

8571

Diag. Cht. No. 1255-2.

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. SO-20-1-60 Office No. H-8571

LOCALITY

State Florida

General locality West Coast

Locality South of San Carlos Bay

1961

CHIEF OF PARTY

F. J. Tucker, Jr.

LIBRARY & ARCHIVES

DATE September 27, 1962

USCOMM-DC 5087

44
2500

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. **R-8571**

Field No. **80-20-1-60**

State **FLORIDA**

General locality **WEST COAST OF FLORIDA**

Locality **~~SAN IBEL ISLAND~~ SOUTH OF SAN CARLOS BAY**

Scale **1:20,000**

Date of survey **1960-1961**

Instructions dated **18 December 1952 and 8 September 1958**

Vessel **Ship SOSBEE**

Chief of party **Floyd J. Tucker, Jr.**

Surveyed by **R.C. Munson, F.J. Tucker, E.L. Talbot, R.M. Davidson,
D.F.S. Galloway, E.D. Schwantes**

Soundings taken by **~~tachometer~~**, graphic recorder, hand lead, **and sounding pole**

Fathograms scaled by **Ship SOSBEE Personnel**

Fathograms checked by **Ship 30 SBEE Personnel**

Protracted by **Fred Bean (Norfolk District Office)**

Soundings penciled by **Fred Bean**

Soundings in **~~fathoms~~** feet at MLW **~~MLLW~~**

REMARKS: **All corrections have been entered, checked and the
soundings have been reduced by the personnel of the
Ship SOSBEE**

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8571

(Field Number 80-20-1-60)

West Coast of Florida

Sanibel Island

Scale 1:20,000

USCGS Ship SOSBEE

1960 - 61 - Chief of Party

Robert C. Munson

1961 - Chief of Party

Floyd J. Tucker, Jr.

A. PROJECT

Project OPR-353, Charlotte Harbor and Vicinity, Florida. Original Instructions, 222/MEK, S-2-80 dated 12/18/52. Revised Instructions, 222/MEK, S-2-80 dated 9/8/58.

B. AREA SURVEYED

This is a survey of the Coast of the Gulf of Mexico from the southwest point of Sanibel Island south and eastward to Estero and Hickory Islands.

The limits are:

North - Sanibel Island

East - Ft. Myers and Bonita Beach

South - 26° 20' N.

West - 82° 05.7' W.

Junctions were made with contemporary and prior surveys as follows:

Direction	Registry No.	Field No.	Date	Scale
West	- H-8363	- 80-2356	- 1956-61	- 1:20,000
South	- H-8328	- HY-8156	- 1956	- 1:80,000
	- H-1592a	-	- 1884	- 1:40,000

Hydrography was run between 15 February 1960 and 15 April 1960 and between 14 February 1961 and 14 April 1961.

C. SOUNDING VESSEL

The ship SOSBEE performed the hydrography offshore from approximately the 12 foot curve. It has a turning radius of 100 meters at 1500 and 1400 r.p.m. The sounding speed was reduced to 1000 r.p.m. in the shoal water near the beach.

* Triangulation location of Sta. SNACK, 1960-62
not available at this time. (5/3/65)

Photogrammetric location can be found
in **Special Report 1960, No. 8**
Proj. CS-353, Ship 505BEE

C. SOUNDING VESSEL - Cont'd.

The turning radius at the reduced speed is also 100 meters.

All inshore hydrography was performed by Skiff 735, a 25 foot wooden hull, flat-bottom skiff powered by two ten horsepower outboard motors. It has a + speed of six knots and a turning radius of 25 meters.

Both the ship and skiff used blue to identify the work.

D. SOUNDING EQUIPMENT

All soundings were obtained with either a 808 fathometer or a sounding pole. Two 808 fathometers were used, numbers 57-35 and 150. Both 808's were calibrated for 820 fm./sec. Pole soundings were obtained in depths less than three feet.

All velocity corrections were determined from bar checks.

E. SMOOTH SHEET

Norfolk Processing Office.

F. CONTROL

Microwave Position-Fixing System control was used for 95% of the Ship hydrography. The remainder of the ship work and all of the skiff hydrography was controlled visually.

The MPFS transmitters were set up at triangulation stations WIGGINS RM 5 1960, PCOB 2 RM 3 1960, and SNACK 1960 with the intention that they would furnish the necessary control for all ship work. As the work progressed westward, the angles obtained from the transmitters on WIGGINS and SNACK steadily reduced. By the time the hydrography reached Longitude 82° 03' W., the angles were so small that the resulting fix was too sensitive to plot accurately. The transmitter at WIGGINS and SNACK were moved to LASS 1960 and Sanibel Island Lighthouse 1955 on Sanibel Island to obtain stronger fixes. The work was then extended westward and joined survey H-8363 (80-2356).

