SHEET 7877

Locality West Coast of Florida

Chief of Party: J. D. Thurmond in 1949-50
Plane of reference is mean low water, reading
1.4 ft. on tide staff ~~at~~ (1949) at Clearwater
4.5 ft. below B. M. 1 (1949)

2.1 ft. on tide staff (1950) at Dunedin
6.3 ft. below B. M. 3 (1926)

Height of mean high water above plane of reference is as follows:

Clearwater = 1.8 feet
Dunedin = 1.9 feet

Condition of records satisfactory except as noted below:

E. C. McKay
Section of Tides

Chief, Division of Tides and Currents.

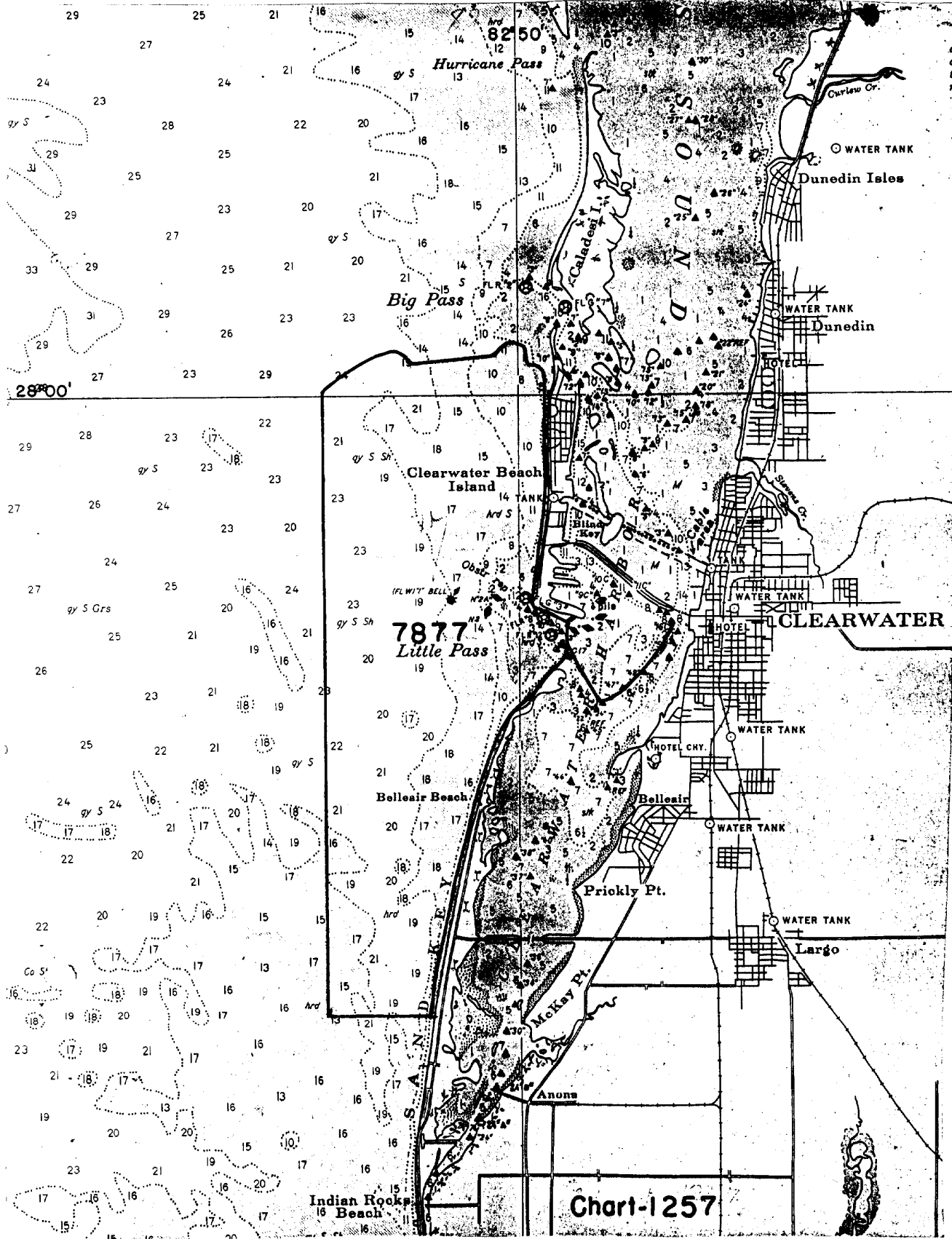


Chart-1257