LASS 1960 is a traverse station from GLASS 1956.

Signal locations for the visual hydrography were obtained from Advance Manuscripts T-11417, T-11414, and T-11418, except for TAN (Fort Myers Beach Municipal WATER TANK, 1955), FOR (Beacon No. 4 San Carlos Bay, 1958) and SAN (Sanibel Island Light, 1955).

G. SHORELINE

The only shoreline, along Sanibel Island, was transferred to the boat sheet from 1:20,000 blue line manuscript reduced from T-11417.

Shoreline along Estero I. and vicinity shown on Smooth Sheet.

relocated *
May 1962

See note
opposite
Page

WEAK

G. SHORELINE - Cont'd.

The low water line is not defined due to the open exposed coast and tide range. Lines were run parallel to the shore as close as possible without jeopardy to life or property. *Sanibel I.*

H. CROSSLINES

There are 70.4 nautical miles or 6% of the hydrography is crosslines. There is no notable discrepancies at the crossings.

I. JUNCTIONS

Junctions with adjoining surveys are satisfactory with no holidays and depth curves can be adequately drawn.

J. COMPARISON WITH PRIOR SURVEYS

The agreement is generally good with prior surveys H-917, H-4344, H-1592a, and H-1478a.

K. COMPARISON WITH THE CHART

A comparison with Chart 1255, 6th. Edition, 4/11/60 and correct to date is as follows:

Charted Depth Feet	New Depth Feet	Latitude North	Longitude West
22 -	25 ✓	26° 19.6'	81° 54.4'
25 -	28 ✓	26° 20.4'	81° 56.2'
25 -	28 ✓	26° 21.3'	81° 57.5'
27 -	31 30	26° 21.4'	82° 00.1'
25 -	29 28	26° 21.4'	82° 00.8'
27 -	30 29	26° 21.2'	82° 02.3'

Comparable present depths within 2 ft generally close by

All other soundings agree within one or two feet.

L. ADEQUACY OF SURVEY

This survey is complete and adequate to supersede prior surveys for charting.

M. AIDS TO NAVIGATION

Fixed Aids to Navigation are:

Sanibel Island Light - Light List No. 5090 and 4399
Channel Daybeacon 4
Channel Daybeacon 6 ← Not on sheet

Floating Aids to Navigation are:

San Carlos Bay, Caloosa Lighted Bell Buoy 2, 5087 & 4398
San Carlos Bay, Outer Buoy 1

φ 26°-23.70'
λ 81°-55.58'

φ 26°-24.65'
λ 81°-57.75'

M. AIDS TO NAVIGATION - Cont'd.

A comparison was made with the Light List and Chart 473. The aids adequately serve the area.

Outer Buoy 1 is in ¹⁷17 feet of water, but the ¹⁹⁶⁴Light List has it in ¹⁶6 feet of water. O.K. This buoy now C"3".

One New Landmark to be charted, offshore of two stacks on the stern-wheeler "Algiers", (landlocked in place), about 175 feet north of the HWL. This stack is signal ASK, number 17112, T-sheet number T-11417, Photo number 60W4459.

On
Chart 1255
8th Ed.
Rev. 8/12/63

N. STATISTICSShip BOBBEE

Day Letter	Date	No. of Positions	Nautical miles of Sounding	No. of Bottom Samples	No. of Pole Soundings
A	2/16/60	59	17.6	0	0
B	2/17/60	173	51.8	0	0
C	2/18/60	16	4.2	0	0
D	2/19/60	32	10.8	0	0
E	2/23/60	122	36.7	0	0
F	2/24/60	148	44.5	1	0
G	2/26/60	50	15.7	0	0
H	3/1/60	196	54.0	10	0
J	3/2/60	190	59.2	7	0
K	3/7/60	78	21.1	1	0
L	3/8/60	219	63.7	3	0
M	3/9/60	164	39.7	8	0
N	3/10/60	165	49.2	3	0
P	3/12/60	77	24.8	1	0
Q	3/15/60	15	3.8	0	0
R	3/16/60	217	60.3	2	0
S	3/17/60	21	5.2	0	0
T	3/21/60	144	35.7	6	0
U	3/22/60	175	44.2	1	0
V	3/23/60	189	44.0	7	0
W	3/24/60	226	67.1	3	0
X	3/25/60	129	35.6	1	0
Y	3/28/60	78	24.3	6	0
Z	3/29/60	203	57.8	4	0
AA	3/30/60	111	32.4	3	0
BA	4/7/60	145	50.7	0	0
CA	4/8/60	109	36.7	4	0
DA	4/9/60	190	56.3	11	0
EA	4/11/60	10	3.2	0	0
FA	4/12/60	26	7.0	2	0
GA	2/14/61	110	25.0	0	0
Total		-3,787	- 1,082.3	- 90	- 0

N. STATISTICS - Cont'd.Skiff 735

Day Letter	Date	No. of Positions	Nautical miles of Sounding	No. of Bottom Samples	No. of Fath Soundings
a -	2/22/61 -	26	4.9	0	0
b -	3/2/61 -	92	18.4	3	143
c -	3/3/61 -	16	3.7	1	0
d -	3/14/61 -	74	14.6	2	0
<u>Skiff Total</u>		- 208	- 41.6	- 6	- 143
<u>Ship Total</u>		- 3,787	- 1,082.3	- 90	- 0
<u>GRAND TOTAL</u>		- 3,995	- 1,123.9	- 96	- 143

Total area in square Nautical Miles = 60.4

O. MISCELLANEOUS

None.

P. RECOMMENDATIONS

This survey is complete and adequate to supersede prior surveys for charting.

Q. REFERENCES TO REPORTS

Micro-Wave Position Fixing System Control For Hydrography, forwarded April 1960.

Respectfully submitted,

Floyd J. Tucker, Jr.
Lieut., C & G S

TIDE NOTE

for

H-8571 (80-20-1-60)

The portable tide gage at Punta Raza⁵, Florida (Latitude $26^{\circ} 29.3'N$, Longitude $82^{\circ} 00.8'W$) was used to control the hydrography. There were no corrections applied to the observed tides. Mean Low Water on the staff was 1.9 feet until 10 September 1960 when the installation was damaged by Hurricane DONNA. Mean Low Water on the new staff was 2.1 feet.

The 75th time meridian was used for this station.

Not on sheet

ABSTRACT OF BAR CHECKS - SKIFF 735

H-8571 (80-20-1-60)

DATE	DAY LETTER	3	4	5	6	7	8	9	11	12	13	15	18	VOLUME	PAGE	INITIAL	PATH. NUMBER
2/22/61	a			TOO ROUGH													57-35
3/ 2/61	b		0.0	0.0	0.0	0.0	0.0			0.0		0.0	0.0	16	21	0.6	57-35
3/ 3/61	c		0.0	0.0	0.0	0.0	0.0							16	22	0.6	57-35
4/14/61	d	-0.3		TOO ROUGH				-0.4	-0.4		-0.5	-0.4		16	33	0.0	57-35

REJECT - LOW VOLTAGE

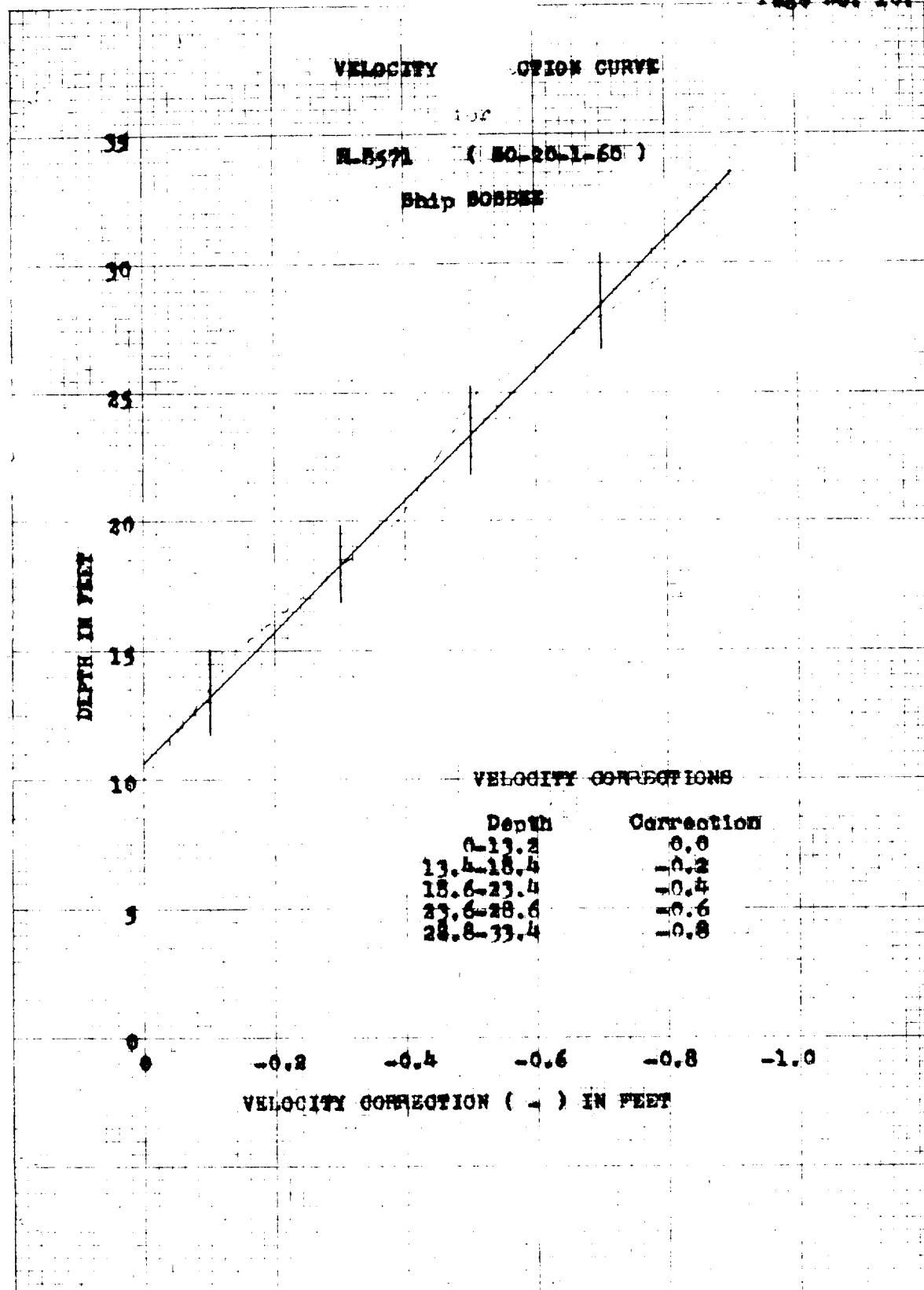
NO VELOCITY CORRECTIONS APPLIED TO SKIFF SOUNDINGS

ABSTRACT OF BAR CHECKS SHIP BOBEE

H-8571 (80-20-1-60)

DATE	DAY LETTER	DEPTH IN FEET				INITIAL NUMBER	PATHOMETER GAIN	LEADLINE CORRECTION	VOLUME	PAGE
		10	15	20	25					
2/16/60	A	0.0	0.0	0.0	0.0	3.6	57-35	7	1	6
2/17/60	B	0.0	0.0	0.0	0.0	3.6	57-35	7	1	29
		0.0	0.0	0.0	0.0	3.6	57-35	7	1	47
		0.0	0.0	0.0	0.0	3.6	57-35	7	1	60
2/23/60	E	0.0	0.0	0.0	0.0	3.6	57-35	7	2	27
2/24/60	F	0.0	0.0	0.0	0.0	3.6	57-35	7	2	59
2/26/60	G	0.0	0.0	0.0	0.0	4.0	57-35	7	3	38
3/1/60	H	0.0	0.0	0.0	0.0	4.0	57-35	7	3	66
		0.0	0.0	0.0	0.0	4.0	57-35	7	3	64
3/2/60	J	0.0	0.0	0.0	0.0	4.0	57-35	7	4	30
3/7/60	K	0.0	0.0	0.0	0.0	4.0	57-35	7	5	4
3/8/60	L	0.0	0.0	0.0	0.0	4.0	57-35	7	5	61
3/9/60	M	0.0	0.0	0.0	0.0	4.0	57-35	7	6	17
3/10/60	N	0.0	0.0	0.0	0.0	4.0	57-35	7	6	56
3/11/60	P	0.0	0.0	0.0	0.0	4.0	57-35	7	6	70
3/13/60	Q	0.0	0.0	0.0	0.0	4.0	57-35	7	7	39
3/16/60	R	0.0	0.0	0.0	0.0	4.0	57-35	7	7	
3/17/60	S	0.0	0.0	0.0	0.0	4.0	57-35	7	7	
3/21/60	T	0.0	0.0	0.0	0.0	4.0	57-35	7	7	
3/22/60	U	0.0	0.0	0.0	0.0	4.0	57-35	7	7	
3/23/60	V	0.0	0.0	0.0	0.0	4.0	57-35	7	7	
3/24/60	W	0.0	0.0	0.0	0.0	4.0	57-35	7	7	
3/25/60	X	0.0	0.0	0.0	0.0	4.0	57-35	7	7	
3/28/60	Y	0.0	0.0	0.0	0.0	4.0	57-35	7	7	
3/29/60	Z	0.0	0.0	0.0	0.0	4.0	57-35	7	7	
3/30/60	AA	0.0	0.0	0.0	0.0	4.0	57-35	7	7	

DATE	DAY LETTER	DEPTH IN FEET					INITIAL FATHOMETER NUMBER	GAIN	LEADLINE	CORRECTION	VOLUME	PAGE
		10	15	20	25	30						
4/ 7/60	BA	0.0	0.0	-0.4	-0.6	-0.8	4.0	57-35	7	30.6	-0.6	13
4/ 8/60	CA	0.0	0.0	-0.4	-0.4		4.0	57-35	7			14
4/ 9/60	DA	0.0	0.0	-0.4	-0.6		4.0	57-35	7	28.0	-0.4	14
4/11/60	EA	TOO ROUGH										68
4/12/60	FA	TOO ROUGH										26
2/14/61	GA	0.0	0.0	-0.4			4.0	150	8			5
TOTAL		-0.2	-3.6	-9.4	-8.2	-5.0						
MEAN		0.0	-0.1	-0.4	-0.5	-0.8						



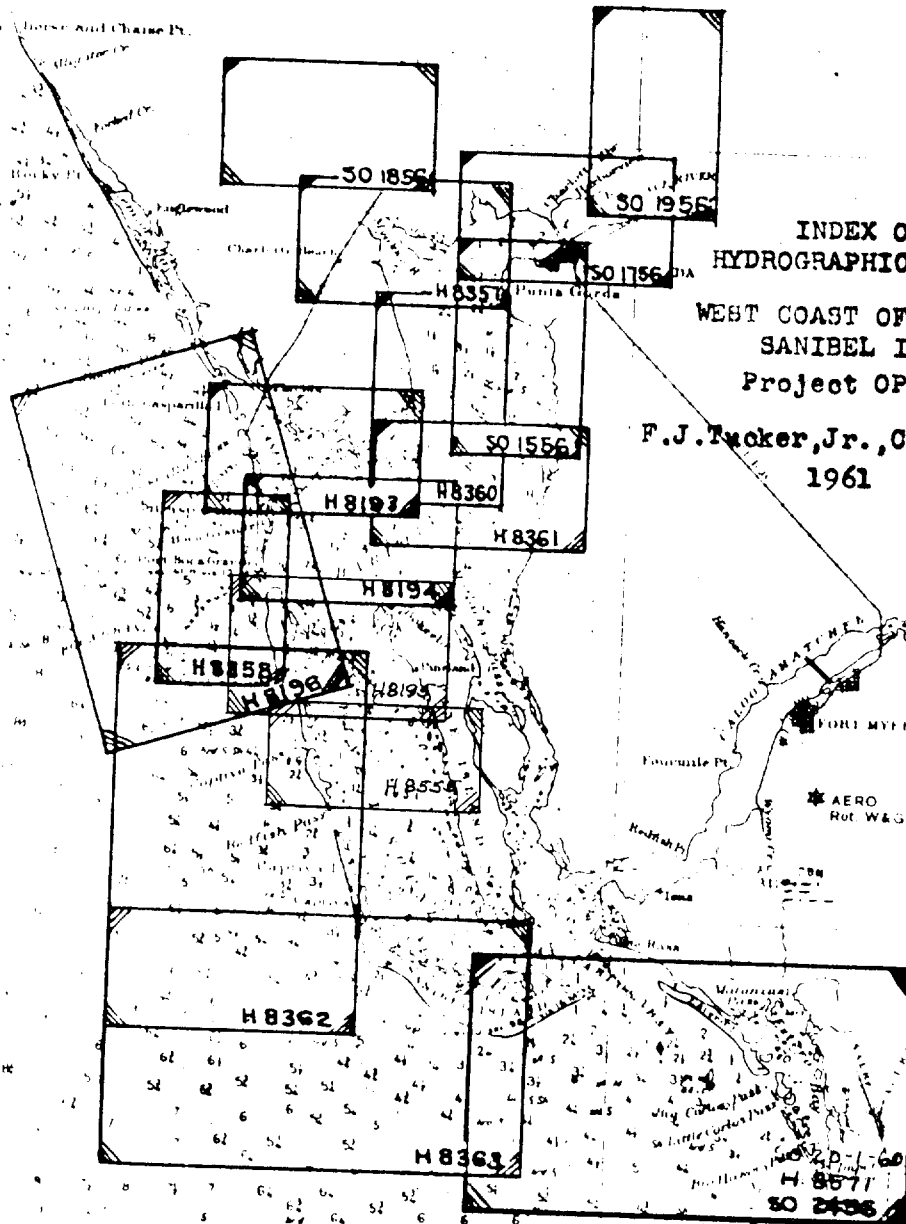
List of Stations on H-8571 (SO-20-1-60)

Name used in Hydrographic Survey	Number	Origin of Station
ABE	1806	T-11418
ASK	17112	T-11417
BOA	1808	T-11418
BOO		BOOB 2 RM 3, 1960
BOX	17116	T-11417
CAR	17115	T-11417
COD	1809	T-11418
DAY	1810	T-11418
DIX	17114	T-11417
EGG	17113	T-11417
EVA	1811	T-11418
FAR	1812	T-11418
FOR		Channel Daybeacon 4, 1958
GAS	17117	T-11417
HIS	17118	T-11417
ICE	14100	T-11414
JAP	14101	T-11414
KID	14102	T-11414
NAC		SNACK 1960-62 *
NOW	17105	T-11417
OUT	17106	T-11417
PEG	1708	T-11417
RAG	17107	T-11417
SAN		Sanibel Island Light ^{1909, r. 1955} 1955
SOP	17108	T-11417
TAN		Ft. Myers Beach Mun. Water Tank, 1955
TOY	17109	T-11417
VET	17110	T-11417
WAS	17111	T-11417
WIG		WIGGINS RM 5, 1960

* Triangulation position not available
at this time.

5/3/65

1961
~~1956~~
 SHEET LAYOUT
 SHIP SOSBEE
 PROJECT 13530
 OPR - 353



INDEX OF
 HYDROGRAPHIC SHEETS

WEST COAST OF FLORIDA
 SANIBEL ISLAND
 Project OPR-353

F.J. Tucker, Jr., Ch. of Part
 1961

152° 30'

APPROVAL SHEET

This survey is complete and adequate and no further field work is recommended.

The Chief of Party in 1960 - 61 was in charge or working with the hydrographic unit for approximately 95% of the work and inspected the boat sheet and records daily during the work.

The boat sheet and processed records are approved.

Approved by,

Floyd J. Tucker, Jr.
Chief of Party, C&GS

Recommended Limits of SMOOTH SHEET

H-8571

(80-20-1-60)

Sheet Size - 36" X 54"

EDGE	Latitude or Longitude	Distance of Signals or Soundings from Edge
Top	- 26° 28.23' N. -	2-3/4"
Bottom	- 26° 18.34' N. -	3"
Right	- 81° 50.16' W. -	3"
Left	- 82° 06.64' W. -	3"

UNITED STATES GOVERNMENT

Memorandum

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

C-83 wab
C-83524C
Info
88341

DATE: April 13, 1964

TO : The Director
Coast & Geodetic Survey

THRU: Chief, Operations Division

FROM : Commanding Officer
USCGC: Ships WAINWRIGHT & HILGARD
& General Delivery, Freeport, Texas

SUBJECT: WIRE DRAG OPERATIONS, SAN CARLOS BAY, OPR-450

1. The 11-foot sounding charted at 26°22.9'N, 81°57.2'W is a non-existent feature and should be deleted from the chart.
2. This sounding, appearing in depths of 22-24 feet, and an area of 0.3 nautical miles radius about it was cleared by wire drag on April 3. Two strips of 13' and 19' effective depths (predicted tides) were used to clear this area from opposing directions. Standard wire drag methods utilizing visual control were employed.
3. Local authorities had no knowledge of any wrecks or obstructions reported in the cited area.

Edwin K. McGaffrey

CC: Tampa D. O.

EKM/jrb

CHT 856B H 8571 NM 52/63

NORFOLK PROCESSING OFFICE
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8571 (So-10-1-60)

GENERAL

This appears to be an excellent basic survey, except for a comparatively small but undetermined amount of displacement caused by the apparent unreliability of the Micro-Wave Position Fixing System as explained in the accompanying report by CDR Munson. Because of questionable returns, on approximately 15% of the positions on this sheet, one or both Micro-wave returns had to be rejected and the positions plotted on course and time. The bottom in the area of this survey is either smooth, or contains minor irregularities or undulations so that displacement is not apparent in the placement of curves or the agreement of soundings at crossings.

It will be noted that the position of station SNACK, 1960 differs on the boat and smooth sheets. The preliminary field location was incorrect and this necessitated a complete replot of the smooth sheet as the error was not noted until the shoreline was transferred.

POSITIONS

In order to facilitate the smooth plotting the circle sheet method was used to plot all positions distant from the control stations. Since two sets of circles were needed, they were drafted on transparent overlays to avoid undue congestion on the smooth sheet. These overlays are being submitted with the survey, however, any of the positions may be plotted, or checked with an extended arm protractor as all control stations fall within the limits of the sheet.

overlays marked for destruction

SOUNDINGS

Soundings are in good agreement at crossings and curves were smoothed by a rather extensive use of $\frac{1}{2}$ foot soundings.

A fathometer trace, having some of the characteristics usually associated with an obstruction, was noted between 164 and 165L day, Vol. 5. It was scanned in the record ~~but was not~~ plotted on the smooth sheet.

and was

*Obstr. removed from smooth sheet. Disproved by Wainwright-Hilgard
Wire-Drage April 13, 1964.
(See Chart Letter #491/64.)
(and next page)*

Norfolk, Va.
24 Sept. 1962

Respectfully submitted,


Hugh L. Proffitt
Cartographer

GEOGRAPHIC NAMES

Survey No. H-8571

Name on Survey	A On Chart No. 1255	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K BEN	
BIG CARLOS PASS	✓									1
ESTERO ISLAND	✓									2
LITTLE CARLOS PASS	✓									3
POINT YBEL	✓									4
SAN CARLOS BAY	✓									5
SANIBEL ISLAND	✓									6
										7
										8
										9
										10
										11
TIDE STATION										12
PUNTA RASSA									✓	13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

George J. Bode
19 Oct 1962

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. .8571...

Records accompanying survey: Smooth sheets .1...;

(boat sheets .1...; sounding vols. .16...; wire drag vols.;

Aluminum mounted Descriptive Reports .1...; graphic recorder envelopes .16...;

special reports, etc. 1. Cahier-Station locations and Microwave
 2-Overlays (Arcs of Angles + 1-Overlay tracing
 position fixing system. Blackline print. T-11417.....

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

Number of positions on sheet		3995
Number of positions checked		293
Number of positions revised		0
Number of soundings revised (refers to depth only)		1
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	8
Junctions	Time	8
Verification of soundings from graphic record	Time	4
Special adjustments	Time	0

Verification by *J. L. Chambers* Total time .223. Date 2/3/64...

Reviewed by *John E. Westbrook* Time 41.5 Date 6/12/64

INFORMATION FOR FUTURE PRE-SURVEY REVIEWS

The area of this survey appears, in general, to be quite stable. In addition, the survey contains no important detached shoals or undeveloped shoal indications.

The shoal which extends southeastward from Point Ybel on Sanibel Island does not seem to be building or eroding at the present time.

Sanibel Island has been slowly building seaward and that trend may continue.

Although the field party had difficulty in obtaining consistently good fixes along sounding lines using the Microwave Position Fixing System, it is not believed that the overall accuracy of the hydrography was affected appreciably.

D. E. Westbrook

OFFICE OF CARTOGRAPHY

REVIEW SECTION -- NAUTICAL CHART DIVISION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8571

FIELD NO. SO 20-1-60

Florida, West Coast, South of San Carlos Bay

SURVEYED: February 1960-April
1961

SCALE: 1:20,000

PROJECT NO. OPR-353

SOUNDINGS: 808 Depth Recorder
Sounding Pole

CONTROL: Microwave
Position Fixing System
and Sextant Fixes on
Shore Objects

Chief of Party-----R. C. Munson
F. J. Tucker, Jr.
Surveyed by-----R. C. Munson
F. J. Tucker, Jr.
E. L. Talbot
R. M. Davidson
D. F. S. Galloway
E. D. Schwantes
Protracted by-----F. Bean
Soundings Plotted by-----F. Bean
Verified and Inked by-----J. L. Chambers
Reviewed by-----D. E. Westbrook
Inspected by-----R. H. Carstens

Date: June 12, 1964

1. Description of the Area

This survey is located immediately south of the entrance to San Carlos Bay, in the Gulf of Mexico, on the west coast of Florida.

The bottom is gently sloping and is composed of fine sand and broken shells.

The most important bottom feature shown on this survey is the southeasterly tip of the shoal which extends southwestward from Point Ybel on Sanibel Island. Nine foot depths exist on this shoal about 3 miles offshore. The main channel into San Carlos Bay lies to the eastward of this shoal.

A portion of the shoal which extends westward from the south end of Estero Island is also shown on the present survey.

2. Control and Shoreline

The origin of the control is adequately described in the Descriptive Report. Some problems were encountered in the field using the Microwave Position Fixing System (MPFS). These problems were manifested by the difficulty in obtaining individual fixes but it is not believed that the overall accuracy of the hydrography was substantially impaired. MPFS fixes were plotted on mylar circle sheet overlays. These overlays are marked for destruction, since all fixes can be plotted, or checked, using an extended 3-arm protractor.

The shoreline originates with Advance Photogrammetric Manuscripts T-11414 (1953-58), T-11415 (1953-61), T-11417 (1953-61), and T-11418 (1953-61).

3. Hydrography

- A. Depths at crossings are in good agreement.
- B. The usual depth curves were adequately delineated. The 3-foot depth curve was added to more adequately define the bottom configuration. Two soundings were emphasized by the addition of brown curves in accordance with Par. 6-64 of the Hydrographic Manual.

The zero depth curve could not be completely defined due to the small range of tide and the exposed nature of the coastline.

- C. The development of the bottom configuration and the investigation of least depths is considered adequate.

4. Condition of the Survey

The field plotting, sounding records, and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual except that different colored inks should have been used to differentiate between the ship and skiff position numbers and day letters. The color blue was used throughout this survey for both vessels.

5. Junctions

An adequate junction was effected with H-8363 (1956, 60-61) on the west. The junction with H-8328 (1956) on the south will be discussed in the review of that survey.

Contemporary inshore hydrography to the north, east, and southeast has not been accomplished at this writing.

6. Comparison with Prior Surveys

H-917 (1:20,000) 1866-67
H-1478a (1:40,000) 1879-80
H-1479a (1:20,000) 1879-80
H-1592 (1:40,000) 1884
H-4844 (1:10,000) 1928

Taken together, these surveys comprise the prior coverage of the present survey area. In general, there is excellent agreement between the present and prior surveys, indicating the comparative stability of the bottom in this area.

Three important changes can be found, however.

The shoal shown on H-917 (1866-67) which extends southeastward from Point Ybel, has built out about 0.2 mile in a southeast direction. Since the survey H-4844 in 1928, the shoal has not changed appreciably.

The shoreline of Sanibel Island, in the vicinity of Lat. $26^{\circ}26'$, Long. $82^{\circ}03'$, has built seaward about 0.1 mile since the survey H-1479a (1879-80).

The end of the shoal which extends southwest from the south end of Estero Island seems to have eroded substantially. Depths of 5 feet on H-4844 (1928), in Lat. $26^{\circ}23.85'$, Long. $81^{\circ}54.60'$, are now 8 feet on the present survey.

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

7. Comparison with Chart 1255, 8th Ed. Rev. 8/12/63

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys which require no further consideration, supplemented by a few soundings from the present survey before verification and review.

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

B. Aids to Navigation

Aids shown on the present survey are in substantial agreement with those charted and adequately mark the features intended, except that a number of aid changes have taken place subsequent to the date of the present survey. (See Notice to Mariners No. 48 of 1962.)


8. Compliance with Instructions

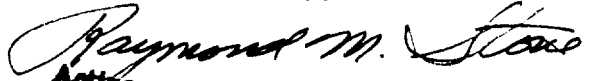
The survey adequately complies with the Project Instructions.

9. Additional Field Work

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

Examined and Approved:


Chief, Marine Chart
Division


~~Acting~~
Associate Director, Office of
Hydrography and Oceanography

TIDE NOTE FOR HYDROGRAPHIC SHEET

November 9, 1962

Nautical Chart Division: R. H. Carstens

Plane of reference approved in
16 volumes of sounding records for

HYDROGRAPHIC SHEET 8571

Locality West coast of Florida

Chief of Party: Floyd J. Tucker Jr. (1960-61)

Plane of reference is Mean low water reading

1.9 ft. on tide staff at Punta Rassa, Florida
2.1 " " " " " " " " after Sept. 10, 1960
5.6 ft. below B. M. 5 (1927)

Height of mean high water above plane of reference
is 1.7 feet.

Condition of records satisfactory except as noted below:


Chief, Tides and Currents Branch

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8571

Record of Application to Charts

[illegible]

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.